HEALTHY BEGINNINGS

A Situational Assessment in Capital Health

Capital Health
Public Health Services

For more information contact: publichealthreports@cdha.nshealth.ca

To cite this report: Public Health Services, Capital District Health Authority. (2013).
Healthy Beginnings A Situational Assessment in Capital Health Version 1.0.

Public Health Services
April 2013

Dear Reader,

As co-leaders of Public Health we are pleased to publish this report: *Healthy Beginnings A Situational Assessment in Capital Health*.

This project began about two years ago when we formed a small team to explore our Healthy Beginnings Program. We weren't beginning from scratch: an evaluation of the program, along with a strong sense that women, families and communities were changing rapidly, had led us to ask questions about the relevance and impact of the work we were doing in Public Health. We wondered if we were keeping up with the times, if we were meeting the changing needs of new parents and their babies, and how could we be working differently.

Historically we would have approached these questions by looking at the published literature and connecting with other Public Health units across the country. That is no longer enough. The academic literature, the engagement policy of Capital Health, and the National Accreditation standards all compel us to engage with those who are impacted by the work and who are partners or stakeholders. As a result, we began a Healthy Beginnings Engagement Project, the scope of which included an extensive engagement process with citizens and stakeholders, a review of the current literature, and an environmental scan of other jurisdictions. To consider the broader context within Nova Scotia, we formed a System Team consisting of senior leaders from Capital Health, the Department of Health & Wellness and the IWK Health Centre.

In 2011, we were not using the language of Situational Assessment, but as we embarked on this report, it became clear to us that this was actually what we had done. Our report needed to reflect not only the detailed methods and results of the Healthy Beginnings Engagement Project, but also the environmental and other factors which we considered, along with next steps resulting from the recommendations. This situational assessment has truly provided Public Health with an understanding of families and communities and our current role with this population, the broader context in which we work, and the factors necessary for program planning and decision making.

This work has been years in the making, and took the collective hearts and hands of countless individuals. We are deeply thankful for the ongoing commitment of our staff; the dedication and perseverance of the Healthy Beginnings Project Team; the strong leadership and coaching in the engagement process by Geoff Wilson and Susan Dunn; and the unwavering support of our Vice-president, Barbara Hall.

And finally, we are thankful for the hundreds of citizens and partners who invested their time and energy in bringing their experiences, insights and advice to this work through the Baby Stories engagement process. We can't wait to see where we go from here to help improve the lives of the next generation's families.

Sincerely,

Linda Young and Dr. Gaynor Watson-Creed
Co-leaders of Public Health Services

ACKNOWLEDGEMENTS

The Healthy Beginnings situational assessment was undertaken by Capital Health's Public Health Services to ultimately improve its Healthy Beginnings program. We extend our thanks to all those who participated in the assessment, particularly those who attended our engagement sessions, responded to our surveys, and spoke with us on behalf of their organizations. We also thank our colleagues in public health organizations across Canada for their time and support.

SYSTEM TEAM

Lea Bryden, *former Vice-President, Citizen Engagement and Accountability, Capital Health*
Heather Christian, *Director, Healthy Development, Nova Scotia Department of Health and Wellness*
Anne Cogdon, *Executive Director, Primary Health, IWK Health Centre*
Dr. Gaynor Watson-Creed, *Medical Officer of Health, Capital Health*
Peter Graham, *Senior Strategy Advisor, Government Relations, Capital Health*
Barbara Hall, *Vice-President, Person-Centred Care, Capital Health*
Janet Braunstein-Moody, *Senior Director, Nova Scotia Department of Health and Wellness*
Dr. Robert Strang, *Chief Medical Officer of Health, Nova Scotia*
Jocelyn Vine, *Vice-President, Patient Care, IWK Health Centre*
Geoff Wilson, *Director, Citizen Engagement, Capital Health*
Linda Young, *Director, Public Health, Capital Health*

HEALTHY BEGINNINGS PROJECT TEAM

Valarie Campbell, *Manager, Public Health, Capital Health*
Susan Dunn, *Citizen Engagement Advisor, Capital Health*
Holly Gillis, *Program Coordinator, Public Health, Capital Health*
Christine Hart, *Healthy Beginnings Nurse, Public Health, Capital Health*
Nicole Druhan-McGinn, *Coordinator, Research and Evaluation, Public Health, Capital Health*
Carmen MacKenzie, *Senior Communications Advisor, Public Health, Capital Health*
Sarah Melanson, *Project Lead and Coordinator, Public Health, Capital Health*
Christel Mueller, *Master in Health Administration Fellow, Capital Health*
Tanya Wagner-Wile, *Healthy Beginnings Nurse, Public Health, Capital Health*
Dr. Gaynor Watson-Creed, *Medical Officer of Health, Capital Health*
Geoff Wilson, *Director, Citizen Engagement, Capital Health*
Linda Young, *Director, Public Health, Capital Health*

PROJECT SUPPORT

Carolyn Dohoo, *Research and Statistical Officer, Public Health, Capital Health*
Jocelyn Amyoony, *Research and Statistical Officer, Public Health, Capital Health*

TABLE *of* CONTENTS

Executive Summary **1**

Glossary **6**

1. Introduction **9**
1.1 About Public Health, Capital Health 10
1.2 About the Healthy Beginnings program 10
1.3 Initiation of the Situational Assessment 13

2. Methods **14**
2.1 Engagement Strategy 14
2.2 Best Practice Literature Search 20
2.3 Environmental Scan 20
2.4 Decision-Making Process 21

3. Results **22**
3.1 Populations Reached 22
3.2 Partner Results 24
3.3 Citizen Results 30
3.4 Citizen Sub-themes 37
3.5 Results of the Best Practice Review 39
3.6 Results of the Environmental Scan 39

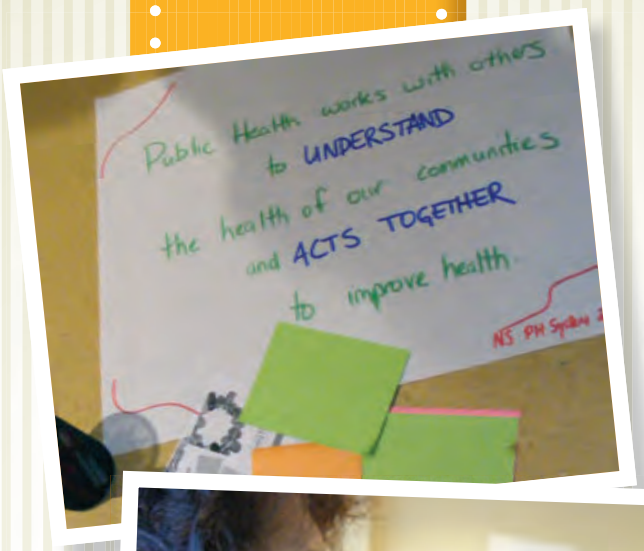
4. Limitations **40**

5. Conclusions and Recommendations **42**
5.1 Find, Equip, and Serve Partners 42
5.2 Work to Address Health Inequities 43
5.3 Provide Greater Choice for Prenatal Education 43
5.4 Contribute to Continuity of Care 44
5.5 Develop a System of Monitoring and a Quality Feedback Mechanism 44

Post Script **45**

References **46**

Appendix A: Enhanced Home Visiting Program and Parkyn Screening Tool *49*
Appendix B: Public Health's Foundational Standard *50*
Appendix C: Engagement Policy, Framework and Toolkit *51*
Appendix D: IAP2 Spectrum *52*
Appendix E: Engagement Methods *53*
Appendix F: Invitation to Family Physicians to Engage *55*
Appendix G: Capital Beat E-magazine Story That Set the Stage for Engagement *56*
Appendix H: Partner Survey *59*
Appendix I: Final Issue Brief *61*
Appendix J: List of Partner Types Participating in the Healthy Beginnings Partner Engagement Survey *62*
Appendix K: Poster Advertisement *63*
Appendix L: Citizen Survey *64*
Appendix M: Broad Focus Group Guide for all Sessions *77*
Appendix N: Healthy Beginnings Logic Model – Enhanced Home Visiting Program *83*
Appendix O: Best Practice Review *84*
Appendix P: Environmental Scan *103*
Appendix Q: Interview Questions for the Environmental Scan *112*
Appendix R: Capital Health's & The National Collaborating Centre for Methods and Tools' Decision-Making Tool *113*
Appendix S: Decision-Making Pathways used by Public Health in the Situational Assessment *114*
Appendix T: Decision-Making Model used by Public Health in the Situational Assessment *115*
Appendix U: Self-Reported Sources of Information from Pregnancy until the Infant is School-Aged *116*
Appendix V: Self-Reported Sources of Support from Pregnancy until the Infant is School-Aged *118*
Appendix W: List of Healthy Beginnings Focus Group Sessions *121*


Public Health works with others
to UNDERSTAND
the health of our communities
and ACTS TOGETHER
to improve health.


Remove
Social barriers
to Support

EXECUTIVE SUMMARY

INTRODUCTION AND PURPOSE

In 2011, Public Health, Capital Health undertook a situational assessment of the Healthy Beginnings program. The assessment was prompted by several factors including a realization that there was limited recent information about the needs of families in the Capital Health community, and that there had been changes in partnerships and networks and in the community itself since the program was implemented. The desired outcome of this assessment was to:

Provide advice on the future directions of Public Health's Healthy Beginnings program by:

– Determining the extent to which the needs of the population served by the program had changed
– Gathering information on the prenatal/postpartum service participants value and need today
– Increasing Public Health's understanding of the program's broad impact on the health of mothers and children from the citizen perspective

It was anticipated that data would then be used to:

- Build and strengthen relationships with other partners and stakeholders in this service-delivery area and set the stage for future collaboration
- Assist Public Health in realizing its stated purpose: *Public Health works with others to Understand the Health of our Communities and Acts Together to Improve Health*
- Identify a set of key change priorities for the Healthy Beginnings program

Public Health thus explored the guiding question: *How does the Healthy Beginnings program need to change to better reflect patterns of use, new information, and the needs of underserved and vulnerable populations*[1]*?*

[1] In this context vulnerable populations are those that have poorer access to the resources needed to handle the inevitable risks to health that all people experience. See glossary for full definition.

RESEARCH METHODS

To answer this question, Public Health embarked on a partner and citizen engagement process. The assessment used a mixed methods approach to engage citizens and stakeholders composed of surveys, modified focus groups, and open citizen and stakeholder engagement sessions. This was complemented by a literature review of best practices as well as an environmental scan of other public health agencies. The surveys and modified focus groups were part of a communication and engagement strategy with partners and citizens while the scan and review helped learn of practices used by other public health organizations, as well as research findings. The situational assessment was carried out by a working group (Project Team) and supported by an advisory group (System Team), composed of individuals from Public Health and partner organizations.

RESULTS

Several themes resulted from the broad engagement process and scans undertaken by Public Health. The scans to learn of best practices and the work of other public health units helped inform the context and use of the results. They highlighted the fact that best practices are highly dependent on local context as are the services provided and the process through which they are provided.

The partner engagement led to five main themes being identified:

- Public Health Needs to Address Priority Families
- Public Health Needs to Balance Population and Individual Support
- Public Health Needs to Advocate for Health Equity
- Public Health Needs to be Entrenched in Communities
- Public Health Needs to be Flexible

The citizen engagement sessions along with the survey responses led to the discovery of four overarching themes which were relevant across all stages of the prenatal and postnatal experience:

- The Importance of Access to Information
- The Importance of Access to Support
- The Importance of Continuity of Care
- The Importance of Compassionate and Flexible Healthcare Providers and Systems

Moreover, there were six subthemes which reflected parent's needs and concerns during certain stages of the prenatal and postnatal experience.

- Maternal Health/Physical Care
- Maternal Confidence/Parenting Skills
- Access to Midwives and Doulas
- Feeding (of Infants and Children)
- Child Development and Health
- Peer Support

CONCLUSIONS AND RECOMMENDATIONS

The results of the situational assessment show that the Healthy Beginnings program should change to better meet the needs articulated by citizens and partners in Capital Health. The results also show clearly that Public Health is one player of many in the prenatal and postnatal experience of most families in the district. Most needs that citizens reflected in the engagement process would require Public Health to work with or support others differently than it does today. The best practice review and the environmental scan results help to provide some direction on how these needs have been met elsewhere.

Based on these conclusions, the following recommendations for changes to the Healthy Beginnings program were validated and endorsed by the System Team.

1. FIND, EQUIP, AND SERVE PARTNERS

In order to contribute to healthy development for children in Capital Health, Public Health should renegotiate relationships with its partners including family physicians, family resource centres, and other community partners. Public Health should share the results of this assessment with partners and begin conversations about how their relationships can change to better serve families in the community.

1.1 SUPPORT FAMILY RESOURCE CENTRES

Public Health should work with family resource centres to find ways to improve the support it provides to the centres beyond the formal supports in place for the Enhanced Home Visiting program.

1.2 WORK TO ADDRESS HEALTH INEQUITIES

Public Health should focus on understanding the needs of its communities, through population health assessment and surveillance and begin work to address health disparities among the communities of Capital Health. Public Health should work with communities of highest need to further understand and address health disparities, beginning with three communities.

1.2.1 FURTHER UNCOVER AND UNDERSTAND THE ROLE OF INFORMAL SUPPORTS

Together with partners, Public Health should begin a dialogue with communities to further expose and understand the critical role that informal supports are playing in the lives of families during the prenatal and postnatal period. An additional goal of the dialogue should be to further understand how the roles of informal supports compare with the role of formal support and to better understand how this varies by population group.

1.3 PROVIDE GREATER CHOICE FOR PRENATAL EDUCATION

Public Health should increase the menu of options available for prenatal education. This may require that public health reevaluate its model of prenatal programming and investigate online options among others.

1.4 CONTRIBUTE TO CONTINUITY OF CARE

Public Health should work more closely with its partners – including family physicians, midwives, family resource centres, and other key players – to support families and act as a connector to build a network of community supports.

1.4.1 DEVELOP AN ENHANCED SCREENING MECHANISM

To directly support improved continuity of care from hospital to home, Public Health should enhance the screening offered to families at the IWK by developing a screening mechanism that will more clearly identify the families that may benefit from enhanced support in the community.

1.5 DEVELOP A SYSTEM OF MONITORING AND A QUALITY FEEDBACK MECHANISM

Public Health should become more effective in using monitoring and quality feedback mechanisms. Public Health should review its surveillance process to uncover challenges to getting timely and quality data on program participation and monitoring program achievements. As well, Public Health should focus on implementing both process and outcome evaluations that can provide better feedback on program participant expectations, program quality, and program and partnership outcomes.

GLOSSARY

CITIZEN:

In the context of this report, citizens refer to any individual living within the boundaries of Capital Health regardless of their legal status within Canada.

COMMUNITY HEALTH BOARD:

A legislated local community organization designed to help foster community development initiatives related to health planning and delivery, to nominate two thirds of Capital Health's Board of Directors, to assess community health needs, to develop a community health plan, and support implementation of approved portions of the health plan.

DELIBERATIVE DIALOGUE:

A process that seeks the broad involvement of key partners in issue identification and information and position development. Typically, the approach seeks to present a broad overview of the entire scope of the subject in order to deeply inform the dialogue. A process of balanced discussion follows of which the intent is to ensure open, transparent sharing and group evaluation of many perspectives. The aim of this approach is to build understanding among all participants of the diverse range of views and perspectives needed to inform change with a view to achieving agreed upon directions.

DOULAS:

According to the Nova Scotia Doula Association (2010), a doula is a trained and experienced professional who provides continuous physical, emotional and informational support to the mother (and her partner) before, during and just after birth; or who provides emotional and practical support during the postpartum period.

EXPERIENCE-BASED DESIGN:

A user-focused design process with the goal of making user experience accessible to the designers, to allow them to conceive of designing experiences rather than designing services. The approach seeks to understand and incorporate the experiences of the end user – both positive and negative – as core transformative elements in the program development process.

EXPERIENCE MAPPING:

A tool intended to gather a broad-spectrum overview of an experience.

FAMILY RESOURCE CENTRE:

A non-profit organization with a specific focus on providing programs and services to support families from pregnancy to age six. Services offered include prenatal and postnatal support programs for children and parents, parenting support, and child development programs. These programs are tailored to the community in which the centre is located.

FORMAL SUPPORT:

In the context of this assessment formal supports are individuals or groups who are paid to provide support.

INFORMAL SUPPORT:

In the context of this assessment informal supports are defined as individuals who are not paid to provide support, e.g. partner, spouse, relative, friend, etc.

OFFLINE ADVERTISING:
Included posters, radio, and newspaper advertising.

PARTNER:
In the context of this assessment partner refers to any individual or group working with the prenatal and postnatal population either directly or indirectly.

PRENATAL CLASSES:
Group/didactic style sessions that are held either over the course of six evening sessions or as one workshop offered on a weekend.

PRESENCING:
Connecting to the source of inspiration and common will while letting go of the non-essential aspects of an issue in order to help form solutions to a given problem. (Presencing Institute, 2012).

QR CODE:
Abbreviation for Quick Response code, a two-dimensional bar code that causes a web page to download into the user's Smartphone when photographed with a mobile tagging app in the phone. In the context of this assessment the web page advertised the open citizen engagement events. QR codes are found in all types of promotional materials.

SITUATIONAL ASSESSMENT:
A situational assessment influences planning in significant ways by examining the legal and political environment, stakeholders, the health needs of the population, the literature and previous evaluations, as well as the overall vision for the project. The phrase "situational assessment" is now used rather than the previous term "needs assessment." The new terminology is used as a way to avoid the common pitfall of only looking at problems and difficulties. Instead it encourages considering the strengths of and opportunities for individuals and communities. In a health promotion context, this also means looking at socio-environmental conditions and broader determinants of health.

SNOWBALL SAMPLE:
A non probability sampling technique where existing study participants recruit future study participants from among their network of colleagues and acquaintances.

STAKEHOLDER:
In this context, a stakeholder includes all partners and citizens – i.e. anyone with a vested interest in the Healthy Beginnings program or its clients.

VULNERABLE POPULATION:
Those that have poorer access to the resources needed to handle the inevitable risks to health that all people experience. Risk varies as a function of opportunities and resources associated with the following social arrangements: personal traits and social status (age, sex, race, and ethnicity), ties between people (family structure, marital status, and social networks), environmental factors (school, employment, income, and housing), and associated factors (violence and/or crime). Vulnerability in the context of the Healthy Beginnings program is most often defined by a score of nine or greater on the Parkyn Postpartum Screening Tool.


Why We're Here...
CAPITAL HEALTH
THINGS HAVE CHANGED!
How can Public Health offer the most benefit?
What do women want today?
TODAY
Our programs haven't changed!
Help us understand your perspective
We're never


What did you want to know?
• no idea what to expect
• no idea how's my labour - had a fast one
• no one told me what to expect
• talking with others
• online
• books
• prenatal


Share Your Experience
Share Your Experience

INTRODUCTION

In 2011, Public Health Services at Capital Health undertook a situational assessment of the Healthy Beginnings program. The assessment was prompted by several factors including a realization that there was limited recent information about the needs of families in the Capital Health community, and that there had been changes in partnerships and networks and in the community itself since the program was implemented. Recent evaluation results had also shown that patterns of use of the program had changed since the program was implemented (see section 1.3). The desired outcome of this assessment was to:

Provide advice on the future directions of Public Health's Healthy Beginnings program by:

- Determining the extent to which the needs of the population served by the program had changed
- Gathering information on the prenatal/postpartum services participants value and need today
- Increasing Public Health's understanding of the program's broad impact on the health of mothers and children from the citizen perspective

It was anticipated that data would then be used to:

- Build and strengthen relationships with other partners and stakeholders in this service-delivery area and set the stage for future collaboration
- Assist Public Health in realizing its stated purpose: *Public Health works with others to Understand the Health of our Communities and Acts Together to Improve Health*
- Identify a set of key change priorities for the Healthy Beginnings program

Public Health began with the guiding question: *How does the Healthy Beginnings program need to change to better reflect patterns of use, new information, and the needs of underserved and vulnerable populations*[2]*?* To answer this question, Public Health embarked on a partner and citizen[3] engagement process to help inform changes to delivery of prenatal and postnatal care for families. The engagement process was complemented by a review of best practices as well as by a scan of other similar programs from other Canadian public health agencies. The results have helped form the recommendations in this report.

---

[2] In this context vulnerable populations are those that have poorer access to the resources needed to handle the inevitable risks to health that all people experience. See glossary for full definition.

[3] In this context, citizen refers to anyone living within Capital Health's boundaries regardless of their legal status

1.1 ABOUT PUBLIC HEALTH, CAPITAL HEALTH

Capital Health is one of nine district health authorities (DHAs) in the province of Nova Scotia and serves approximately 400,000 individuals, or about 40 per cent of the Nova Scotia population. Public Health Services (Public Health) is a department within Capital Health and serves the mandates of both Capital Health and the provincial public health system. The provincial public health system has recently been reviewed (Government of Nova Scotia, 2010) and in 2010 released a provincial purpose statement that outlines a new and enhanced direction for public health in development of surveillance and assessment products, and evaluations and plans for each of its programs, as well as standards for each major component of public health activity (Appendix B). The introduction of these standards has encouraged Public Health to improve evidence informed decision-making at all levels, and to identify and address health disparities in all areas of programming.

In 2010, Capital Health developed a citizen engagement policy and toolkit for broad use, based on standards of the International Association of Public Participation (IAP2) (Appendix C). The new policy requires Capital Health to commit to engage with citizens on any decisions that affect their health and healthcare. It was against this backdrop that Public Health initiated the Healthy Beginnings situational assessment.

1.2 ABOUT THE HEALTHY BEGINNINGS PROGRAM

The program within Public Health that focuses on prenatal and postpartum support is known as Healthy Beginnings. The provincial Healthy Beginnings program has four stated long-term objectives (Government of Nova Scotia, 2003):

- To promote optimal physical, cognitive, emotional, and social development of all Nova Scotian children
- To enhance the capacity of parents to support early child development
- To enhance the capacity of communities to support healthy child development
- To contribute to a coordinated effective system of child development services and supports for children and families

Within the program, prenatal classes are universally offered to all families by public health nurses at various community locations. Public Health nurses also support family resource centres to deliver prenatal classes with a focus on underserved populations.

In order to assess the needs of families with newborn babies and match them to postpartum program opportunities, Public Health relies on a universal screening tool, a modified Parkyn Postpartum Screening Tool (Appendix A). The tool consists of 16 items designed to identify factors associated with risk of parenting problems or sub-optimal infant health outcomes (Ontario Ministry of Health and Long Term Care, 2002). The Parkyn is typically completed within 48 hours postpartum, in hospital. If a mother rates nine or higher on the Parkyn, then the family is offered further consultation and assessment for the Enhanced Home Visiting program (Government of Nova Scotia, 2012). Families that rate lower than nine receive a universal postnatal phone assessment and may receive a home visit for additional one-on-one support based on the nursing assessment.

The Parkyn screening process has been in place since the Enhanced Home Visiting program was implemented in Capital Health in 2002. Since then, implementation evaluations (Phase I & Phase II) (Government of Nova Scotia, 2004) have been conducted on the Enhanced Home Visiting portion of the Healthy Beginnings program, but needs for programming outside the enhanced portion's scope have not been assessed. Consequently, very little information had been recently gathered regarding the current needs of families with young children. And in the meantime, some changes in the community and healthcare context supporting new families had become evident:

- Today, Public Health is responsible for approximately 4,400 births annually in Nova Scotia. Births in the 2011/12 fiscal year totalled 4,318, up from 4,009 when the Enhanced Home Visiting program began formally in 2002.
- Midwives and doulas can be accessed in the private and public sectors to support families in the prenatal and postnatal period
- Family resource centres now provide a wide range of services to families alongside Public Health, but with a focus on specific communities
- Use of the Internet and social media for information and support has grown substantially over the past decade.
- Niche businesses providing prenatal and postnatal information and support have emerged.
- Public Health now works with seven community health boards to learn about community needs and shape services. These volunteer boards have been in place in Capital Health for just over 10 years. Public Health's mandate has broadened since 2010 with an increased emphasis on population health surveillance and assessment and decreasing emphasis on some of the traditional programming.

Public Health's expanding list of partners over the past 10 years has resulted in a new network of community supports for Healthy Beginnings and other public health programs. See Appendix W for a full list of partners. Some of the key partners are described below:

Family Resource Centres

Family resource centres are non-profit organizations with a specific focus on providing programs and services to support families from pregnancy to age six. They offer prenatal classes and postnatal services to those within their communities, with a focus on underserved populations.

IWK Health Centre

The IWK Health Centre operates separately from Capital Health but within the geographic boundaries of the district. The IWK Health Centre focuses on the health of women and children, and youth in the three Maritime Provinces (Nova Scotia, Prince Edward Island and New Brunswick) and includes primary and tertiary health services as well as research in various fields (IWK Health Centre, 2009a). All specialist obstetric services in Capital Health are provided at the IWK. The IWK also offers a volunteer service, Extra Support for Parents, which provides emotional and practical support for parents of newborns. Extra Support for Parents is another key partner for Healthy Beginnings. Given the health centre's target population as well as its location within the boundaries of Capital Health and the professional and volunteer services offered, it is a key partner in the Healthy Beginnings program and to Public Health as a whole.

Midwives and Doulas

Midwives and doulas are available in some parts of Capital Health district and offer services related to Healthy Beginnings. Within Nova Scotia, midwives are fully regulated and provide public services within the IWK Health Centre (IWK Health Centre, 2012) and in other community settings. Midwives within the province have the authority to act as a primary care provider and provide service from pregnancy until six weeks postpartum (IWK Health Centre, 2009b)[4]. Meanwhile, doulas within Nova Scotia operate publicly and in the private sector; they can support families before, after, and during birth (Nova Scotia Doula Association, 2010). Halifax Regional Municipality (HRM) also offers a volunteer doula program to provide services free of charge to communities within the area.

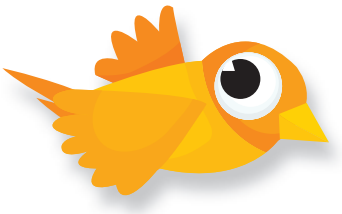
Primary Care Physicians

There are over 400 primary care physicians practicing in Capital district, many of who work alone or in small practices which may include a family practice nurse and/or other health practitioners. The vast majority of families in Capital Health have access to a primary care physician in their communities, including women who require prenatal and postnatal care and families that require care for their infants and children including childhood immunizations.

[4] Midwifery services were suspended from December 2010 to December 2012 (IWK Health Centre, 2012). This occurred during the Healthy Beginnings situational assessment.

1.3 INITIATION OF THE SITUATIONAL ASSESSMENT

The H1N1 pandemic provided a unique opportunity to examine the current operations of the Healthy Beginnings program. Public Health's response to the pandemic disrupted prenatal and postnatal care[5], since public health nurses from all programs were required to deliver H1N1 vaccines in community clinics. This resulted in a decision to maintain universal screening during the pandemic, but to offer no prenatal classes and to limit postnatal follow-up to families that screened in as requiring additional support (Parkyn Score ≥9). The interruption created natural comparison groups between families who received the usual prenatal and postnatal supports and those who received the limited follow-up, allowing for an impact assessment of the program. The results of the impact assessment indicated that patterns of use differed from what had been anticipated when the program was implemented. It also led to recognition that public engagement was necessary to further explore this issue, specifically citizen needs.



[5] Some individuals were unable to receive full prenatal education while others did not receive full postpartum support

2 METHODS

The situational assessment was carried out by a working group known as the Project Team with the support of an advisory group known as a System Team. The Project Team included frontline practitioners of the Healthy Beginnings program, the director of Public Health, the medical officer of health for Capital Health, the Healthy Beginnings program manager, the director of Citizen Engagement, an engagement advisor, senior communications advisor, research and evaluation coordinator, program coordinator focused on knowledge translation, a masters of health administration fellow and a "project lead" with a background in early child development and experience in Healthy Beginnings program coordination. The System Team was created as a link between the Project Team and key leaders/decision makers, and allowed the leaders to anticipate problems and direct the Project Team to appropriate mitigations. This System Team included leaders from Capital Health, the IWK Health Centre and the Nova Scotia Department of Health and Wellness.

The assessment was designed as a mixed methods approach, which included use of surveys, modified focus groups, an environmental scan and a best practice review. The surveys and modified focus groups were part of a wider communication and engagement strategy with partners and citizens. All of the practices were grounded in the frameworks of the International Association for Public Participation (IAP2) (International Association for Public Participation, 2012) and Theory U[6]. The precise methodologies used are outlined below.

2.1 ENGAGEMENT STRATEGY

An engagement strategy for citizens and partners was created using the guiding question: *How does the Healthy Beginning program need to change to better reflect patterns of use, new information and the needs of underserved and vulnerable populations?* The overall intent of the engagement process was to:

Identify a set of key change priorities for this program that would result in:

- Strengthened program efficacy and accountability for the resources used in the program
- The delivery of more relevant, appropriate and targeted programming that would be specific to the needs of various populations
- Improved outcomes for vulnerable populations served by the Healthy Beginnings program

[6] See http://www.ottoscharmer.com/publications/summaries.php for more information


Why We're HERE...
Communities have changed
We haven't.
We're EXCITED to hear how moms and babies' needs have changed.

The guiding question was generated by the initial working group following a series of exploratory conversations to determine if engagement was the right approach. These early conversations were critical in identifying the:

- Problem/issue statement
- Decision to be made
- Levels of participation required including the decision-maker, the decision question, the decision making process, and the public participation goal.

The conversations were guided by the IAP2 Framework (International Association for Public Participation, 2012) and the Capital Health engagement toolkit (Appendix C).

Following these conversations the team drafted a detailed engagement plan that outlined:

- The decision to be made
- The final decision-maker
- Governance structures
- Goals, objectives and expected outcomes of the engagement
- Process and structures including guiding principles and roles of participants, the Project Team and the System Team
- Detailed design elements

Finally the working group recruited a full Project Team and identified key influencers for invitation to the system team.

The engagement process for the situational assessment used three unique approaches: deliberative dialogue, experience-based design and experience mapping.

Deliberative dialogue was employed to involve key partners in issue identification and position development.

Experience-based design was used to make stakeholders' experience accessible to the designers, allowing them to conceive of designing programming experiences that were more relevant to users. This design approach seeks to understand and incorporate the experiences of the end user – both positive and negative – as core transformative elements in the program development process. End users are considered "experts" in their experience of any system or program, and therefore are able to contribute to program design at a fundamental level.

Lastly, experience mapping was used to create maps of families' prenatal and postnatal experience that exposed the range of resources families were accessing and what they identified as their most significant needs (Appendix E). The maps were designed specifically to expose a full spectrum of resources and needs, beyond those that might have been identified by or within the Healthy Beginnings program alone. The level of engagement was identified as the *Involve* level on the IAP2

Spectrum[7], meaning that Public Health committed to engaging in ongoing dialogue with the public to ensure that concerns were understood and considered throughout the situational assessment (Appendix D). All work with the IAP2 Spectrum was guided by IAP2 Core Values[8].

The communication strategies accompanying the engagement strategy were intended to reach diverse populations within Capital Health, to reach some specific audiences, and generate awareness as a change management strategy so that the general public and media were aware of the situational assessment and were better prepared for changes as a result of our efforts. In order to facilitate communications, Public Health created a brand known as "Baby Stories" that was then available for use on posters, tweets (hashtag #chbabystories) and other online and offline messaging throughout the engagement process.

The engagement and communications strategies were divided into two main streams – partner and citizen – as described below.

2.1.1 PARTNER ENGAGEMENT METHODS

A) The partner engagement strategy occurred prior to any citizen engagement or advertising efforts. It involved the distribution of an internal invitation to an online survey (Appendix G), using the Baby Stories brand, to partners known to the Healthy Beginnings program. The list of partner types is included in Appendix J. The invitation was also sent to more than 400 family physicians in the Capital Health district via the District Department of Family Practice Newsletter which is distributed by email and fax (Appendix F). The strategy also involved the telling of stories about the Healthy Beginnings program and announcement of the situational assessment through the Capital Health external e-magazine "Capital Beat" (Capital Health, 2011b) as methods of garnering interest in the process (Appendix G).

A draft survey was developed and pilot-tested by a convenience sample of staff with knowledge of the partner groups. Modifications were made based on the feedback received. The survey included six open-ended questions examining both the community partners' experience with the Healthy Beginnings program and their perspective on current issues facing families in the prenatal and postnatal period (Appendix H). The survey was administered to a snowball sample of partners from October 17, 2011 to December 31, 2011.

[7] IAP2 Spectrum of Public Participation. International Association for Public Participation, www.iap2.org . 2007.

[8] IAP2 Core Values for the Practice of Public Participation. http://www.iap2.org/displaycommon.cfm?an=4. 2007.

B) The results of this survey were themed into an issue brief (Appendix I). Theming was based on content analysis using methods previously described by Krippendorff (Krippendorff, 2013). The issue brief was circulated to all partners that had participated in the survey. Partners were then invited to participate in one of three separate engagement sessions. Partners provided their feedback on the issue brief during these meetings, which led to its further refinement [9]. The refined brief was then used to introduce the situational assessment during the modified citizen focus groups. Twitter (http://www.twitter.com) was used to share participants' comments during each of the three partner engagement sessions in the interest of exposing the wide range of views and values held by participants and further deepening citizen and partner interest in the assessment.

2.1.2 CITIZEN ENGAGEMENT METHODS

A) A local media planning/buying agency, Time and Space Media, was engaged to plan and book a campaign that would reach the primary target audiences: pregnant women, females ages 18-40 and parents of babies and preschoolers. Time and Space Media suggested a mix of radio, print and online advertising vehicles to reach the audience, primarily relying on radio. The strategy involved high-activity and low-cost websites such as Facebook (http://www.facebook.com), Kijiji (http://halifax.kijiji.ca), Twitter, and Pinterest (http://pinterest.com), as well as use of mass emails and promotion through the Capital Health website. These approaches were supplemented with radio advertisements that aired on four local radio stations, posters, newspaper advertisements and an online ad on the website of the province's largest newspaper highlighting the reasons for the engagement process and encouraging participation. A prominent rotating banner announcing the engagement sessions was also placed on Capital Health's home page and linked to a "Baby Stories" section of the Capital Health website where information on how to participate in the engagement process could be found. Public Health spokespeople were interviewed on CBC Radio programming in both English and French. These mass media approaches were used to generate broad awareness of the engagement opportunity and to help prepare the community and stakeholders for potential resulting changes to Healthy Beginnings programming.

The strategy to reach parents directly relied heavily on social media use. Public Health posted information about its public engagement sessions as well as a link to the online survey on 183 [10] Facebook pages and parent group profiles. Facebook responses and conversations were monitored daily for activity and for opportunities to correct misinformation regarding the assessment. Public Health placed free event dates and times as well as a link to the citizen survey under the community and children's categories of Kijiji. In addition, a paid advertisement was placed on Kijiji to attract individuals to the public sessions and survey. In addition, "tweets" on the initiative were initiated frequently, and an announcement regarding the assessment and engagement opportunities was pinned on Pinterest daily for a three-week period.

[9] It is important to note that there was a session held specifically at the IWK Health Centre and that all sessions occurred during different times of the day to attract the widest audience possible.

[10] To determine appropriate Facebook groups for promotion, community groups, local elementary school groups, and others with young families in their membership were searched. Specific gathering spots and groups for families were identified by Public Health staff from various communities. These ranged from recreation centres, faith groups and festivals to independent boutique children's stores.

This online strategy was accompanied by offline advertisements. Posters were placed throughout Capital Health, in family resource centres, local shops and other locations, as well as within the IWK Health Centre (Appendix K). Public Health nurses also placed these advertisements in the communities in which they worked or made formal requests for partner organizations to share the poster promotion with their clients. For convenience, a QR code was placed on each poster that allowed readers to add the information readily to their smart phones.

B) Similar to that which was created for partners, an online survey was developed for citizens (Appendix L). It employed the experience-based design methodology (described in Section 2.1) to examine the experience of families in the prenatal and postnatal period. The survey included demographic questions as well as three closed and three open-ended questions regarding six key stages of the prenatal and postnatal experience. A draft survey, modeled on experience-based design, was developed based on a previous program evaluation (Capital Health, 2011). The survey was pilot-tested by a convenience sample of staff involved in Healthy Beginnings; modifications were made based on the feedback received. The final survey was live for 24 days, from February 10, 2012 to March 5, 2012.

Survey responses were monitored every two days during the 24-day period. During that time, promotional strategies were regularly adapted, through Kijiji and Facebook, to encourage participation of a diverse set of citizens in the survey. In particular the postal codes of survey respondents were analyzed once every two days in order to determine the extent to which all seven community health board areas were represented. There was then a concentrated effort to reach out to groups within areas that had low representation. Methods included the use of standardized messages on the various social media sites in use. This targeted social media surge continued until geographic representation was perceived as adequate.

C) In addition to the online opportunity to participate, Public Health offered a total of 28 open or "by invitation" modified focus groups, held in a variety of locations in the district between February 20, 2012 and March 6, 2012. The open focus groups were created to reach individuals within the general public. Five sessions were held, each scheduled for an hour. Promotional efforts involved the use of mass media to encourage attendance at these public sessions. Incentives to attract participants were also used and included childcare during the sessions and transportation reimbursement.

The "by invitation" focus groups were adapted from the public sessions. Twenty-four were held in total. These sessions were designed to specifically reach those families who had unique cultural, geographical, generational, and/or economic experiences. Incentives to attend these sessions were also used and included provision of childcare during the session, a small honorarium and transportation reimbursement. Participants were recruited through community health boards and key partner organizations including family resource centres, church groups and cultural groups.

The formats of the modified focus groups were adapted to the culture of the participants and size of the group. They were scheduled for one to two hours and were facilitated by seven Capital Health Community Health Board staff recruited by the Project Team.

Both the public and invited sessions included opportunities for participants to reflect on their prenatal and postnatal experiences though the completion of an experience map (Bate & Robert, 2006). The experience map was a tool (created in both hard copy and online survey format) intended to gather a broad-spectrum overview of the experience of new parents along a timeline that parallels the Healthy Beginnings program mandate. The intention was to understand users' full prenatal and postpartum experience, and to avoid leading or prompting people to comment solely on their experiences with Public Health and/or the Healthy Beginnings program (Appendix M). In each session, participants completed the maps, and were invited into a facilitated group discussion regarding the key points and questions outlined in the maps.

2.2 BEST PRACTICE LITERATURE SEARCH

The objective of the literature search was to identify the best practices to achieve the outcomes outlined in the Healthy Beginnings Program Logic Model (Appendix N). The review of synthesized literature included meta-analyses and systematic reviews as well as peer-reviewed research and grey literature reports (Appendix O). Databases searched include the Health Evidence and Best Practices portal of the Public Health Agency of Canada, the Capture Project, the National Collaborating Centre for the Determinants of Health, and the National Collaborating Centre for Healthy Public Policy, and Medline. Literature was also collected from the Nova Scotia Department of Health and Wellness, the Reproductive Care Program and from the reference lists of other pieces of literature. Search terms used include child, baby, infant, or newborn; maternal or parent; prenatal, antenatal, postnatal, or postpartum; program; and "public health." Literature was screened in through titles, abstracts/executive summaries and then by the full body of the document.

The scope of the literature review and search strategy was identified by a subgroup of the Healthy Beginnings Project Team. An independent reviewer then completed the review and two academic partners provided feedback prior to the review being finalized.

2.3 ENVIRONMENTAL SCAN

A national environmental scan was undertaken to help inform Project Team recommendations for changes in delivery of prenatal and postnatal care for families (Appendix P). Eight public health units from four provinces were identified. These included seven Public Health peer organizations[11]

[11] Peer groups have similar characteristics in terms of socio-demographic profiles as well as geographic areas - these include 24 variables. (Statistics Canada, 2011).

and one public health unit known for taking a comprehensive, evidence-informed approach to their prenatal and postnatal programming[12].

Nine interviews were held, and the interviewees were subsequently provided an opportunity to review their transcribed interview notes prior to any information being shared (Appendix Q). Interviewees were from:

Ontario:	Niagara, Peel, Hamilton health authorities
British Columbia:	Thompson/Caribou (Ministry of Children and Family Development), Fraser Health
Saskatchewan:	Saskatoon Health Region, Regina Qu'Appelle Health Authority
Manitoba:	Winnipeg Regional Health Authority with the Ministry of Health

The objective of the scan was to learn how other regions structured, staffed and delivered prenatal and postnatal care, for the purposes of informing program changes that could be undertaken within Capital Health.

2.4 DECISION-MAKING PROCESS

Themed results from the engagement, environmental scan and best practice review were presented back to the Project Team to enable further interpretation and decision-making. Theory U was used as the baseline framework for analysis by the Project Team (Presencing Institute, 2012). The "Presencing" component of the Theory U framework allowed the team to absorb the large quantities of information gathered during the engagement sessions and form it into further actions. The team also used a decision-making matrix adapted from tools from Capital Health and the National Collaborating Centre for Methods and Tools (Appendix R). Decisions required the consideration of three broad sets of operational parameters for Public Health: 1) the provincial context for changes to the Healthy Beginnings program, which had the potential to limit the scope of decisions that could be made, 2) the legislated (mandatory) functions of public health, and 3) the project's desired outcomes (improvements in service delivery without increase in cost or unnecessary duplication of work, application of resources to those in greatest need, etc.) (Appendix T).

The recommendations from the Project Team were forwarded to the System Team for further review and consideration. The final decision-making authority for the project rested with the System Team and specifically with the Vice-President, Person-Centered Care for Capital Health, as the authority within Capital Health to whom Public Health reports (Appendix S). This individual, assisted by the System Team, ensured that decisions were consistent with other district and provincial priorities and with public health standards.

[12] Peel Public Health were selected because of their "Nurturing the Next Generation" Initiative

3 RESULTS

3.1 POPULATIONS REACHED

Table 1. The level of participation in the partner and public engagement sessions as well as in the electronic scans of health units.

PARTICIPATION	
Partners	
Survey	143
Interviews	16
Partner Engagement Sessions	45[1*]
Partner Subtotal	199-209
Citizens	
Survey	330
Invited Focus Groups	141 Families[2]
Open Sessions	10 Families[3]
Citizen Subtotal	481
E Scans	
Interviews	9
National Subtotal	9
TOTAL	**694**

1: Three sessions; 2: Twenty sessions; 3: Five sessions: Four in English and one in French
** Figure is approximate range = 40-50*

A total of 694* partners and/or citizens participated in the Healthy Beginnings situational assessment.

The sampling strategy for partners (snowball) resulted in representation from a diverse group of partners including those working in primary care settings, in communities, and in policy.
A total of 481 families from across the district participated in the citizen engagement activities.

Table 2. Number of citizens engaged by Community Health Board

COMMUNITY HEALTH BOARD	N OF PARTICIPANTS*			
	Focus groups	Open sessions	Survey	Grand Total
Chebucto West	13	1	74	88
Cobequid	14	4	92	110
Dartmouth	4	1	29	34
Eastern Shore – Musquodoboit	1	1	6	7
Halifax Peninsula	12	1	50	63
Hants West [1]			4	4
Southeastern Dartmouth	18	4	37	59
Out of District/Postal Code Not Found	1		37	38
GRAND TOTAL	**62**	**12**	**329**	**403**

** Postal Codes were not captured for all focus group participants*

1. Community health board area with primarily rural communities

Table 2 shows the number of citizen participants by engagement method by community health board area. Based on postal code information provided, Cobequid and Chebucto West community health board areas had the highest number of participants. However, it is important to note that not all citizens provided a postal code; in particular, only half of the focus group participants did so. Community health boards that appear to have very low representation, namely Eastern Shore-Musquodoboit and Hants West, had focus groups in their communities for which individual's postal codes were not captured (see Appendix W for list of focus group sites).

The open sessions and survey participants reflected individuals from diverse backgrounds and public sessions included both parents and grandparents.

Table 3. Age range of citizen survey participants

AGE RANGE OF CITIZEN SURVEY PARTICIPANTS	N	%
18 or younger	2	1
19-25	23	7
26-30	71	22
30-35	147	46
36 or older	76	24
TOTAL	**319**	**100**

Table 3 shows the age range of survey participants. The majority of participants, 46 per cent reported being 30-35 years of age while 24 per cent reported their age as 36 years or older. Participants 18 years of age or younger formed the minority age group with only 1 per cent of participants.

The invited sessions broadened the reach of the sessions and included teenage parents as well as families from the Muslim, African Nova Scotian and rural communities. A detailed list of community organizations that hosted focus groups is outlined in Appendix W. The invited focus groups succeeded in reaching particular groups that did not regularly use Healthy Beginnings programming and those that were unlikely to attend an open public session.

Lastly, the interviews of Capital Health's peer group health units and other innovative public health units resulted in the collection of a broad range of expertise and service delivery models that further informed the assessment.

3.2 PARTNER RESULTS

Over 150 partners provided feedback through the partner survey and individual interviews and about one-third attended a partner gathering to further discuss issues related to prenatal and postpartum care. Partners provided feedback regarding their experiences with Public Health, as well as perspectives on public health's prenatal and postnatal programming in Capital Health. Although there were a wide range of views, in general partners stated expectations that Public Health would work on multiple levels – from population to individual – and that Public Health would work more collaboratively.

The partner surveys, interviews and engagement sessions led to five main themes being identified:

- Public Health Needs to Address Priority Families
- Public Health Needs to Balance Population and Individual Support
- Public Health Needs to Advocate for Health Equity
- Public Health Needs to be Entrenched in Communities
- Public Health Needs to be Flexible

The themes are addressed in detail below:

3.2.1 PUBLIC HEALTH NEEDS TO ADDRESS PRIORITY FAMILIES

Partners shared clear expectations that Public Health must identify families who need additional prenatal and postnatal support, and act as a connector between those families and other community supports. However, partners held a broad range of perspectives on what constituted 'vulnerability' or 'priority' at that life stage. Some partners focused on determinants of health as signs of vulnerabilities; education, income, housing, and social and cultural isolation were key factors identified.

> *"I value it most when it (Public Health) tries to deal with the social determinants of health. I value Public Health when they prioritize marginalized and vulnerable groups for programming that will increase these groups' autonomy and wellbeing."*

Other partners defined priority on a medical basis such as history of premature birth, challenges with breastfeeding initiation before discharge or diagnosed medical conditions in infant or mother.

Generally, partners affirmed Public Health's role in universal postpartum screening and the use of reliable and valid methods to assess risk. All partners agreed that any family can become vulnerable at any point in time and must have their needs addressed at that time.

There was also acknowledgement that services provided by Public Health have low uptake by some groups considered to be vulnerable. Supporting these families would require a revised approach by Public Health and better partnership with agencies that have good relationships with these communities.

> *"I would like to see greater effort put to figuring out how to appropriately/effectively support First Nations, African NS, low income, women & their children, etc. This needs significant dialogue with those already working with "priority" populations, such as meetings with family resource centers staff."*

The discussions on priority populations revealed differing perspectives on the targeting of certain populations versus the provision of universally available supports. Partners stated expectations that a mix of targeted and universal approaches would be used by Public Health, but no consensus was reached as to what an optimal mix might be.

3.2.2 PUBLIC HEALTH NEEDS TO BALANCE POPULATION HEALTH AND INDIVIDUAL SUPPORT

Partners reported, in both the survey and engagement sessions, that they valued Public Health's focus on determinants of health and use of population-wide applications ("upstream focus"). At the same time, partners acknowledged and valued Public Health's historical role in individual postnatal follow-up and support. Many partners spoke of Public Health as a safety net for families in the transition from hospital to community.

> *"The PHN (public health nurse) visit is (should be) a certainty that new mothers can rely on once the baby is born - someone coming into their homes to check on them and allows them an opportunity to voice any concerns or problems. Many women would not phone Public Health with these "trivial" questions, but they make a huge difference to mothering confidence in the first weeks."*

Tensions emerged during the deliberative dialogue sessions regarding the need for Public Health to support individuals in the community and the need for public health to support large-scale social change through contributions to health policy. Some partners expressed unease with Public Health potentially working less with individuals.

> *"… The culture of breastfeeding grows one mother & baby at a time. You won't see the social change without individual change & support."*

Others noted that in a climate of fiscal scarcity, Public Health would fall short in resources to partner effectively and address population level issues if the focus remained on working with individuals. The effectiveness of individual support in affecting population change was questioned by survey respondents.

> *"If you look at the evidence relating to a Population Health Approach and the majority of current Public Health work, you will realize quickly there is a disconnect. The evidence tells us that one on one education and skill development is resource intensive and has minimal impact on the health of the population as a whole."*

In general, while partners differed on whether Public Health should choose individual over population support or vice versa, most partners wanted Public Health to balance both sets of activities.

> *"As we are working towards an obesity strategy for NS, I think Public Health needs to add value to this work by continuing to support breastfeeding, and supporting food security and healthy eating for young families. We know that we need to challenge the unhealthy behaviors that we are seeing and model and educate and support policies that will impact early childhood development and improve health and well-being. Public Health staff could be more available in communities to support the hands-on development of these services while also working to influence policy in this regard."*

3.2.3 PUBLIC HEALTH NEEDS TO ADVOCATE FOR HEALTH EQUITY

Public Health as an advocate emerged as a theme throughout all partner consultations, particularly in relation to addressing the determinants of health. Most partners stated expectations that Public Health advocate on issues ranging from poverty to access to health services in rural communities. Public Health was perceived as having the ability to take on this role due to the focus on health equity in the provincial Public Health standards.

> *"Advocating for higher income assistance and better housing would be an excellent role for Public Health."*

> *"Public Health could advocate for the BIG THREE of challenges for all families in rural areas; lack of public transportation, geographic isolation (access to services), literacy (work as a more active partner with literacy networks, i.e. schools & FRCs)."*

Some partners were keen to see Public Health play a bigger role in providing evidence that informs advocacy:

> *"Public Health could work with others to develop a shared agenda. Analysis of health – could be a part of a more organized and intentional women's health community with a race/ability/gender identity/rural/urban lens."*

A few partners expressed caution in Public Health's broader advocacy role and sought more focus on early support for women and children.

> *"I totally disagree! Women & babies must be the priority. Street outreach, healthy air – all important – but the focus here must remain on women during pregnancy, screening those who need more support & support for new moms & babes. Public Health Services must advocate for women and the issues to support mothers & babies."*

In general, there was significant support from partners for Public Health to step into an advocacy role and for Public Health to partner with agencies that could be voices on issues that determine health status.

3.2.4 PUBLIC HEALTH NEEDS TO BE ENTRENCHED IN THE COMMUNITY

Almost all partners desired a Public Health "entrenched in communities." However, the definition of "entrenchment" was not clear. For some partners this meant Public Health having a bigger neighborhood presence through changes in the physical location of public health offices, while for others it meant Public Health having a better understanding of local community needs and health issues.

> *"Continue your service as it is now, but offered in more locations."*

"Talk with more pre-school parents. Talk with groups of service providers. Offer groups that allow women to have input into what happens and to evaluate what are being offered."

Some community partners wanted Public Health to work behind the scenes as a collaborator and connector to ensure healthy communities through partnership and community development.

"I view the promotion of healthy communities as a priority for public health. Promoting access to food, housing, and transportation is important. Helping to link families with others in their community (even promoting interaction between generations - looking at ways to enhance quality of life in older people by having them support young families) is really helpful."

"Prenatal could be delivered by peer volunteers using key public health messages - or a program designed and overseen by or in collaboration with Public Health. Postpartum could be delivered the same way - if we were to enhance our partnerships with other community service provider… both through information sharing and grant provision, we would help reach the vulnerable families out there - that we aren't getting to now (I think)."

The definition of community was equally diverse. Some partner organizations defined community as families, while others took a strong geographic view and still others defined community more virtually, as in online communities and groups of like-minded individuals. All organizations desired a more aware Public Health with respect to community needs and provision of complementary community supports.

"Public Health should be well linked into a range of services & supports for families - aware of resources!"

Most partners expected Public Health to achieve community entrenchment through more meaningful and reciprocal partnerships and better assessment of community needs.

"Be entrenched in the communities. Provide support to grass roots groups to help communities/families help themselves. Needs assessments need to be done. Public Health should partner w/ CHBs to get this done – make use of volunteer resources who know the population."

3.2.5 PUBLIC HEALTH NEEDS TO BE FLEXIBLE

Partners expressed a strong view that Public Health should be more flexible and responsive to the needs of families and communities by embracing technology to share information. Partners stated that Public Health supports need to be accessible outside of usual office hours and available through the use of technological innovations including various social media platforms.

> *"New technologies are developing all the time. It might be useful if videos were available for use in the information programs that could also be viewed again at home - something accessed from a website, live streamed so that if one parent saw it at the library session, they could share it with their partner at home later. Making use of new technologies to track pregnancy milestones and later babies growth and development might be helpful for the next generation of parents for whom technology is so part of their everyday lives."*

> *"I believe we need the Loving Care booklets put into TV/Video vignettes that are running on TV & YouTube regularly that exposes everyone to good research-based information & therefore de-stigmatizes & informs."*

Partners also wanted Public Health to support agencies who work with families outside of daytime office hours and support existing social networks in the community.

> *"I like the idea of connecting peers to learn from each other."*

> *"If we truly want to meet the needs of community we need to look beyond 8-4pm. Many community based programs offer evening/weekend support to meet the needs of the families they work with."*

The Enhanced Home Visiting program partnership was highlighted as an example of a Public Health and community partnership that is flexible and responsive in meeting families' needs.

> *"One of the fundamental principles of EHV (Enhanced Home Visiting) is meeting people and families where they are at. As practitioners, this means being flexible and available to people not only when but also where they would like to receive support. This means some evening work, some weekend work and working in locations that are not traditional workplaces."*

3.3 CITIZEN RESULTS

Approximately 481 members of the public engaged with Public Health during the Healthy Beginnings situational assessment, with a significant portion attending the invited focus group sessions. These families discussed their experiences in the prenatal and postnatal period as well as their needs during different life stages. While different groups highlighted the need for different supports, four overarching themes emerged which encompass the underlying needs from pregnancy until the child is school-aged. Subthemes during different stages of the prenatal and postnatal period were also outlined through the online survey, public engagement sessions, and invited focus groups.

Table 5. Self-reported needs of parents at pregnancy, birth, six weeks of age, and from six weeks until the infant is school-aged.

NEEDS/CONCERNS	STAGE			
	Pregnancy	Birth	Six Weeks	Six Weeks until School-Aged
Access to information				
Access to support				
Continuity of care				
Healthcare providers and health				
Maternal health / physical care				
Maternal confidence, parental skills				
C-section				
Access to Midwives & doulas				
Infant Feeding				
Child development				
Child health				
Peer support				
Pregnancy & prenatal care				
Morning sickness				
Baby's gender				
Labor & delivery				
Healthy baby				
Sleep				
Infant weight gain				
Public Health Services				
Return to work/ childcare				
School				

The results of the citizen engagement are highlighted in Table 5. The citizen engagement sessions along with the survey responses led to the discovery of four overarching themes which represented what families felt was most important in the prenatal and postnatal period:

- The Importance of Access to Information
- The Importance of Access to Support
- The Importance of Continuity of Care
- The Importance of Compassionate and Flexible Healthcare Providers and Systems

In addition to these overarching themes, families identified a number of primary needs/concerns that related to two or more stages of the prenatal and postnatal period. These needs/concerns were classified as subthemes and are outlined below in Table 6.

Table 6. Primary needs/concerns reported by parents in the four stages of the prenatal and postnatal period

NEEDS/CONCERNS	STAGE			
	Pregnancy	Birth	Six Weeks	Six Weeks until School-Aged
Maternal Health and Physical Care				
Maternal Confidence/ Parenting Skills				
Access to Midwives and Doulas				
Infant Feeding				
Child Development and Health				
Peer Support				

The details of the overarching themes and subthemes are presented below:

3.3.1 THE IMPORTANCE OF ACCESS TO INFORMATION

Families highlighted their need to access credible information as a key theme at all stages of development. The public felt that information on pregnancy, child development and parenting could be made available through a variety of formats, although the descriptions of precise needs varied between invited and public session participants. The need for local, readily accessible, specific, and circumstance-based information was a strongly expressed by all families. This included the need to have information available in an online format with enough information to address current and future child development.

> *"…I wanted to be told things honestly and to have the information from our hospital online where I could search it."*

A sub-theme resulting from those that attended the invited focus groups was a desire to access information of cultural relevance. Families required information that was relevant to their situation and which reflected diverse learning styles and capabilities.

> *"distribute information through our community. Ensure our cultural leaders understand the services…"*

Parents indicated receiving information from a wide variety of supports. Respondents listed over 32 sources of information, both formal and informal, that they used as their child developed (Appendix U).

Figures 1, 2 and 3 outline the top ten information sources survey participants reported. Results varied by the developmental stage, but the characteristics of the top five remained relatively consistent; they include family doctors and family members. These informational supports ranged from formal to informal, but both played a significant role as the infant develops.

Figure 1. The top 10 sources of information during pregnancy listed by parents in the citizen engagement survey.

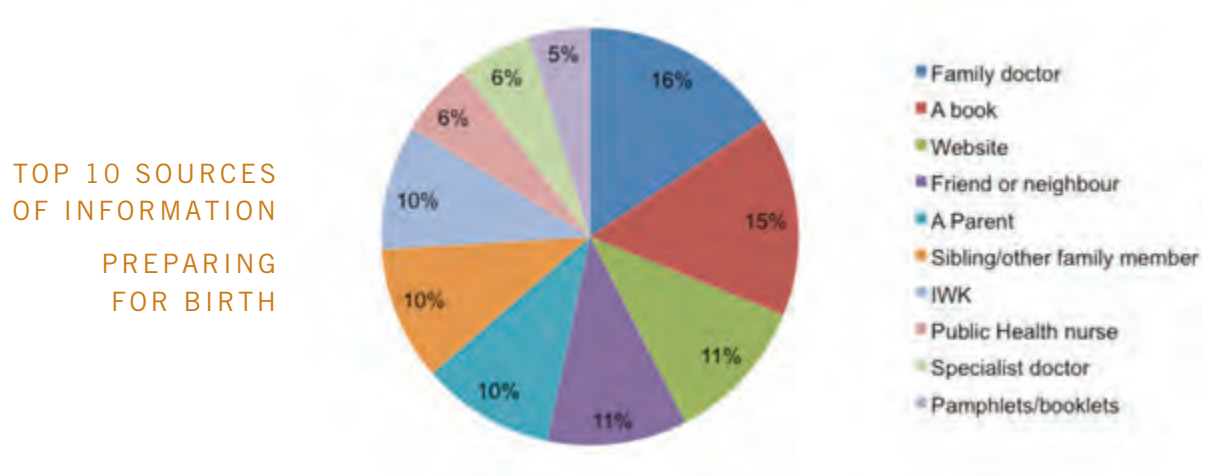


Figure 2. The top 10 sources of information around the time of birth as listed by parents in the citizen engagement survey.

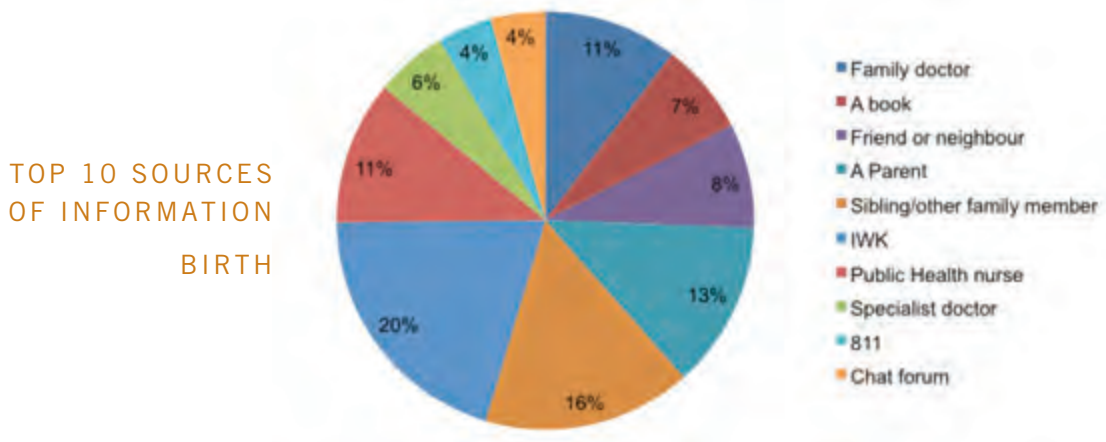
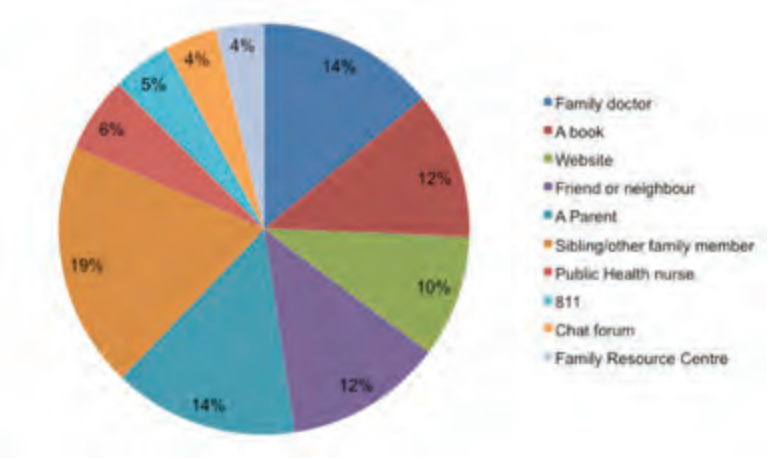


Figure 3. The top 10 sources of information for six weeks after birth until the child was school-aged as listed by parents in the citizen engagement survey.

TOP 10 SOURCES OF INFORMATION

SIX WEEKS UNTIL SCHOOL-AGED



3.3.2 THE IMPORTANCE OF ACCESS TO SUPPORT

The importance of access to supports was highlighted by all families at all stages of development regardless of whether they participated in the online survey, public engagement sessions, or invited focus groups. This theme included a need to access formal (defined as those paid to provide support, e.g. healthcare workers and family resource centre staff) and informal supports (defined as those who volunteer their time for support, e.g. friends and family) as parents transitioned from pregnancy to parenthood. Those who responded to the survey stated that their need for informal supports increased as their child developed while those who attended the invited focus groups desired increased formal support, particularly after their baby was born. Participants in the invited sessions described limited informal supports at all stages of their child's development.

> *"I wish I'd found a Mom's group sooner. That was the best support, realizing that everyone else feels the same as me, and sharing stories. Horror stories of sleepless nights and insane schedules don't seem as bad when others are going thru [sic] the same thing!"*

Survey participants reported the opposite, characterizing the prenatal and postnatal period as one in which they had a variety of informal supports to draw upon. These respondents reported needing these informal supports, and having this need met. In addition, those who attended the invited focus groups felt that support needed to be relevant to their own situations.

> *"I had a really fantastic experience throughout because of all the support from my family"*

> *"Concern as I didn't know how to raise a boy – still on my own, boyfriend was partying a lot"*

Figure 4. The top 10 sources of support or direct care during pregnancy listed by parents in the citizen engagement survey.

TOP 10 SOURCES OF SUPPORT OR DIRECT CARE

PREPARING FOR BIRTH

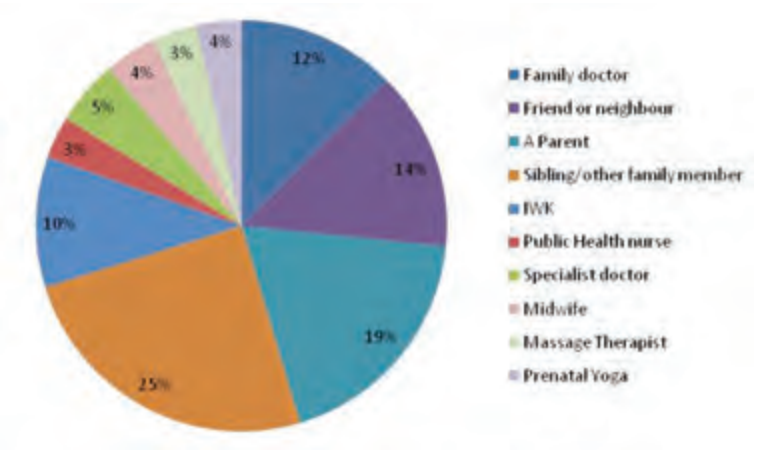


Figure 5. The top 10 sources of support or direct care during delivery as listed by parents in the citizen engagement survey.

TOP 10 SOURCES OF SUPPORT OR DIRECT CARE

BIRTH

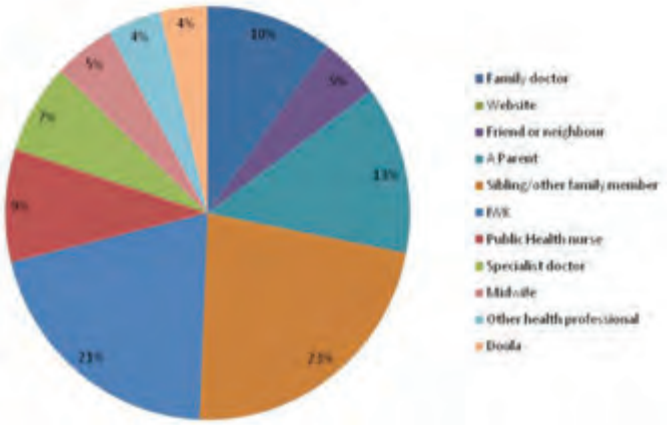
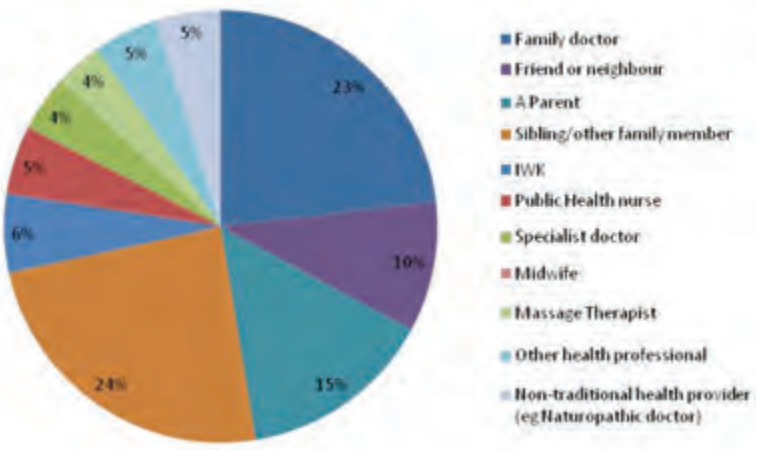


Figure 6. The top 10 sources of support or direct care from six weeks until the child was school-aged as listed by parents in the citizen engagement survey.

TOP 10 SOURCES OF SUPPORT OR DIRECT CARE

FROM SIX WEEKS UNTIL SCHOOL-AGED



The sources of support identified by parents in the survey indicated that the supports throughout development were consistent and both formal and informal. Parents indicated that their primary support was a family member regardless of the stage of development. The IWK Health Centre also played a significant support role during pregnancy and delivery while Public Health played a less significant role during this time (Appendix V). Additionally, family physicians were identified as the primary formal support for many parents during development.

Other primary care practitioners were identified as important formal supports in all of the citizen engagement results. Yet, difficulties in accessing chosen formal supports, e.g. doulas, midwives, and specialists, were revealed in the survey. Individuals felt strongly about their caregivers who greatly impacted their experience during the prenatal and postnatal period.

> *"I wanted to know if I was going to have access to the health care I wanted and needed. I live about 2 hours from my family doctor, and about an hour away from the closest Hospital. I am not in the midwifery district and was very saddened, angry and worried to not being able to have the access I felt as a Canadian I had the right too [sic]! My options were looking very bleak!"*

Altogether families stated that they required both formal and informal supports as their child developed. The importance of informal support was highlighted in all cases along with the importance of one's choice of healthcare provider.

3.3.3 THE IMPORTANCE OF CONTINUITY OF CARE

Continuity of care was highlighted as a concern for all families at all stages of development regardless of whether they participated in the online survey, public engagement sessions, or invited focus groups. Families described a desire for prolonged contact with one individual through the prenatal, birth and postnatal experience. Participant responses referred to the need for better continuity of care between the prenatal and postnatal stages as well as between healthcare providers. All respondents desired to know the individual delivering their baby prior to the delivery.

> *"I wanted to know that I could trust my primary care providers. Although the physician who attended my birth turned out to be a phenomenal person who I would later trust, she was a stranger to me - we met during my labor, and a relationship of trust simply did not exist at that time..."*

In the responses to the survey and open sessions, families stated that they required consistent messages from their providers, regardless of their institution or profession, as well as continuity of knowledge of their situation. In addition, parents desired their physician be present and able to deliver their infant. Those who attended the public focus groups and responded to the survey added that midwives had the characteristics to provide this continuity of care, not just physicians.

"I need seamless service delivery. Work with my family physician. I need one source. I want consistency."

Those who attended the invited sessions reiterated all of these needs, but added that they required formal structural support after birth to compensate, in some cases, for a lack of informal support. Public Health's initial contact, during prenatal classes, did not fully meet this need.

"Better integration of Public Health & Family Resource when offering programs & sessions (e.g. prenatal)"

3.3.4 THE IMPORTANCE OF COMPASSIONATE AND FLEXIBLE HEALTHCARE PROVIDERS AND HEALTH SYSTEMS

The need for compassionate and flexible healthcare providers was highlighted as a theme by all families at all stages of development regardless of whether they participated in the online survey, public engagement sessions, or invited focus groups. Individual experiences with care providers as well as maternal and infant health were mentioned in all of the other overarching themes. This may signify the importance of interactions between family and care provider, as well as the uncertainty experienced by parents during to pregnancy, birth and child development. Families highlighted both positive and negative experiences with their care providers.

Parents spoke of the need to have high quality providers as well as choice of professionals. Strong statements were a trademark of this theme as families noted that they not only needed access to care, but also care from their preferred provider. This included family physicians, midwives, doulas, and specialists.

"Better access to the health care provider of my choice. I had to find a new family doctor that would take prenatal patients and I was placed on the waiting list for a midwife."

During the invited focus group sessions, parents revealed a preference for care from providers who mirrored their social or cultural diversity. These individuals also spoke of a need to have providers help them navigate the healthcare system.

"Need more culturally competent system to understand the needs of diverse groups, particularly Muslim women."

Moreover, participants stated that they required recognition of their abilities as an informed parent and respect of their treatment choices. These statements related to choices during delivery as well as afterwards. The importance of maternal and infant health was also highlighted under this theme. Parents wished to learn how to sustain the good health of their infant during and after pregnancy.

"I had a few (very young) nurses that offered me an epidural (at only 2 cm! what foolishness!!), and I was not pleased with that. When I was paired with a nurse that supported my decisions, I was very happy and attribute much of my success to her encouragement as well as my husband's and midwife's."

3.4 CITIZEN SUB-THEMES

3.4.1 NEEDS ARISING THROUGHOUT THE INFANT-EARLY CHILDHOOD PERIOD: PREGNANCY, SIX WEEKS POSTPARTUM, AND SIX WEEKS UNTIL SCHOOL-AGED

A) Maternal Health/Physical Care

The responses of parents during the engagement changed with different stages of child development. During pregnancy, parents wanted to know how to maintain a healthy pregnancy as well as what to expect during delivery. Specific needs for more accessible information on issues relating to diet, exercise and prenatal care were also articulated. Parents also wanted to know what changes were normal as their pregnancy progressed.

After birth, parents were most concerned about physical recovery of the mother and postpartum depression. This subtheme was especially prominent during the invited focus groups. Parents noted that they felt lost and unclear with respect to physical and mental changes that occurred during and after pregnancy. Parents also noted a need for information related to child and infant sleep at this stage.

B) Maternal Confidence/Parenting Skills

Concerns regarding maternal confidence and parenting skills emerged during the survey as well as during the public and invited sessions. Parents reported that their needs during this time were high related to access to information and to available supports.

Parents described feelings of insecurity if a healthcare provider in a position of authority, their peers, or others they trusted did not validate their parenting actions. Maternal confidence was positively related to having the most and best information possible. Learning that peers had similar problems also was described as having a positive impact on parental confidence, as families wanted to discuss practical solutions with other parents.

Parents noted that knowledge was reassuring and improved parental confidence. For older children approaching school-age, parents reported wanting to understand appropriate activities for children as well as appropriate disciplinary practices.

3.4.2 NEEDS ARISING SPECIFICALLY DURING PREGNANCY AND BIRTH

Midwives and Doulas

This was a theme that emerged from the survey but not from the invited focus groups. Responses focused on access to information, interaction, and financial support for both midwives and doulas. While midwives are publicly funded, doulas are not funded within Nova Scotia. Parents noted that both doulas and midwives provided critical postpartum supports, specifically in terms of answering questions about pregnancy and birth and in terms of supporting breastfeeding.

It is important to note that during this situational assessment the midwifery program had been suspended within Capital Health and that this may have contributed to the strength of responses. Parents stated that they required more timely information with respect to whether they would receive a midwife or not.

Doulas were often referred to as positive familial supports. While there were comments on the expense, their knowledge and help was very positively reflected upon. Parents said that doulas were readily available to make home visits and helped foster parental confidence.

3.4.3 NEEDS ARISING SPECIFICALLY AFTER BIRTH: BIRTH, SIX WEEKS, SIX WEEKS UNTIL SCHOOL-AGED

Feeding

Parents stated that as their infant grew, specific needs related to feeding changed. At birth, there was a strong focus on breastfeeding, especially in hospital. Mothers noted that they would have appreciated increased and sustained support for breastfeeding. Parents also stated that realistic expectations would have helped them continue breastfeeding, along with consistent messaging from different health professionals.

As the child became older parents stated a need for more information on transitioning to solid foods along with information on sustaining breastfeeding. Parents wanted to learn which foods the child should be eating including when different foods should be introduced. The focus on healthy diets for children continued until school-age.

3.4.4 NEEDS ARISING IN INFANCY AND EARLY CHILDHOOD ONLY: SIX WEEKS UNTIL SCHOOL-AGED

A) Child Development and Health

Parents stated needing more information on their infant's development, and on developmental milestones and common childhood illnesses in order to decrease worries related to developmental milestones and illness. Parents reported that they wanted to know more about managing their child's health with a focus on health screening and immunizations, and when to contact a physician if the child is ill.

B) Peer Support

Peer support as an informal support was noted as being necessary at six weeks of age. Peer support was described as being from parent groups or others with children of a similar age. This included a need for access to play groups such that parents and children would have the opportunity to mingle. Those who attended invited focus groups also reported having fewer informal supports while those who responded to the survey and that attended the public sessions reported an increase in their informal supports as their child aged.

3.5 RESULTS OF THE BEST PRACTICE REVIEW

The results of the best practice review are highlighted in detail in Table 1, Appendix O. An overarching theme emerging from the review was that best practices for prenatal and postpartum support are highly dependent on local context. Few conclusions could be drawn due to methodological variation in the studies. Many authors identified a need for further, higher quality research in this area.

3.6 RESULTS OF THE ENVIRONMENTAL SCAN

The results of the environmental scan with other Public Health units are described in detail in Appendix P. Overall the scan showed that practices were highly dependent on local context including how Public Health services are funded and whether services are situated within or outside of acute care structures.

The following findings are of note in relation to the needs reported by citizens and partners in Capital Health:

- Other Public Health agencies reported offering a wide range of visits; some offer universal home visits while others do not, and not all offer visits by public health nurses.
- Other public health agencies within Canada have adopted various levels of use of technology use including YouTube (http://www.youtube.com), texting, and Facebook. Some areas are also using electronic health records, while others offer online prenatal modules as an alternative to the classroom-setting delivery.
- The environmental scan showed that many jurisdictions experience sub-optimal information sharing between local programs and certain federal programs.
- Other public health units reported challenges in continuity of care in their areas particularly in creating a seamless transition from hospital to home and between care providers. Almost all interviewees commented on poor integration with primary health and family physicians, regarding both family physician referrals to Public Health programs and information sharing.
- The public health units interviewed in the assessment reported difficulties in meeting the needs of newcomer populations and other priority populations such as specific cultural groups.

4 LIMITATIONS

A) Voluntary Participation and Convenience Sampling

Participation in the partner and citizen engagement sessions and surveys was voluntary and therefore neither the partner nor citizen results can be deemed representative of the population or all partner groups. Probability sampling was not applied. As described in the Research Design and Methods section, many efforts were made to ensure geographic representation in the survey, through postal code monitoring, and through targeted promotion of the focus groups to diverse cultural, social and generational groups. Partner participation in the survey and engagement sessions was enabled by previously existing relationships between public health and partners and required a flexible schedule of the engagement sessions (mix of day and evening sessions in different locations), and optimal participation may not have been reached due to the challenges of scheduling sessions. Similarly, participation in the public citizen sessions may have been limited due to the scheduling of the sessions in winter months (January and February).

Both the length of the citizen survey and its voluntary nature may have contributed to the number of incomplete surveys; not all questions were answered by all participants.

B) Recall bias

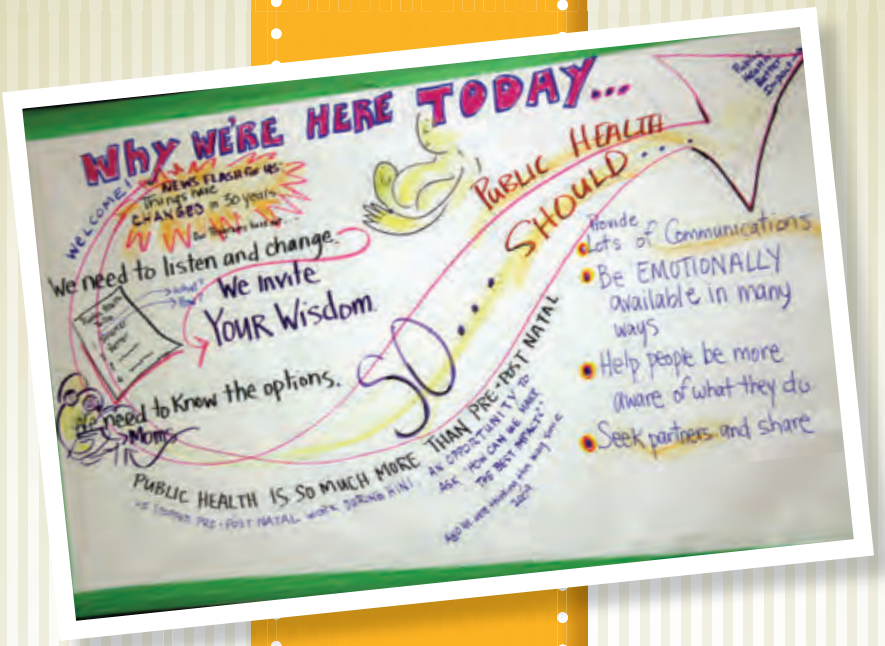
The citizen survey relied heavily on families' ability to recall events, which for some families may have been five or more years ago. Efforts to minimize recall bias included the use of the experience mapping process in both the survey and engagement sessions. The process involved prompts that encouraged families to recall what they were feeling or experiencing at different points in the prenatal, postpartum and early childhood periods.

C) Response bias

The partner and citizen engagement results may be limited by response bias, where some populations have been either over- or underrepresented. The "by invitation only" focus groups were designed to reach individuals unlikely to participate in the public sessions for a variety of social, cultural and economic reasons. In providing specific invited sessions, some sub-groups may have been inadvertently overrepresented. Response bias related to social desirability may have been present for the invited focus groups and public sessions; this form of bias would have been minimized for survey respondents due to the anonymity offered by survey methodology.

D) Inconsistencies in the recording of invited focus groups' data

Factors such as group size, interpreter support, and the need for attention to cultural practices required flexible facilitation approaches during the invited focus groups. As a result, data collection practices varied considerably from session to session. While the experience maps formed the basis of all focus group discussions, smaller groups had more of a generative conversation while larger groups tended to proceed through discussion of the maps more systematically. Recording of quotes also varied from session to session, as in smaller sessions there was a higher risk of attribution of quotes to individuals, and so a higher risk to personal privacy.


WHY WE'RE HERE TODAY...
WELCOME!
NEWS FLASH for us:
Things have CHANGED in 50 years
We need to listen and change.
We invite
YOUR Wisdom
We need to Know the options.
Moms
PUBLIC HEALTH SHOULD...
Provide Lots of Communications
Be EMOTIONALLY available in many ways
Help people be more aware of what they do
Seek partners and share
SO...
PUBLIC HEALTH IS SO MUCH MORE THAN PRE-POST NATAL
AN OPPORTUNITY TO
ASK "HOW CAN WE HAVE THE BEST IMPACT?"


THINGS HAVE CHANGED!
TODAY
Our programs haven't changed!
2012

5 CONCLUSIONS AND RECOMMENDATIONS

The results of the situational assessment show that the Healthy Beginnings program should change to better meet the needs articulated by citizens and partners in Capital Health. The results also show clearly that Public Health is one player of many in the prenatal and postnatal experience of most families in the district. Most needs that citizens reflected in the engagement process would require Public Health to work with or support others differently than it does today. The best practice review and the environmental scan results help to provide some direction on how these needs have been met elsewhere, and to what extent prenatal and postnatal activities support reaching the outcomes intended.

Based on these conclusions, the following recommendations for changes to the Healthy Beginnings program validated and endorsed by the System Team on April 5, 2012.

5.1 FIND, EQUIP, AND SERVE PARTNERS

In order to contribute to healthy development for children in Capital Health, Public Health should renegotiate its relationships with its partners. Specifically, the Project Team recommends that Public Health share findings from this assessment with key partners including primary care providers, family physicians and family resource centres, and begin conversations about how their relationships can change to better serve families in the community.

5.1.1 SUPPORT FAMILY RESOURCE CENTRES

Public Health should work with family resources to find ways to improve the support it provides to the centres beyond the formal supports in place for the Enhanced Home Visiting program.

5.2 WORK TO ADDRESS HEALTH INEQUITIES

Public Health should focus on understanding the needs of its communities through population health assessment and surveillance, and begin work to address health disparities among the communities of Capital Health. The Project Team recommends that Public Health work with communities of highest need to further understand and address health disparities, beginning with three communities.

5.2.1 FURTHER UNCOVER AND UNDERSTAND THE ROLE OF INFORMAL SUPPORTS

Together with partners, Public Health should begin a dialogue with communities to further expose and understand the critical role that informal supports are playing in the lives of families during the prenatal and postnatal period. An additional goal of the dialogue should be to further understand how the roles of informal supports compare with the role of formal support, and to better understand how this varies by population group.

5.3 PROVIDE GREATER CHOICE FOR PRENATAL EDUCATION

The citizen engagement findings highlighted a range of diverse needs with respect to prenatal education. The Project Team recommends that Public Health increase the menu of options available for prenatal education. This may require that Public Health re-evaluate its model of prenatal programming and investigate online options among others.

5.4 CONTRIBUTE TO CONTINUITY OF CARE

Continuity of care from pregnancy until the infant is school-aged was a recurring theme in citizen feedback. Public Health must work more closely with its partners to support families and act as a connector to build a network of community supports. The Project Team recommends that Public Health work more closely with family physicians, midwives, family resource centres and other key players.

5.4.1 DEVELOP AN ENHANCED SCREENING MECHANISM

To directly support improved continuity of care from hospital to home, Public Health must enhance the screening offered to families at the IWK by developing a screening mechanism that will more clearly identify the families that may benefit from enhanced support in the community.

5.5 DEVELOP A SYSTEM OF MONITORING AND A QUALITY FEEDBACK MECHANISM

Given the investment required for situational assessments, a system must be created to continually monitor communities and adjust to meet their needs. These changes must be based on surveillance, and a system effective enough to process information and change accordingly. Scheduled evaluations of Healthy Beginnings work must also become a part of this system to address challenges that ongoing monitoring cannot. The Project Team recommends that Public Health review its surveillance process to uncover challenges to getting timely and quality data on program participation and monitoring program achievements. As well, Public Health should focus on implementing both process and outcome evaluations that can provide better feedback on program participant expectations, program quality, and program and partnership outcomes.

POST SCRIPT

Public Health embarked on a Healthy Beginnings situational assessment to learn about the needs of its population and to look for options to modify its programming and partnerships to better meet those needs. As part of this work, an engagement process and scan of other public health agencies provided insight on the needs of citizens and partners, and options worth considering to better serve underserved populations. Through this assessment, Public Health has recognized that it must work more closely with its partners and the provincial system.

Since the situational assessment was completed, Public Health has begun to engage in a number of related provincial initiatives. The Government of Nova Scotia has begun a review of work related to the "early years" – i.e. programming affecting families with babies, toddlers and preschoolers – and as part of this review, the Department of Education was tasked the responsibility for such government programming. In addition, a Premier's Task Force on the Early Years has been established to provide leadership to strategy development and implementation. Public Health has been an active participant in these consultations.

Public Health has also begun to act on some of the recommendations put forth by the Project Team. It is leading and supporting the use of prototypes to explore key activities related to continuity of care with its counterparts in primary care and family resource centres. Public Health is also working with family resource centres to support their work of achieving equitable outcomes within their communities. One team has begun to use Twitter, Facebook, and Pinterest in a more concentrated effort to connect with parents virtually, and another is developing a project to revise online content based on information needs identified by parents through the assessment. Public Health has also begun to work with the Department of Health and Wellness to pilot a screening tool that can better identify the needs of new families, and is also participating in conversations regarding the early years. Future work will be needed to identify the proportion of universal versus targeted programming offered by Public Health in Capital Health.

Lastly, Public Health is focusing on evidence-informed decision-making through a review and redesign of its surveillance, research and evaluation processes. There is also a focus on building systematic approaches to literature reviews, program planning and evaluation all in an effort to continuously learn how to work differently within communities to support healthy development.

REFERENCES

Bate Paul and Glenn Robert. (2006). *Experience-based design: from redesigning the system around the patient to co-designing services with the patient.* Quality Saf Health Care 15: 307-310.

Capital Health. (2011a). *Healthy Beginnings Impact Assessment Executive Summary.* Retrieved from http://www.cdha.nshealth.ca/system/files/sites/71/documents/healthy-beginnings-impact assessment-executive-summary.pdf

Capital Health. (2011b) *Shaping the future of pre and postnatal services.* Retrieved from http://www.cdha.nshealth.ca/media-centre/2011-11/shaping-future-pre-and-postnatal services

Community Health Boards. (2010). *Our healthy future. Realizing our promise: A community health plan for 2010-2013*. Retrieved from http://www.cdha.nshealth.ca/system/files/sites/3990 documents/community-health-plan-2010-2013_0.pdf

Government of Nova Scotia. (2003). *Healthy Babies, Healthy Families: Postpartum and Postnatal Guidelines*. Retrieved from http://novascotia.ca/hpp/publications/PostpartnatalGuide.pdf

Government of Nova Scotia. (2004). *Healthy Beginnings Enhanced Home Visiting Initiative Evaluation Framework.* Retrieved from http://www.gov.ns.ca/hpp/publications/HB-eval-framework report.pdf

Government of Nova Scotia. (2006). *The renewal of public health in Nova Scotia: Building a public health system to meet the needs of Nova Scotians.* Retrieved from http://www.gov.ns.ca hpp/publications/07148_therenewalofphinnsreport_apr06_en.pdf

Government of Nova Scotia. (2010). *Nova Scotia Public Health A Journey Towards Renewal.* Retrieved from http://novascotia.ca/hpp/yourmove/Journey-Towards-Renewal.pdf

Government of Nova Scotia. (2011). *Nova Scotia public health standards 2011-2016*. Retrieved from http://www.gov.ns.ca/hpp/yourmove/Public_Health_Standards_EN.pdf

Government of Nova Scotia. (2012a). *Healthy Beginnings Enhanced Home Visiting Program Standards.* Retrieved from http://novascotia.ca/hpp/publications/HB-EHV-Standards.pdf

Government of Nova Scotia. (2012). *Province to consult Nova Scotians on early years* [Press Release]. Retrieved from http://novascotia.ca/news/release/?id=20120525006

IWK Health Centre. (2009a). *About us.* Retrieved from http://www.iwk.nshealth.ca/index. cfm?objectid=83035FEC-96DF-D496-5C20716B6DFB391E

IWK Health Centre. (2009b). *How we help.* Retrieved from http://www.iwk.nshealth.ca/index cfm?objectid=146CDA7E-AA07-FBB6-76AABB8E0D615178

IWK Health Centre. (2012). *Update on the IWK's midwifery program-December 2012* [Press Release]. Retrieved from http://www.iwk.nshealth.ca/index.cfm?objectID=14686F35-B51E-C4A3 7072C77C6580B267

Krippendorff, K. (2013). *Content analysis: An introduction to its methodology 3rd Edition*. Sage Publications, Incorporated.

Nova Scotia Doula Association. (2010). *Frequently asked questions.* Retrieved from http://nsdoulas.ca/general-public/faq

Ontario Ministry of Health and Long Term Care. (2002). *Healthy Babies Healthy Children Policy Statement on Universal Screening and Assessment for Healthy Child Development Prenatal to School Age.* Retrieved from http://www.health.gov.on.ca/english/providers/pub/child/hbabies policy_statement.html

Presencing Institute (2012). Overview. Retrieved from http://www.presencing.com/overview

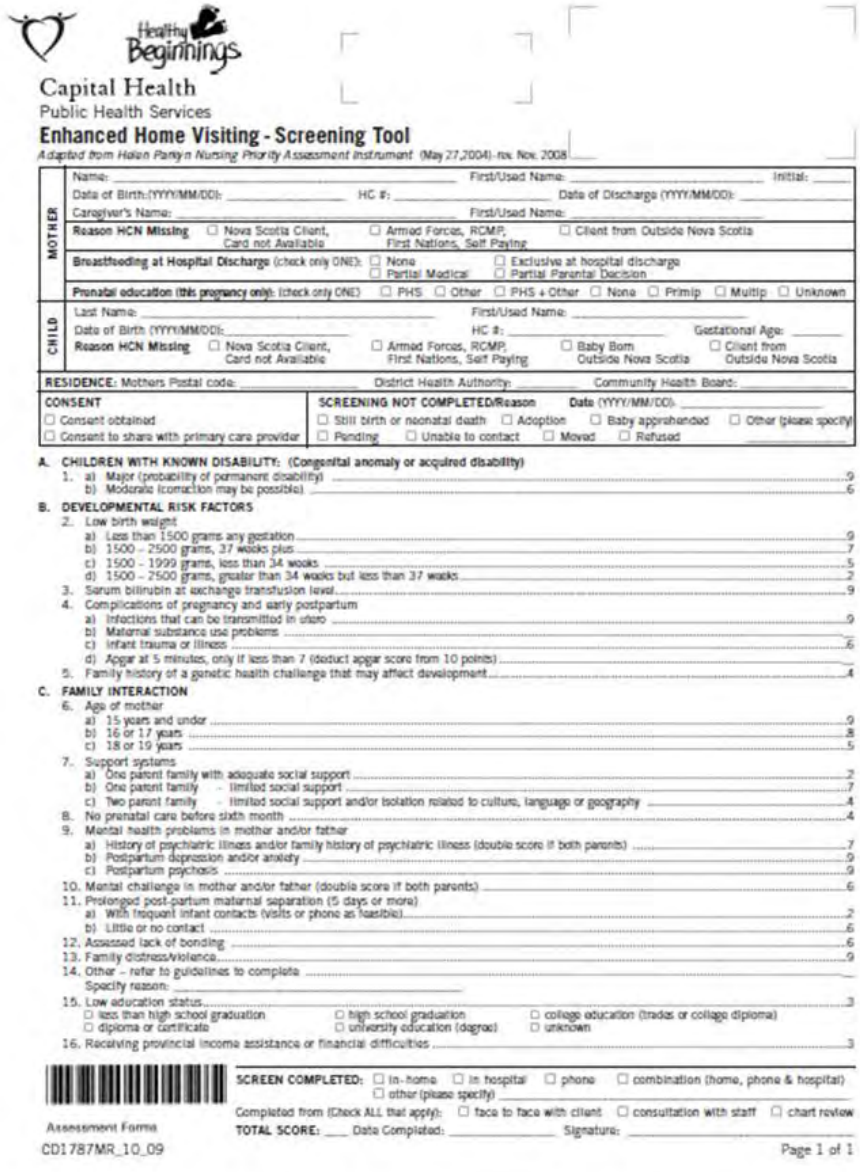
Statistics Canada. (2011). *Health profile, June 2012.* Retrieved from http://www12.statcan.gc.ca/health-sante/82-228/help-aide/Q03.cfm?Lang=E

APPENDICES

APPENDIX A: ENHANCED HOME VISITING PROGRAM AND PARKYN SCREENING TOOL

The Enhanced Home Visiting Program is a program created as part of the federal Early Childhood Development Initiative to aid in improving parenting as well as strengthening childhood development and community supports. The initiative requires that Public Health identify vulnerable parents through the use of two screening tools and offer support for up to three years after the baby is born. This support, whether physical, mental, or emotional, is in the form of a community home visitor or public health nurse coming to the home at least once a month.

PARKYN SCREENING TOOL



Healthy Beginnings

Capital Health
Public Health Services

Enhanced Home Visiting - Screening Tool

Adapted from Helen Parkyn Nursing Priority Assessment Instrument (May 27,2004) - rev. Nov. 2008

MOTHER

Name: _____ First/Used Name: _____ Initial: _____
Date of Birth:(YYYY/MM/DD): _____ HC #: _____ Date of Discharge (YYYY/MM/DD): _____
Caregiver's Name: _____ First/Used Name: _____
Reason HCN Missing ☐ Nova Scotia Client, Card not Available ☐ Armed Forces, RCMP, First Nations, Self Paying ☐ Client from Outside Nova Scotia
Breastfeeding at Hospital Discharge (check only ONE): ☐ None ☐ Partial Medical ☐ Exclusive at hospital discharge ☐ Partial Parental Decision
Prenatal education (this pregnancy only): (check only ONE) ☐ PHS ☐ Other ☐ PHS + Other ☐ None ☐ Primip ☐ Multip ☐ Unknown

CHILD

Last Name: _____ First/Used Name: _____
Date of Birth (YYYY/MM/DD): _____ HC #: _____ Gestational Age: _____
Reason HCN Missing ☐ Nova Scotia Client, Card not Available ☐ Armed Forces, RCMP, First Nations, Self Paying ☐ Baby Born Outside Nova Scotia ☐ Client from Outside Nova Scotia

RESIDENCE: Mothers Postal code: _____ District Health Authority: _____ Community Health Board: _____

CONSENT
☐ Consent obtained
☐ Consent to share with primary care provider

SCREENING NOT COMPLETED/Reason **Date** (YYYY/MM/DD): _____
☐ Still birth or neonatal death ☐ Adoption ☐ Baby apprehended ☐ Other (please specify)
☐ Pending ☐ Unable to contact ☐ Moved ☐ Refused _____

A. CHILDREN WITH KNOWN DISABILITY: (Congenital anomaly or acquired disability)
1. a) Major (probability of permanent disability) 9
   b) Moderate (correction may be possible) 6

B. DEVELOPMENTAL RISK FACTORS
2. Low birth weight
   a) Less than 1500 grams any gestation 9
   b) 1500 – 2500 grams, 37 weeks plus 7
   c) 1500 – 1999 grams, less than 34 weeks 5
   d) 1500 – 2500 grams, greater than 34 weeks but less than 37 weeks 2
3. Serum bilirubin at exchange transfusion level 9
4. Complications of pregnancy and early postpartum
   a) Infections that can be transmitted in utero 9
   b) Maternal substance use problems ..... _____
   c) Infant trauma or illness 6
   d) Apgar at 5 minutes, only if less than 7 (deduct apgar score from 10 points) ..... _____
5. Family history of a genetic health challenge that may affect development 4

C. FAMILY INTERACTION
6. Age of mother
   a) 15 years and under 9
   b) 16 or 17 years 8
   c) 18 or 19 years 5
7. Support systems
   a) One parent family with adequate social support 2
   b) One parent family - limited social support 7
   c) Two parent family - limited social support and/or isolation related to culture, language or geography 4
8. No prenatal care before sixth month 4
9. Mental health problems in mother and/or father
   a) History of psychiatric illness and/or family history of psychiatric illness (double score if both parents) 7
   b) Postpartum depression and/or anxiety 9
   c) Postpartum psychosis 9
10. Mental challenge in mother and/or father (double score if both parents) 6
11. Prolonged post-partum maternal separation (5 days or more)
   a) With frequent infant contacts (visits or phone as feasible) 2
   b) Little or no contact 6
12. Assessed lack of bonding 6
13. Family distress/violence 9
14. Other – refer to guidelines to complete ..... _____
   Specify reason: _____
15. Low education status 3
   ☐ less than high school graduation ☐ high school graduation ☐ college education (trades or college diploma)
   ☐ diploma or certificate ☐ university education (degree) ☐ unknown
16. Receiving provincial income assistance or financial difficulties 3

SCREEN COMPLETED: ☐ In-home ☐ In hospital ☐ phone ☐ combination (home, phone & hospital)
☐ other (please specify) _____
Completed from (Check ALL that apply): ☐ face to face with client ☐ consultation with staff ☐ chart review
TOTAL SCORE: ___ Date Completed: _____ Signature: _____

Assessment Forms
CD1787MR_10_09

Page 1 of 1

APPENDIX B: PUBLIC HEALTH'S FOUNDATIONAL STANDARD

APPENDIX C: ENGAGEMENT POLICY, FRAMEWORK AND TOOLKIT

Capital Health's Engagement Policy:

http://policy.nshealth.ca/Site_Published/DHA9/document_render.aspx?documentRender.IdType=6&documentRender.GenericField=&documentRender.Id=26055

Capital Health's Engagement Framework and Toolkit:

http://www.cdha.nshealth.ca/system/files/sites/317/documents/engagement-framework-and-toolkit.pdf

APPENDIX D: IAP2 SPECTRUM

IAP2 Spectrum of Engagement: http://iap2canada.ca/Default.aspx?pageId=1020549

APPENDIX E: ENGAGEMENT METHODS

DELIBERATIVE DIALOGUE

Deliberative dialogue seeks the broad involvement of key stakeholders in issue identification and information and position development. Typically, the approach seeks to present a broad overview of the entire scope of the subject in order to deeply inform the dialogue. A process of balanced discussion follows of which the intent is to ensure open, transparent sharing and group evaluation of many perspectives. The aim of this approach is to build understanding among all participants of the diverse range of views and perspectives needed to inform change with a view to achieving agreed-upon directions.

Qualities and principles of deliberative dialogue:

DELIBERATION

It is dialogue for weighing, not a debate for winning. It is about what is most valuable to us, not just facts alone. A critical prerequisite of deliberation is naming and framing issues in the context of the dialogue participants. It is about working through our (human) limitations and embracing ***both*** reason and emotion.

DIALOGUE

- "Problems have complex, multi-factored solutions" NOT "problems have a single, correct answer"
- "Others hold pieces of the answer" NOT "I have the answer"
- Collaborative (a group attempting to find common understanding) NOT combative (factions attempting to prove "the other" wrong)
- Finding common ground NOT about winning
- Listening to understand NOT listening to find flaws
- Talking through issues NOT talking about issues
- Raising your assumptions for inspection and discussion NOT defending your assumptions
- Re-examining all points of view NOT defending your own views
- Admitting that others' thinking can improve your own NOT about exploiting the weaknesses and flaws in the other position
- Seeking strength and value in other positions NOT seeking the only outcome that agrees with your position
- Discovering new possibilities and opportunities NOT seeking to protect the status quo

EXPERIENCE-BASED DESIGN

"Experience-based design (EBD) can be regarded as an extension of the current trajectory of improvement methods that will not entail starting anything from scratch. EBD is a user-focused design process with the goal of making user experience accessible to the designers, to allow them to conceive of designing experiences rather than designing services." [1]

Experience-based design reflects the principle that well-designed systems (or programs) must be safe and reliable, technically sound, and informed by the needs of the end user. This approach contends that only the combination of safety/reliability, technical proficiency and usability can create a whole, well-designed program. The approach seeks to understand and

[1] Bate, Paul, and Glenn Robert, "Experience-based design: from redesigning the system around the patient to co-designing services with the patient." *Qual Saf Health Care* 2006 15: 307-310

incorporate the experiences of the end user – both positive and negative – as core transformative elements in the program development process. End users are considered "experts" in their experience of any system or program, and therefore are able to contribute to program design at a fundamental level.

EXPERIENCE MAPPING:

- Purpose: A tool (created in both hard copy and online survey format) intended to gather a broad-spectrum overview of the experience of new parents along a timeline that parallels the Healthy Beginnings program mandate. The intention was to understand users' total prenatal and postpartum experience, and to avoid leading/prompting people to comment specifically about their experiences solely with Public Health and/or the Healthy Beginnings program. Part of the rationale was to attempt to identify and understand the relevance of Healthy Beginnings/Public Health interventions in the context of their entire experience. This helped to uncover confusion about roles between and among the many stakeholders offering programming and support in these periods; identified relevance; uncovered genuine, unprompted experiences (both positive and negative); helped Public Health providers and other stakeholders see themselves and their program in context
- Participants were asked to describe their experiences at key touch points in the prenatal/postpartum journey (Pregnant: I'm going to be a parent; Birth: I'm a parent; Six weeks after birth: I'm a parent! What now?; Five years after birth: My child is ready for school)
- Questions for each point in the journey: What were you feeling? What did you really want to know? Who helped you the most, and how? What would have made this time better for you?
- Participants were also encouraged to identify any significant moments for themselves in their parenthood journey in-between any of the five main touch points we identified
- Experience maps were used in the public forums, focus groups, and in an online format.

APPENDIX F: INVITATION TO FAMILY PHYSICIANS TO ENGAGE

Capital Health
Public Health Services

Public Health has been involved in the lives of pregnant women, new mothers and their families for decades.

We've been offering a range of services, and we're wondering…

Are we keeping up with the times?

Are we meeting the changing needs of new parents and their babies?

How could we be working differently?

We are embarking on a journey to find out what you think, and to make sure that what we hear along the way informs the changes we need to make in our programs, next year and beyond.

Whether you…

- *are interested in creating a different future to support pregnant women and new parents,*
- *currently provide care to this population, or*
- *have a personal experience you'd like to share,*

…we would love to hear your perspective.

Capital Health has made a commitment to involve citizens in establishing priorities and making decisions that matter to them and that affect them. Help us make sure we're investing Public Health resources in the very best way possible.

We invite you to be part of the discussion to help shape how Public Health supports pregnant women, moms, babies and their families in the future.

We'll be in touch, by phone or email, very shortly. If you know of someone else who would like to be part of this discussion, please let us know – or forward this invitation, and invite them to contact us directly.

For more information, call Jennifer Kendell at 481-5862 or email jennifer.kendell@cdha.nshealth.ca.

APPENDIX G: CAPITAL BEAT E-MAGAZINE STORY THAT SET THE STAGE FOR ENGAGEMENT

THE FUTURE OF PRE AND POSTNATAL SERVICES

By Carmen MacKenzie

Team members from public health services and citizen engagement within Capital Health are turning to community partners and others who support moms, babies and their families to learn how to better meet the prenatal and postnatal needs of families in the district.

To help explore this question, Roxanne Manning, Caralee McDaniel and Natasha Horne of the Dartmouth Family Centre seat themselves around a small round table in Manning's office to discuss the differences between the prenatal and postnatal programs they offer and the publicly-funded universal programs offered by public health.

The centre represents one of more than 100 stakeholders that public health services has contacted through a formal engagement initiative designed to seek out what people think about their prenatal and postnatal services to help inform future programming decisions.

"We tend to think in healthcare that everything needs to be delivered by a clinician," said Manning, the executive director of the centre. "With respect to prenatal, our experience tells us that a clinician isn't always the right person to deliver it."

Certain aspects of the program such as labor and delivery are more appropriate for a nurse to deliver, she said. The centre currently partners with public health to deliver these classes, and it seems to work well.

"In some cases, a [nurse] is the right person. Absolutely," she said. "But I don't think in every case."
The Dartmouth Family Centre is a community-based organization that opened its doors in 1989 and sees more than 400 families per year at their Dartmouth North location as well as at outreach locations throughout Dartmouth. They offer parent and child playgroups, a community drop-in room, childcare, enhanced home visiting (funded by public health) and well baby clinics (hosted by public health nurses), an 11-week prenatal program, parenting programs and workshops, one-on-one parent support and a community trading cupboard.

All of their programs and supports are free and are designed based on the needs of people who walk through their doors.

In preparing for a baby, one size doesn't fit all

People who participate in the centre's programs tend to be younger than those who typically attend public health's prenatal classes. Some of them have shared that the public health classes aren't a fit for them.

“If you’re 16, walking into a room with all couples, probably dressed up from coming from work, and you’re there by yourself, it’s hard to focus on the content [of the class] when some of those other things are there,” Said Horne

According to a recent survey conducted by public health, this perspective is understandable. The average age of women who attend public health’s prenatal classes is 31, with 87 per cent reporting some post-secondary education.

The differences between the centre’s programs and those offered by public health go beyond demographics; it’s about how the programs are delivered as well.

“The more didactic approach doesn’t seem to appeal to [the centre’s participants] as much,” Manning said. She explained that their programs are interactive. They don’t teach; instead they believe participants learn by sharing stories and experiences, and having fun.

“It’s not like school.”

They provide incentives like bus passes and grocery cards to enhance participants’ nutrition during pregnancy, and they offer child care for older siblings all in an effort to remove barriers that might otherwise prevent people from attending.

The prenatal program is popular, at times exceeding the space they have, but the magic behind it is its ability to build relationships and connections that remain long after the baby is born. For the centre’s staff, it’s all about relationships.

“The actual birth is maybe 24 to 72 hours,” said McDaniel, “But there’s so much before and afterwards, and that’s more what we try to focus on.”

No easy answer

With all of these things going for the Dartmouth Family Centre’s program, one might wonder how public health’s current services fit into this picture.

Manning suggests a dose of caution.

“We are fragile,” she said. “While it’s nice to rely on us, or to say we’re doing it better or that we’re better situated to do it, we may not always be able to be there. Our funding is uncertain.”

The Dartmouth Family Centre does not have dedicated funding to deliver prenatal programs, so they piece it together from within their already slender budget. They are always concerned about what might happen if any one piece of their funding disappeared tomorrow. And if public health’s prenatal programming shifted, would people look to centres like theirs to fill the gap?

Manning, McDaniel and Horne believe there’s a role for healthcare professionals and a role for community-based organizations, like theirs, that have the ability to build sustainable relationships, a sense of community, and connect families with longer-term programs and supports.

So does public health, which sees itself as a partner with such organizations.

“The question is really how we work in communities,” said Linda Young, Director of Public Health Services. “We know there's a wide range of family and community resources for pregnant women and new moms, and that people use them in very different ways. Where do our traditional prenatal and postnatal services fit, and what is our relationship with groups, like the Dartmouth Family Centre, who reach what they would consider priority populations? What’s the right balance?”

What do you think?

Is the current range of public health and community-based programs and services meeting the prenatal and postnatal needs of our community?

If so, let us know how it’s working.

If not, let us know what we could be doing differently.

You can leave your feedback in the comments section below or contact Sarah Melanson directly at sarah.melanson@cdha.nshealth.ca or **(902) 481-5926**.

You can also visit our website for more information on the engagement process currently underway.

APPENDIX H: PARTNER SURVEY

HEALTHY BEGINNINGS ENGAGEMENT SURVEY

INTRODUCTION TO THIS SURVEY:

Public Health has been involved in the lives of pregnant women, new mothers and their families for decades. We have been offering a range of services and we're wondering…are we keeping up with the times? Are we meeting the changing needs of new parents and their babies? How could we be working differently?

We are embarking on a journey to find out what you think, and to make sure that what we hear along the way informs the changes we need to make in our programs next year and beyond. We invite you through this survey to be part of the discussion to help shape how Public Health supports pregnant women, moms, babies and their families in the future.

1. What is your experience with Public Health work with pregnant women and new moms?

2. What do you value most about public health programming/support?

3. What else have you found useful as community member/health practitioner/parent in prenatal and postnatal support?

4. What do you see as the most pressing issues for pregnant women and new moms?

5. If you could imagine Public Health's prenatal and postpartum program in the future, what would you want it to look like and how do you think we got there?

6. Who else would you suggest we contact/speak with?

APPENDIX I: FINAL ISSUE BRIEF

Issue Brief: *http://www.cdha.nshealth.ca/system/files/sites/127/documents/baby-stories-engagement.pdf*

APPENDIX J: LIST OF PARTNER TYPES PARTICIPATING IN THE HEALTHY BEGINNINGS PARTNER ENGAGEMENT SURVEY

Partner Type	Number of Agencies*represented in partner engagement survey and sessions
Family resource centres	13
Private providers (doulas, dieticians, independent retailers)	9
Women's centres & shelters	7
Child development and child care centres	5
Youth organizations	5
Cultural organizations	4
Faith-based groups	3
Academic institutions	3
Primary care providers	3
Children's aid groups	3
Acute care partners (IWK, other Capital Health departments)	3
Recreation centres	2
Government departments (Dept of Health & Wellness, Dept of Community Services)	2
Union	1
Libraries	1

*Agencies may have been represented by more than one individual

APPENDIX K: POSTER ADVERTISEMENT

http://www.cdha.nshealth.ca/system/files/sites/127/documents/baby-stories-poster.pdf

APPENDIX L: CITIZEN SURVEY

HEALTHY BEGINNINGS

Babies. We all love them. And we know it takes a village to raise a child. At Public Health, supporting new parents and their babies is a big part of what we do. From prenatal education to visiting families at home after the birth of their baby, we want to make sure the support we provide meets the needs of today's parent – from pregnancy to primary.

We are reaching out to new parents like you, so tell us your story.

The good and the bad. Let us know what becoming a parent was like for you during those early years. What did you really want to know? Who helped you the most, and how? What would have made this time better for you?

This survey will take 15 minutes to complete. It will retrace your journey from the time you found out you were going to be a parent up to when your child was ready for school. You don't have to complete every section. You can skip over any of them that don't apply to you. There are 8 pages in total, including this page. Each section is about a different stage in your journey to and through early parenthood, and we ask you pretty much the same questions in each. That is so we can understand who was helping you, where you were seeking information, and what was really important to you at that point in time.

There is background information about Public Health, our work, and this project available on our website. We encourage you to read before doing the survey.

Just below we have asked a few questions so we can learn a bit more about you and your baby specifically so we can compare people's experiences based on their age, the age of their child and where they live. The question about family status and sharing your email address are optional.

Finally, there's a spot below where you can enter an email address if you want to be kept informed about the results of this project.

And remember, all the information you provide is completely confidential. We may use some direct quotes from your information in our final report but we will not identify you in any way.

Thanks for helping us out.

1. What is your postal code? ☐

2. How old are you?
   - ○ 18 or younger
   - ○ 19-25
   - ○ 26-30
   - ○ 30-35
   - ○ 36 or older

3. How old is your child?
   If you have more than one child, enter the age of your oldest child.

   Months ☐

   Years ☐

4. OPTIONAL: Enter your email address if you want updates on this project sent to you.

We will not share your email address.

5. If you entered your email address above, would you like to know about other volunteer opportunities to participate in helping Capital Health make decisions?
   - ○ Yes, I would like to learn about other opportunities. Please add my email address to your list.
   - ○ No thanks.
   - ○ Maybe. Can you send me more information? Some of my questions are:

6. How did you hear about the Babystories survey?
   - ○ Radio ad
   - ○ Kijiji ad
   - ○ Newspaper
   - ○ Facebook
   - ○ Twitter
   - ○ Poster
   - ○ Word of mouth
   - ○ Healthcare provider
   - ○ Other, please specify

7. What were you **feeling** when you first found out that you were pregnant?
   Please check all the answers that apply.
   - ○ Happy
   - ○ Scared
   - ○ Confused
   - ○ Angry
   - ○ Joyful
   - ○ Relieved
   - ○ Excited
   - ○ Worried
   - ○ Confident
   - ○ Other (your feelings in your own words)

8. What did you really want to know at that stage?

9. Who helped you the most at this stage and how did they help you?
Check as many answers that apply.

	Gave me information or answered my questions	Supported me
A Parent	○	○
A brother or sister	○	○
Other family member	○	○
Friend or neighbor	○	○
Support group or society	○	○
Not-for-profit group (NGO)	○	○
Doula	○	○
Midwife	○	○
IWK	○	○
Family Resource Centre	○	○
Public Health Nurse	○	○
Family doctor	○	○
Specialist doctor	○	○
Other health professional	○	○
Social worker	○	○
Website	○	○
Chat forum	○	○
Facebook group	○	○
Other social media	○	○
A book	○	○
Non-traditional health provider (i.e. Naturopathic doctor)	○	○
Massage therapist	○	○
Drop in centre	○	○
Dietician/diabetic clinic	○	○
Nurse from doctor's office	○	○
Lactation consultant	○	○
Breastfeeding support line	○	○
811	○	○
Prenatal yoga	○	○
Pamphlets/booklets	○	○
Clergy	○	○
Other religious or cultural support	○	○

10. What would have made this time better for you?

Tell us about important or memorable moments during the period of your pregnancy before you gave birth.

11. Briefly describe the most memorable or important moment for you during this time.

12. What were you **feeling** during the period of time when you were pregnant to give birth?
Please check all the answers that apply.

- ○ Happy
- ○ Scared
- ○ Confused
- ○ Angry
- ○ Joyful
- ○ Relieved
- ○ Excited
- ○ Worried
- ○ Confident
- ○ Other (your feelings in your own words)

13. What did you really want to know at this stage?

14. Who helped you the most at this stage and how did they help you?
Check as many answers that apply.

	Gave me information or answered my questions	**Supported me**
A Parent	○	○
A brother or sister	○	○
Other family member	○	○
Friend or neighbor	○	○
Support group or society	○	○
Not-for-profit group (NGO)	○	○
Doula	○	○
Midwife	○	○
IWK	○	○
Family Resource Centre	○	○
Public Health Nurse	○	○
Family doctor	○	○
Specialist doctor	○	○
Other health professional	○	○
Social worker	○	○
Website	○	○
Chat forum	○	○
Facebook group	○	○
Other social media	○	○
A book	○	○

Non-traditional health provider (i.e. Naturopathic doctor)	○	○
Massage therapist	○	○
Drop in centre	○	○
Dietician/diabetic clinic	○	○
Nurse from doctor's office	○	○
Lactation consultant	○	○
Breastfeeding support line	○	○
811	○	○
Prenatal yoga	○	○
Pamphlets/booklets	○	○
Clergy	○	○
Other religious or cultural support	○	○

15. What would have made this time better for you?

16. Were there any other memorable or important moments for you during this period? Describe them briefly below.
Be sure to tell us how you were feeling, who was helping you, what information you needed, and what would have made this experience better for you.

Tell us about your experience and most memorable moments when you gave birth.

17. What were you **feeling** during and immediately after giving birth?
Please check all the answers that apply.

- ○ Happy
- ○ Scared
- ○ Confused
- ○ Angry
- ○ Joyful
- ○ Relieved
- ○ Excited
- ○ Worried
- ○ Confident
- ○ Other (your feelings in your own words)

18. What did you really want to know at this stage?

19. Who helped you the most at this stage and how did they help you?

Check as many answers that apply.

	Gave me information or answered my questions	**Supported me**
A Parent	○	○
A brother or sister	○	○
Other family member	○	○
Friend or neighbor	○	○
Support group or society	○	○
Not-for-profit group (NGO)	○	○
Doula	○	○
Midwife	○	○
IWK	○	○
Family Resource Centre	○	○
Public Health Nurse	○	○
Family doctor	○	○
Specialist doctor	○	○
Other health professional	○	○
Social worker	○	○
Website	○	○
Chat forum	○	○
Facebook group	○	○
Other social media	○	○
A book	○	○
Non-traditional health provider (i.e. Naturopathic doctor)	○	○
Massage therapist	○	○
Drop in centre	○	○
Dietician/diabetic clinic	○	○
Nurse from doctor's office	○	○
Lactation consultant	○	○
Breastfeeding support line	○	○
811	○	○
Prenatal yoga	○	○
Pamphlets/booklets	○	○
Clergy	○	○
Other religious or cultural support	○	○

20. What would have made this time better for you?

Tell us about important or memorable moments during the first few weeks after you gave birth.

21. Briefly describe the most memorable or important moment for you during this time.

22. What were you **feeling** during the first few weeks after giving birth?
Please check all the answers that apply.

- ○ Happy
- ○ Scared
- ○ Confused
- ○ Angry
- ○ Joyful
- ○ Relieved
- ○ Excited
- ○ Worried
- ○ Confident
- ○ Other (your feelings in your own words)

23. What did you really want to know at this stage?

24. Who helped you the most at this stage and how did they help you?
Check as many answers that apply.

	Gave me information or answered my questions	**Supported me**
A Parent	○	○
A brother or sister	○	○
Other family member	○	○
Friend or neighbor	○	○
Support group or society	○	○
Not-for-profit group (NGO)	○	○
Doula	○	○
Midwife	○	○
IWK	○	○
Family Resource Centre	○	○
Public Health Nurse	○	○
Family doctor	○	○

Specialist doctor	○	○
Other health professional	○	○
Social worker	○	○
Website	○	○
Chat forum	○	○
Facebook group	○	○
Other social media	○	○
A book	○	○
Non-traditional health provider (i.e. Naturopathic doctor)	○	○
Massage therapist	○	○
Drop in centre	○	○
Dietician/diabetic clinic	○	○
Nurse from doctor's office	○	○
Lactation consultant	○	○
Breastfeeding support line	○	○
811	○	○
Prenatal yoga	○	○
Pamphlets/booklets	○	○
Clergy	○	○
Other religious or cultural support	○	○

25. What would have made this time better for you?

26. Were there any other memorable or important moments for you during this period? Describe them briefly below.
Be sure to tell us how you were feeling, who was helping you, what information you needed, and what would have made this experience better for you.

Tell us about your experience and most memorable moments as a new parent around the time when your child was six weeks old.

27. What were you **feeling** around the time when your child was six weeks old?
Please check all the answers that apply.

- ○ Happy
- ○ Scared
- ○ Confused
- ○ Angry
- ○ Joyful
- ○ Relieved
- ○ Excited
- ○ Worried

- ○ Confident
- ○ Other (your feelings in your own words)

28. What did you really want to know at this stage?

29. Who helped you the most at this stage and how did they help you?
Check as many answers that apply.

	Gave me information or answered my questions	Supported me
A Parent	○	○
A brother or sister	○	○
Other family member	○	○
Friend or neighbor	○	○
Support group or society	○	○
Not-for-profit group (NGO)	○	○
Doula	○	○
Midwife	○	○
IWK	○	○
Family Resource Centre	○	○
Public Health Nurse	○	○
Family doctor	○	○
Specialist doctor	○	○
Other health professional	○	○
Social worker	○	○
Website	○	○
Chat forum	○	○
Facebook group	○	○
Other social media	○	○
A book	○	○
Non-traditional health provider (i.e. Naturopathic doctor)	○	○
Massage therapist	○	○
Drop in centre	○	○
Dietician/diabetic clinic	○	○
Nurse from doctor's office	○	○
Lactation consultant	○	○
Breastfeeding support line	○	○
811	○	○
Prenatal yoga	○	○
Pamphlets/booklets	○	○
Clergy	○	○
Other religious or cultural support	○	○

30. What would have made this time better for you?

Tell us about important or memorable moments during the first few years between the times your child was six weeks old but before he/she started school.

31. Briefly describe the most memorable or important moment for you during this time.

32. What were you **feeling** during this time that your child was growing (six weeks after birth to just before school age)?
Please check all the answers that apply.

- ○ Happy
- ○ Scared
- ○ Confused
- ○ Angry
- ○ Joyful
- ○ Relieved
- ○ Excited
- ○ Worried
- ○ Confident
- ○ Other (your feelings in your own words)

33. What did you really want to know at this stage?

34. Who helped you the most at this stage and how did they help you?
Check as many answers that apply.

	Gave me information or answered my questions	**Supported me**
A Parent	○	○
A brother or sister	○	○
Other family member	○	○
Friend or neighbor	○	○
Support group or society	○	○
Not-for-profit group (NGO)	○	○
Doula	○	○
Midwife	○	○
IWK	○	○
Family Resource Centre	○	○

Public Health Nurse	○	○
Family doctor	○	○
Specialist doctor	○	○
Other health professional	○	○
Social worker	○	○
Website	○	○
Chat forum	○	○
Facebook group	○	○
Other social media	○	○
A book	○	○
Non-traditional health provider (i.e. Naturopathic doctor)	○	○
Massage therapist	○	○
Drop in centre	○	○
Dietician/diabetic clinic	○	○
Nurse from doctor's office	○	○
Lactation consultant	○	○
Breastfeeding support line	○	○
811	○	○
Prenatal yoga	○	○
Pamphlets/booklets	○	○
Clergy	○	○
Other religious or cultural support	○	○

35. What would have made this time better for you?

36. Were there any other memorable or important moments for you during this period? Describe them briefly below.
Be sure to tell us how you were feeling, who was helping you, what information you needed, and what would have made this experience better for you.

Tell us about your experience and most memorable moments as you and child prepare for the start of school.

37. What were you **feeling** around the time when you and your child were preparing for the start of school?
Please check all the answers that apply.

- ○ Happy
- ○ Scared
- ○ Confused
- ○ Angry

- ○ Joyful
- ○ Relieved
- ○ Excited
- ○ Worried
- ○ Confident
- ○ Other (your feelings in your own words) [ ]

38. What did you really want to know at this stage?

[ ]

39. Who helped you the most at this stage and how did they help you?
Check as many answers that apply.

	Gave me information or answered my questions	**Supported me**
A Parent	○	○
A brother or sister	○	○
Other family member	○	○
Friend or neighbor	○	○
Support group or society	○	○
Not-for-profit group (NGO)	○	○
Doula	○	○
Midwife	○	○
IWK	○	○
Family Resource Centre	○	○
Public Health Nurse	○	○
Family doctor	○	○
Specialist doctor	○	○
Other health professional	○	○
Social worker	○	○
Website	○	○
Chat forum	○	○
Facebook group	○	○
Other social media	○	○
A book	○	○
Non-traditional health provider (i.e. Naturopathic doctor)	○	○
Massage therapist	○	○
Drop in centre	○	○
Dietician/diabetic clinic	○	○
Nurse from doctor's office	○	○
Lactation consultant	○	○
Breastfeeding support line	○	○
811	○	○
Prenatal yoga	○	○

Pamphlets/booklets	○	○
Clergy	○	○
Other religious or cultural support	○	○

40. What would have made this time better for you?

APPENDIX M: BROAD FOCUS GROUP GUIDE FOR ALL SESSIONS

SESSION STAKE	Gain insight into the public's/user's pre and post natal experience
SESSION OUTCOMES	Advice from the public/users of pre and post natal services. • What are the services they want/need? • Where and when do they want to receive these services? • Who are they most comfortable receiving services from? Provide information about Public Health's role in pre/post natal care and context around the factors that are driving the need for change.
EMOTIONAL IMPACT	Honest, thoughtful, safe, respectful
LEADER PERSPECTIVE	Thoughtful, safe, respectful, friendly
QUESTIONS	

Time	Activity & Instructions	Set up, tools and materials	Notes and Issues
15 min	**Setting the stage** • Introductions and context • Why are we doing this? • What do we hope to accomplish during these conversations? • What will happen as a result of these sessions? • Ground rules Please note, our colleague Susan will be doing something called graphic facilitation. She will be capturing in pictures our conversation today.	Agenda Experience Map Evaluation	Facilitator will be graphic facilitating in front of room

Time	Activity & Instructions	Set up, tools and materials	Notes and Issues
60 min TOTAL	**Your experience. Your story. Your wisdom.** **Today we want to learn from your experiences during pregnancy, birth, and as a Mom of a young child. As mothers we all share some common experiences, and also have some experiences that are unique to us…good and bad. We want to hear those today and learn from them. So…lots of questions…lots of talking…and lots of listening!** **We want our conversation to be relaxed and informal, so please make yourself comfortable and feel free to ask questions.** **Here is an overview of what we'll be doing today. I'll explain the steps in more detail as we go, but want to give you a sense of what will happen.** **First, you will have the opportunity to tell your story and hear the stories of the other Mom's here today. In group conversations at your table and conversations with everyone in the room, we will learn from each other and together you will tell us what you think is most important about Public Health's pre and post natal services. And we'll also give you information on Public Health and what's going on with them.** **So, let's get started.**	Also on table: sticky notes, pens, markers, extra paper, flip chart paper Experience map will also be posted on large brown paper posted on wall. Key milestone experiences will be identified on paper with space available to add participant comments.	Facilitator will be strolling around room with sketch pad, creating smaller images and adding to large picture.

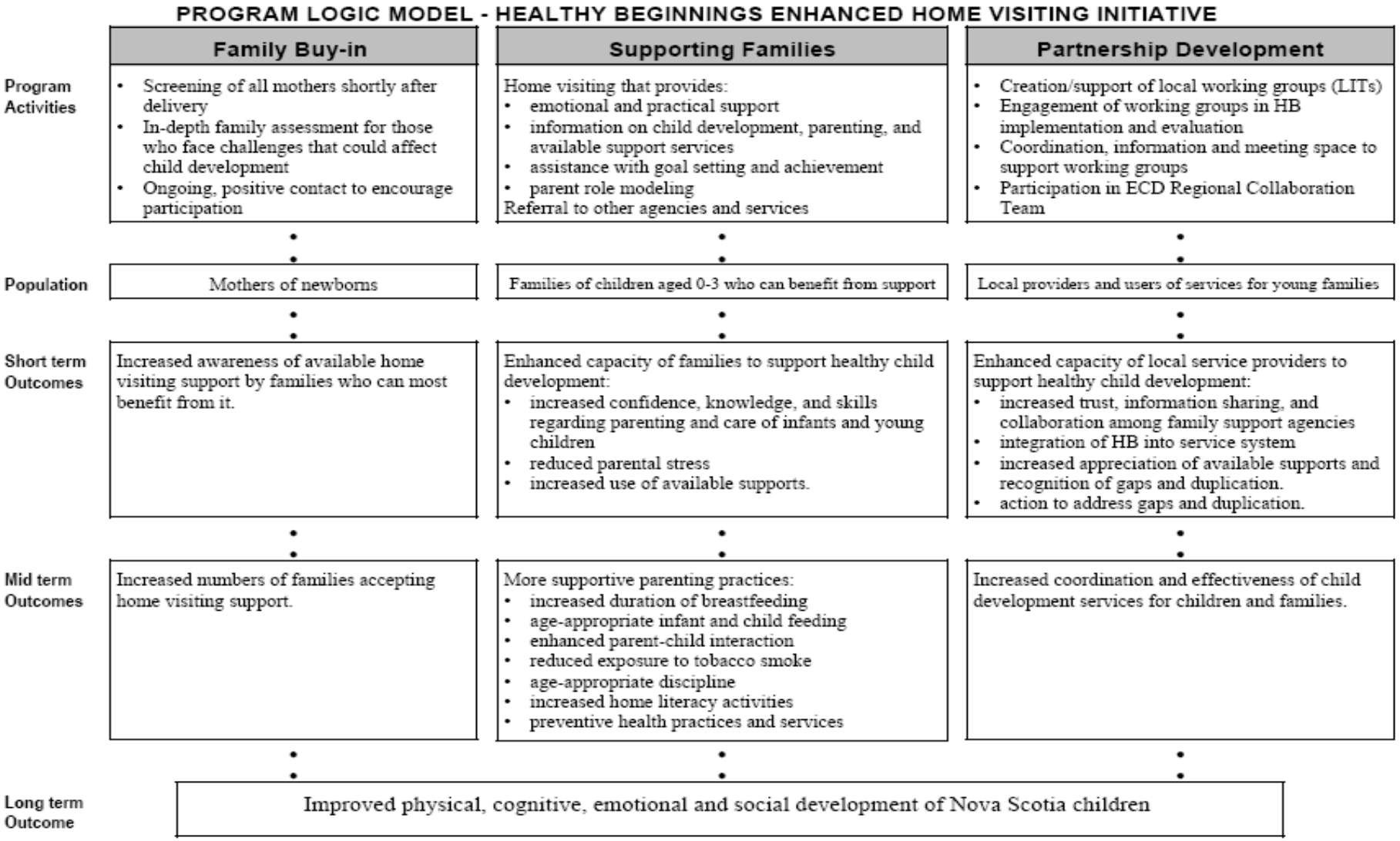
Time	Activity & Instructions	Set up, tools and materials	Notes and Issues
15 min	**On your tables, there are copies of what we are calling an experience map. Let's go over this together. At the top of the paper there are typical key moments in the pre and post natal experience….such as pregnancy, birth, and so on. You will also see a list of words that might describe your experiences. Please circle whatever words describe how you felt, and feel free to add you own words.** **At the top of the page you will also see a rectangle and the question "What were your most important moments in between?" In this section we encourage you to write whatever comes to mind. For example, you may have had a really hard time with morning sickness…or some big discomfort with those „after delivery stitches'…or lots of questions about breastfeeding…you get the idea. If nothing comes to mind, don't worry.** **Let's look at the questions on the right hand side of the page.** (read questions) **Please answer the questions as best you can to help tell your story from pregnancy, to the birth of your baby, and as the Mom of a young child.** **We'll give you 15 minutes to write down your story. Questions? We'll circle around the room, so if you have questions or need help, just raise your hand and one of us will come over and lend a hand.**		

Time	Activity & Instructions	Set up, tools and materials	Notes and Issues
15 min	Next, let's take a few minutes to share briefly a bit about your story with each other. Thinking about your experience please answer about this question**. "What were the important moments/key highlights in your experience?"** You will need to pick someone at your table to take some notes on the flipchart paper. You have 15 minutes for this part of the conversation and we'll give you a few minutes warning when time is almost up. And if you have any questions, we'll circle around the room, so just flag us down.		Encourage everyone to participate and share their stories. As Mom's often like to share many details about their pregnancy, birth and new parent experiences, you may need to skillfully keep conversation focused and keep an eye on time.
15 min	**On to the next step, at your tables, talk about what you think are the top 5 most common and most important pre/post natal events…the 5 biggest things about becoming a Mom, and being the Mom of a young child.** **Once you have your top 5, we need someone from each table to come over to the brown paper on the wall and write down the top 5 from your group. We'll give everyone some time to look at all the comments and then it will be back to your tables for some more conversation and getting your wisdom.**		**This is where the experience map on the wall is used.**
15 min	Now that you've had some time to learn from each other, we'd like to learn from you. Based on what you've talked about, and posted, please answer two questions for us. • What do you think are the most important events that new Moms need the most support or help with?		

Time	Activity & Instructions	Set up, tools and materials	Notes and Issues
	• Where can you go to for that help? It might be your family doctor, a friend, the internet and so on. List as many as you can think of. Once again, please have someone from your table take a few notes on the flip chart paper.		
5 min	**Thank you for sharing your story with us. We'd now like to share some information with you about Public Health.** **Here are Linda Young and Gaynor Watson Creed.**		**Host:** Linda and Gaynor explain PH mandate, current role, current situation in healthcare, etc. This is optional based on how much is shared at the beginning. Check in with Project Team during session.
20 min	Time to put you back to work! At your tables please talk about the following 3 questions. • What do you think are the most important pre/post natal services that must be available? • How are these services best provided? • Who is the best person or organization to provide these services? Please write down your answers on the flip chart paper on your tables.	**Write questions on flipchart paper and post in the room for easy reference.**	
10 min	**Harvest key ideas from each group**		**Host:**

Time	Activity & Instructions	Set up, tools and materials	Notes and Issues
5 min	Wrap up • What will we do with this information? • When will we decide? • How will we let you know what happened? Please take a few minutes to fill out evaluation our sincere appreciation for all your work today.		**Host:**

APPENDIX N: HEALTHY BEGINNINGS LOGIC MODEL – ENHANCED HOME VISITING PROGRAM



APPENDIX O: BEST PRACTICE REVIEW

BEST PRACTICE IN PUBLIC HEALTH PRENATAL, POSTNATAL AND POSTPARTUM PROGRAMMING: LITERATURE REVIEW

SUMMARY

A search of synthesized literature, including meta-analyses and systematic reviews, as well as original research and reports was conducted in order to identify existing best practice for prenatal and postnatal Public Health programming. The review generated many systematic reviews and meta-analyses of public health interventions regarding a variety of child and maternal outcomes. However, all of the reviews identified limitations pertaining to the quality of the studies included and consequently the strength of the conclusions that could be drawn.

The primary issue identified in the meta-analyses and systematic reviews was significant heterogeneity among studies. There were differences in intervention methodology and implementation, varying outcome measures and follow up periods for similar interventions, and a large number of poorly conducted studies that did not report completely on methodologies. As a result, many authors identified the need for further, higher quality research.

Regardless of the intervention method, intervention timing, or child/maternal outcome targeted, best practice for prenatal and postnatal Public Health programming is not conclusively identified in the literature. This is partly due to inconclusive scientific literature and partly due to the contextual nature of best practice. Consequently, interventions being designed and implemented should be grounded in theory and tailored to the specific needs of the population. It is instrumental to have well defined outcomes and goals, to have well described methodology, and to have resources in place for ongoing program evaluation and reporting.

The following review of synthesized literature is also limited in that only systematic reviews of quantitative studies were included. There may be another large body of qualitative evidence for best practice for Public Health programming. However, for the purposes of this review and the scope of this project none of the qualitative literature was assessed. There is potential that the methods of intervention and philosophies used in implementing the interventions as well as other maternal and child outcomes are more completely discussed and assessed in qualitative literature than what was identified in this literature search.

OBJECTIVE

The objective of this literature review is to identify the best practices for Public Health programming, both targeted and universal, in Canada and internationally with respect to prenatal and postnatal care for babies and families.

The specific outcomes of interest identified by Public Health were taken from the Healthy Beginnings Program Logic Model Short- and Mid-term Outcomes and are as follows:

1. Increased confidence, knowledge, and skills regarding parenting and care of infants and young children;
2. Reduced parental stress;
3. Increased use of available supports;
4. Increased duration of breastfeeding;

5. Age-appropriate infant and child feeding;
6. Enhanced parent-child interaction;
7. Reduced exposure to tobacco smoke;
8. Age-appropriate discipline; and
9. Increased home literacy activities.

SEARCH STRATEGY

A search of synthesized literature, including meta-analyses and systematic reviews, as well as original research and reports was conducted for this literature review. The databases searched included Health Evidence and the Canadian Best Practices Portal of the Public Health Agency of Canada (PHAC). Literature was also collected from partner groups including the Department of Health and Wellness and the Reproductive Care Program. Additional articles were identified by searching the reference lists of other literature, through searching the Capture Project and the National Collaborating Centre for Determinants of Health and the National Collaborating Centre for Healthy Public Policy. When literature was identified that was not generated through the searches outlined above, a specific search for that particular piece of literature was conducted in Medline.

The following search terms were used for searching Health Evidence, the Canadian Best Practice Portal and the Capture Project:

1. child or baby or infant or newborn;
2. maternal or parent*;
3. prenatal or antenatal or postnatal or postpartum;
4. program*; and
5. “public health.”

All literature that was generated during the search was screened for relevance first by reading the title, then by reading the abstract or executive summary, and finally by reading the entire literature, if applicable. Pieces of literature were included in the review if they were relevant and provided supportive information for the objective of the literature review.

KEY FINDINGS

The following table summarizes supportive literature for both universal and targeted programming interventions to improve the parental and child outcomes identified by Public Health as areas of interest for best practice programming.

Table 1. Summary of literature surrounding Public Health practice for prenatal and postnatal maternal and child outcomes

OUTCOME	UNIVERSAL PROGRAMMING		TARGETED PROGRAMMING	
Increased confidence, knowledge, and skills regarding parenting and care of infants and young children	Bryanton 2010		Velez 2004*	
	Intervention:	parental education	**Intervention:**	parental education among women admitted to a substance abuse treatment program
	Timing of intervention:	postnatal	**Timing of intervention:**	prenatal and postnatal
	Results & conclusions:	benefits remain unclear	**Results & conclusions:**	improvements in parenting knowledge reported
Reduced parental stress	Dennis 2004		Dennis 2004	
	Intervention:	preventing postpartum depression	**Intervention:**	preventing postpartum depression
	Timing of intervention:	prenatal and postnatal	**Timing of intervention:**	prenatal and postnatal
	Results & conclusions:	no evidence that interventions reduce risk of developing postpartum depression	**Results & conclusions:**	no evidence that interventions reduce risk of developing postpartum depression but interventions targeted to mothers at risk show potential
	Shaw 2006		Shaw 2006	
	Intervention:	support for improving maternal mental health	**Intervention:**	support for improving maternal mental health
	Timing of intervention:	postpartum	**Timing of intervention:**	postpartum
	Results & conclusions:	universal programs did not show significant beneficial results	**Results & conclusions:**	nurse home visiting, case conferencing and peer support improved maternal mental health in high-risk groups of

				women
Increased duration of breastfeeding	Britton 2007		Dyson 2005	
	Intervention:	support for breastfeeding mothers	**Intervention:**	promotion of the initiation of breastfeeding in low-income populations
	Timing of intervention:	postnatal	**Timing of intervention:**	prenatal or postnatal
	Results & conclusions:	some interventions increased duration of exclusive breastfeeding but more evidence to investigate the effectiveness is required	**Results & conclusions:**	improvement in levels of breastfeeding initiation
	Spiby 2009		Turnbull 2012	
	Intervention:	education to improve breastfeeding duration	**Intervention:**	home visitation by a variety of professional, paraprofessional, and lay people
	Timing of intervention:	postnatal	**Timing of intervention:**	prenatal and postnatal
	Results & conclusions:	benefits remain unclear	**Results & conclusions:**	the interventions had no significant effect on breastfeeding at 6 months
	Lumbiganon 2011			
	Intervention:	prenatal breastfeeding education		
	Timing of intervention:	prenatal		
	Results & conclusions:	insufficient evidence exists; any intervention compared to routine care is		

	promising			
Age-appropriate infant and child feeding	Related interventions are generally aimed toward developing countries or older children.		Related interventions are generally aimed toward developing countries or older children.	
Enhanced parent-child interaction			Barlow 2011	
			Intervention:	individual & group-based parenting programs for improving psychosocial outcomes for teenage parents and their children
			Timing of intervention:	postnatal
			Results & conclusions:	positive results were seen for parent-child interaction although evidence is not strong; further research is required
Reduced exposure to tobacco smoke	Lumley 2009		Lumley 2009	
	Intervention:	intervention for smoking cessation during pregnancy	**Intervention:**	intervention for smoking cessation during pregnancy
	Timing of intervention:	prenatal	**Timing of intervention:**	prenatal
	Results & conclusions:	the health benefits for babies of smoking cessation indicate the importance of smoking interventions however no recommendations can be made about the effectiveness of the strategies evaluated	**Results & conclusions:**	the health benefits for babies of smoking cessation indicate the importance of smoking interventions however no recommendations can be made about the effectiveness of the strategies evaluated

Levitt 2007	
Intervention:	interventions for smoking relapse prevention, cessation, and reduction
Timing of intervention:	postpartum
Results & conclusions:	no evidence to support interventions delivering counseling or materials
Baxter 2011	
Intervention:	interventions to reduce environmental tobacco smoke exposure and establish smoke-free homes
Timing of intervention:	prenatal and postnatal
Results & conclusions:	mixed results from interventions; the effectiveness of these interventions remains inconclusive
IARC Tobacco Control 2009	
Intervention:	smoke-free home policy
Timing of intervention:	any time
Results & conclusions:	smoke-free home policies reduce exposure of children to SHS,

		reduce adult smoking, and appear to reduce youth smoking		
Age-appropriate discipline	Barlow 2010		Bilukha 2005	
	Intervention:	group-based parenting programs for improving emotional and behavioral adjustment	**Intervention:**	early child home visitation in preventing violence and child maltreatment among single and low SES mothers
	Timing of intervention:	postnatal	**Timing of intervention:**	postnatal
	Results & conclusions:	evidence suggests potential short-term improvements; long-term benefits remain unclear	**Results & conclusions:**	some positive results that early home visiting reduces child maltreatment; insufficient evidence for preventing parent violence
	Bilukha 2005		MacMillan 2009	
	Intervention:	early child home visitation in preventing parent violence and child maltreatment	**Intervention:**	prevention of exposure to child maltreatment and neglect
	Timing of intervention:	postnatal	**Timing of intervention:**	postnatal
	Results & conclusions:	insufficient evidence for recommendations on reducing parent violence and child maltreatment	**Results & conclusions:**	home visiting programs and parent training programs are not uniformly effective
	MacMillan 2009			
	Intervention:	prevention of exposure to child maltreatment and neglect		
	Timing of	postnatal		

intervention:

	Results & conclusions:	home visiting programs and parent training programs are not uniformly effective	
Increased home literacy activities			Goldfeld 2011*
		Intervention:	child heath nurses modeled shared reading activities to parents, gave parental support & free books
		Timing of intervention:	postnatal
		Results & conclusions:	no beneficial results were seen at 2 years of age from the literacy promotion program in disadvantaged communities
			Whaley 2011*
		Intervention:	literacy intervention of 2 and 4 years among Spanish-speaking children
		Timing of intervention:	prenatal and postnatal
		Results & conclusions:	literacy intervention for 2 or 4 years (starting at age 3-4) significantly increased school readiness

*not a systematic review or meta-analysis; results are from 1 study only and must not be used as a comprehensive evaluation of existent literature
SHS; second hand smoke

LITERATURE SUMMARIES

Individual summaries for the literature identified in Table 1 have been included for each of the parental and child outcomes.

Increased confidence, knowledge, and skills regarding parenting and care of infants and young children

Bryanton and Beck (2010) conducted a meta-analysis of randomized control trials of postnatal parental education. Individual or group education was included, as long as it was delivered within 2 months of birth. The outcomes for the education were related to general infant care or parent-infant relationships. The results showed potential benefits for sleep enhancement and increased maternal knowledge although the evidence is not strong and the benefits of postnatal education remain inconclusive.

Velez et al. (2004) conducted a study to investigate the effects of parenting skills training on parenting knowledge for pregnant or recent postpartum mothers who have been admitted to a substance abuse treatment program. A pre- and post-training parenting skills questionnaire was used to assess parenting knowledge. The authors report that parenting knowledge improved over all categories after receiving the parent training. It is possible that parenting programs targeted to mothers or pregnant women with substance abuse problems are beneficial, however there is not enough evidence to make any recommendations. This article was a single study conducted, not a systematic review of literature or a meta-analysis.

Reduced parental stress

Dennis and Creedy (2004) conducted a meta-analysis of the effects of different preventive psychosocial and psychological interventions, compared with regular ante, intra, or postpartum care, to reduce the risk of postpartum depression. Secondary objectives were to look at the effectiveness of specific types of interventions, intervention modes, timing, and duration, multiple contact interventions, and interventions for women at high risk of postpartum depression. All randomized control trials with the primary or secondary aim of reducing the risk of postpartum depression were included in the meta-analysis. Fifteen studies from primarily Australia and the UK were included although inconsistency of follow up, incomplete reporting, different outcomes and different outcome measures were identified. The studies included all had different intervention methodologies and standards for usual care. Considering this caution, the overall results found that women receiving preventive interventions were just as likely to experience postpartum depression as those receiving usual care. There is no evidence to suggest that antenatal classes, in-hospital psychological debriefing, and multiple versus single contact interventions are effective. The effects of lay person home visits remain inconclusive. While no conclusions can be drawn from the evidence, the authors identify promising interventions including: intensive postnatal professional home visits, targeting at-risk mothers, and interventions with postnatal components only.

Shaw et al. (2006) conducted a systematic review to look at the benefit of postpartum support to improve maternal mental health and quality of life. The review considered any form of postpartum support (telephone, home visit, clinic visits) for women. Postpartum interventions were defined as occurring within the period from birth to one year after birth. Results showed that there was no overall evidence of benefit from universal postpartum support for low risk mothers in improving mental health outcomes. However, according to the authors, home visits from nurses, case conferencing, and peer support show promise in improving mental health outcomes for women in high-risk groups.

Increased duration of breastfeeding

Dyson et al. (2005) conducted a meta-analysis of the effect of randomized control trials of any breastfeeding promotion. Any promotion intervention, targeted before the first breastfeeding, to

any population was included in the study. Nine of the 11 studies were conducted among low-income populations in the United States where initiation levels were low. The outcomes for the breastfeeding promotion interventions were related to the initiation and duration of any or exclusive breastfeeding. The meta-analysis found that health education interventions and informal, repeated breastfeeding education (personalized to each woman) were successful at increasing rates of breastfeeding initiation. Non-significant positive results were also seen for other forms of breastfeeding promotion interventions. The benefits of having any form of breastfeeding promotion implemented remain inconclusive and it is not known whether the positive results seen here would be generalizable to other populations.

Britton et al. (2007) conducted a meta-analysis to look at the effectiveness of support for breastfeeding mothers. Randomized or quasi randomized control trials for any support intervention, delivered at any time by any method, were included if it compared to a control group receiving usual care. Thirty four studies, with any extra breastfeeding support, and with control groups receiving different standards of usual care (depending on the particular study) were included in the meta-analysis. The outcomes related to the breastfeeding support were duration of any breastfeeding and exclusive breastfeeding. The results showed that any intervention was most beneficial among populations with intermediate breastfeeding prevalence (60-80 per cent). The effect of support was also greater for mothers exclusively breastfeeding compared to those who were any breastfeeding. The WHO/UNICEF training courses appeared to be beneficial for professional training and additional lay support was effective in prolonging exclusive breastfeeding. However, further investigation into the effectiveness of interventions is required. It remains unclear the best timing and delivery of interventions for improving breastfeeding duration.

Spiby et al. (2007) conducted a systematic review of education or training interventions with health professionals on the duration of breastfeeding. A variety of education methods and approaches were included in the review although no single approach consistently positively affected breastfeeding duration. Issues with differing methodology and study quality as well as deficiencies in rigorous evaluation meant that interpretation of the results is difficult and that the best education intervention cannot be identified at this time. Consequently, the authors recommend further research into the education of health-care professionals as it relates to the support of breastfeeding mothers.

Lumbiganon et al. (2011) conducted a meta-analysis of prenatal breastfeeding education for improving breastfeeding duration. The authors included randomized control trials for prenatal education only, excluding RCTs that also included intra or postpartum components. Outcomes considered duration and initiation of any or exclusive breastfeeding. All 14 studies included had different interventions and so summary statistics for meta-analysis were not generated. After review of the included studies the authors concluded that no recommendations about effective interventions can be made for increasing breastfeeding initiation or duration. Multiple interventions were not significantly better than single interventions but some positive results for the use of peer counseling in breastfeeding education. However, more RCTs with adequate power and sample size are required to evaluate the effectiveness of prenatal education.

Turnbull and Osborn (2012) conducted a meta-analysis of prenatal and postnatal home visitation interventions for improving child and maternal outcomes in mothers with a drug or alcohol problem. Seven articles (RCT or quasi randomized trials) were identified for a variety of outcomes. For interventions that looked at breastfeeding at 6 months the authors found that there was no significant difference between intervention and control groups. Consequently, insufficient evidence exists to recommend home visitation for mothers at risk with drug and

alcohol problems to support breastfeeding and further research with large, high-quality randomized trials, is required.

Age-appropriate infant and child feeding

All the interventions found for this topic have been related to complementary feeding in developing countries. For those interventions that were evaluated in developed countries, the focus is on breastfeeding, which has already been covered in its own outcome.

Enhanced parent-child interaction

Barlow et al. (2011) conducted a meta-analysis on the effect of individual or group-based parenting programs on improving psychosocial outcomes for teenage parents and their children. The studies included were randomized or quasi randomized trials targeting mothers aged 20 years or under. The interventions could be individual or group-based and delivered either prenatally or postnatally. The outcomes measured related to psychosocial outcomes were: a sense of competence in the parenting role, parent interaction with the child, child interaction with the parent, and any combined parent-child interaction. Positive meta-analytic results were identified for improving parent-child interactions post-intervention and at follow up. Positive results were also found for improving parent responsiveness to child and infant responsiveness to mother, however further research is required to achieve more conclusive results.

Reduced exposure to tobacco smoke

Lumley et al. (2009) conducted a meta-analysis of interventions for promoting smoking cessation during pregnancy. Studies included randomized control trials where smoking cessation during pregnancy was the primary goal of the intervention. The authors found a significant reduction in smoking during late pregnancy after the interventions however the studies included had significant heterogeneity. The studies with lower heterogeneity and smaller effects on smoking during pregnancy and smoking relapse prevention showed no significant reductions in relapse. Due to the established benefits to health from smoking cessation on child outcomes, the authors highlighted the importance for smoking cessation interventions, however, there were no conclusions about the most effective strategies.

Levitt et al. (2007) conducted a systematic review of interventions for preventing smoking relapse and increasing smoking cessation in postpartum women. The review included randomized control trials of any intervention pertaining to smoking cessation or reduction and smoking relapse prevention among postpartum mothers (birth to 1 year). Only 3 studies met the inclusion criteria and all 3 interventions differed in methodology. The authors found that the provision of supportive materials and counseling in hospitals, pediatricians' offices, or health clinic had no significant effects on cessation rates, relapse prevention, or smoking reduction in the postpartum period, compared to control groups.

Baxter et al. (2011) conducted a systematic review of studies that present findings from interventions to increase the establishment of smoke-free homes and to reduce environmental tobacco smoke exposure in children. Interventions were delivered either during pregnancy or during the neonatal period and consisted of counseling, individualized plans, and motivational interviewing. Issues with evaluating the studies together included underreporting of usual care in control groups, intervention implementation, different outcome measures (self-report versus biomarkers), and different follow-up periods. The authors report findings mixed evidence in the studies included in the systematic review and that there is insufficient evidence to conclusively identify the effectiveness of such interventions. Consequently, the authors suggest that further research is required.

A report generated by the International Agency for Research of Cancer (IARC, 2009) included a systematic review of smoke-free home policies and their effectiveness for reducing second hand smoke (SHS) exposure in children as well as reducing levels of adult smoking. Restrictions to smoking in the home are not usually mandated by law and are considered voluntary policies. The authors investigated studies reporting the proportion of smoke-free homes among smokers, the factors associated with having a smoke-free home, the factors associated with being a smoker and having a smoke-free home, as well as child exposure to SHS in the home. The authors found that there is an increase in the prevalence of smoke-free homes over time. Also, smokers living in smoke-free homes smoke fewer cigarettes per day. However, this may be a result of lighter smokers being more likely to adopt smoke-free home policies. Finally, the authors reported that homes with smoke-free policies resulted in decreased exposure to SHS among children living in the home. These benefits were not as strong in homes with only partial restriction of smoking in the home. Based on these conclusions, the authors recommend that public education campaigns, and all cessation promotion efforts, are used to encourage smokers to adopt smoke-free homes.

Age-appropriate discipline

Barlow et al. (2010) conducted a meta-analysis on the effect of parent-training programs on improving emotional and behavioral adjustment in children, from birth to 3 years of age. Randomized control trials that used standardized tools to measure emotional and behavioral adjustment in populations with and without behavioral problems were included in order to investigate early interventions for treating or preventing the development of such problems. Parent report and independent observers of the child behavior reported short-term improvements from group-based parental training however the results were small and non-significant for those studies relying on parent report. The evidence for improvements in behavior over the long-term was unclear for both parent report and independent observer studies. There is some positive, significant evidence to support short-term benefits of group-based parent-training programs on child emotional and behavioral adjustment however the further evidence to support these results and to evaluate long-terms benefits of such interventions is required.

Bilukha et al. (2005) conducted a systematic review of the evidence investigating early childhood home visitation on reducing 1) violence by the child; 2) violence by the parents; 3) intimate partner violence; and 4) child maltreatment. To measure violence by the parent, the researchers considered one article that used general convictions and arrests as a proxy measure, regardless of violent status of the crime or arrest. The findings show that there were no significant reductions in convictions or arrests for mothers in the intervention group, but that when considering a subsample of single mothers considered low SES, there was a significant reduction for those in the intervention group. Due to the lack of evidence, it is not possible to determine the effectiveness of home visitation for preventing parental violence. The authors also reviewed evidence about child maltreatment (abuse and neglect) and found that there was more evidence to support positive results in reducing child maltreatment from early home visitation, especially among high-risk populations such as single mothers and low SES.

MacMillan et al. (2009) conducted a review of literature on preventing child maltreatment. The review was not systematic and provided no summary measures of effect. However, when considering interventions to prevent physical abuse and neglect, the authors found that there was insufficient evidence to make any conclusions about the effectiveness of home visiting and parenting programs because they varied so widely in implementation and methodology and had varying results.

Increased home literacy activities

Goldfeld et al. (2011) conducted a cluster randomized trial including local government authorities in the bottom tertile of the Socioeconomic Indexes or Areas Index of Disadvantage (areas of greatest disadvantage). At 4, 12, 18, and 42 (yet to occur) months, parents were given an age appropriate book, book list and guidance messages about shared-reading by a maternal and child health nurse. This intervention occurred simultaneously with the standard well-child visits. At 2 years a questionnaire was used to gather measures of language and communication and home literacy activities. Upon analysis the authors found no beneficial effects of the Let's Read literacy promotion program at 2 years of age. The authors will also conduct analyses on participant data at 4 years of age (end of intervention). It is possible that beneficial effects will have developed by then however the authors did expect positive effects to be present by 2 years. A population wide primary care approach may not deliver the anticipated benefits to language and communication in disadvantaged communities.

Whaley et al. (2011) conducted a controlled trial of the effects of the Little By Little literacy promotion program on school readiness among Hispanic families in Los Angeles. Participants were recruited from the Special Supplemental Nutrition Program for Women, Infants and Children (WIC) program and received information and counseling on reading to and interacting with their children as well as on developmental milestones. Families also received age appropriate books and toys at different stages through the program, from third trimester of pregnancy until 5 years of age when the child and mother no longer qualify for WIC. The counseling and resources were offered in both English and Spanish. At the end of the 2 or 4 years of intervention the authors found that both time periods significantly improved school readiness in the intervention group however room for improvement remained in some groups (e.g. low SES) compared to control children's school readiness.

INTERPRETATION

Common issues identified in the meta-analyses

The majority of the literature considered in this report suggests that evidence for best practice in Public Health programming remains unclear. Issues consistently arise in meta-analyses and systematic reviews of interventions that contribute significantly to the lack of conclusive evidence. The majority of meta-analyses and systematic reviews report that the studies identified during searches are often of poor methodological quality rendering them inappropriate for inclusion in the analysis. Individual studies can have problems with incomplete implementation of the intervention, lack of an appropriate or well described control group, lack of well described „usual care', and short, non-existent, or variable follow up periods. Furthermore, interventions were often conducted differently throughout distinct settings and will have differences in outcomes, measurement of outcomes, methodology and implementation, variability in sample sizes and follow up periods making their inclusion in meta-analytic studies difficult. Many interventions also focus on specific populations, resulting in limited generalizability of the findings.

Advice for Public Health programming

Best practice is a contextual concept. Best practice can vary for distinct populations, in different places, at different times and under different circumstances. Consequently, explicit objectives and goals, pilot testing of interventions and then thorough evaluation and sharing of the results is highly recommended and critically important for implementing Public Health programs.

Since the best practice evidence for Public Health programming is inconsistent and unclear, interventions being designed and implemented should be grounded in theory and tailored to the specific needs of the population. It is instrumental to have well defined outcomes and goals, well defined and described methodology as well as resources in place for ongoing program evaluation. This may be of particular importance for addressing the unique needs of priority populations, as identified as an important role for Public Health action related to the determinants of health and reducing health inequities (NCCDH, 2010).

Literature also exists on the evaluation of different types of interventions, regardless of the specific outcome. Evidence from a systematic review demonstrates that home visiting by Public Health nurses is most effective on child and maternal outcomes when multiple community agencies and primary care services are involved, when more intensive home visits (weekly) occur either during pregnancy or after childbirth, and when the mothers involved are those considered at risk due to social circumstances (Ciliska, 1999). Similar systematic review methods were used to evaluate the effects of parenting groups, with professional involvement, on parent and child outcomes (Thomas 1999). This study provides some evidence that parenting groups can be beneficial, especially those addressing child behavior through parent empowerment however insufficient evidence exists evaluating the effectiveness of specific types of parenting groups on specific child and parental outcomes (Thomas, 1999).

The National Collaborating Centre for Healthy Public Policy released a summary report in 2010 that identifies 13 public interventions in Canada that contributed successfully to reducing health inequalities. Among the 13 interventions many interventions targeted pregnant women or single or low income mothers with the intention of improving child and maternal outcomes (NCCHPP, 2010).

Table 2. Summary of NCCHPP public interventions that contributed to reducing health inequalities in Canada

PROGRAM	LOCATION
Self-Sufficiency Project (revenue support program)	BC & NB; 1992-1999
Family Health Benefits Project	Saskatchewan; since 1998
Participate and Learn Skills Project (skills development for children 5 to 15 years)	Ottawa; 1980-1982
Montreal experimental longitudinal study (prevention of delinquency among boys)	Montreal; 1985-1987
The Higgins Nutrition Intervention Program (monitoring diet during pregnancy)	Montreal; 1981-1991
Proactive services for single mothers	Ontario; 1994-1999
Better Beginnings, Better Future (child & family development for preschool to school-age children)	Ontario; 1993-1998
Yes, I Quit! (anti-smoking campaign)	Montreal
Born Equal – Growing Healthy (psycho-social, informational and nutritional support for pregnant women)	Quebec; 1994-1998
The Neighborhood Parenting Support Project (prevention of child mistreatment)	Manitoba; 1988-1992
Early Years Centres (parent training centres for parents with kindergarten age children)	Ontario
Canadian Prenatal Nutrition Program (CPNP)	Canada
Canadian Standards Association standard CAN/CSA Z614 on playground safety	Montreal; 1991-1995

Increased use of available supports was also identified as a short-term outcome from the Healthy Beginnings Program Logic Model Short- and Mid-term Outcomes. The search strategy for this literature review was not able to generate information on the connectivity or coordination between Public Health and other prenatal and postnatal resources. To this point, only interventions that incorporated collaboration with other providers have been identified. It is also of note that according to the Healthy Babies, Healthy Families: Postpartum and Postnatal Guidelines (Department of Health, 2003) practices of healthcare providers must build on the existing strengths and capacities of families (Guideline #5). None of the interventions identified

for Public Health prenatal and postnatal programming have specifically focused on strengths building strategies, however, some of the specific parental educational programs included in meta-analyses may have had strength based and capacity building philosophies incorporated into the intervention methodology.

Limitations

Considering the purpose and scope of this project, only systematic reviews of quantitative literature were included in this literature review. By doing this, there may be a large body of literature that is not captured or considered, particularly with respect to the philosophies underlying intervention implementation. It is important to highlight this as a drawback of the above review, and identify that qualitative literature was not included solely due to the scope of the project. This review was also not intended to be a comprehensive and thorough review of all existing quantitative literature, nor should it be interpreted as such.

Conclusion

Best practice for prenatal and postnatal Public Health programming is not consistently identified in the literature regardless of the outcome or intervention being considered. Consequently, programs being implemented must be ground in theory with special consideration to the particular needs of the target population. Program goals and objectives must be clearly identified and methodology must be thoroughly outlined with ongoing evaluation and reporting incorporated into the program implementation.

REFERENCES

Barlow J, Smailagic N, Ferriter M, Bennett C, Jones H. Group-based parent-training programs for improving emotional and behavioral adjustment in children from birth to three years old. Cochrane Database of Systematic Reviews 2010, Issue 3. Art. No.: CD003680.

Barlow J, Smailagic, Bennet C, Huband N, Jones H, Coren E. Individual and group based parenting programs for improving psychosocial outcomes for teenage parents and their children. Cochrane Database of Systematic Reviews 2011, Issue 3. Art. No.: CD002964.

Baxter S, Blank L, Everson-Hock ES, Burrows J, Messina J, GuillaUme L, Goyder E. The effectiveness of interventions to establish smoke-free homes in pregnancy and in the neonatal period: a systematic review. Health Education Research 2011; 26(2): 265-282.

Bilukha O, Hahn RA, Crosby A, Fullilove MT, Liberman A, Moscicki E, Snyder S, Tuma F, Corso P, Schofield A, Briss PA. The effectiveness of early childhood home visitation in preventing violence. American Journal of Preventive Medicine 2005; 28(2S1): 11-39.

Britton C, McCormick FM, Renfrew MJ, Wade A, King SE. Support for breastfeeding mothers. Cochrane Database of Systematic Reviews 2007, Issue 1. Art. No.: CD001141.

Bryanton J, Beck CT. Postnatal parental education for optimizing infant general health and parent-infant relationships. Cochrane Database of Systematic Reviews 2010, Issue 1. Art. No.: CD004068.

Ciliska D, Mastrilli P, Ploeg J, Hayward S, Brunton G, Underwood J. The effectiveness of home visiting as a delivery strategy for Public Health nursing interventions to clients in prenatal and postnatal period: A systematic review. Effective Public Health Practice Project 1999. Ontario Ministry of Health.

Dennis CL, Creedy DK. Psychosocial and psychological interventions for preventing postpartum depression. Cochrane Database of Systematic Reviews 2004, Issue 4. Art. No.: CD001134.

Department of Health. Healthy Babies, Healthy Families: Postpartum and Postnatal Guidelines. Province of Nova Scotia 2003.

Dyson L, McCormick FM, Renfrew MJ. Interventions for promoting the initiation of breastfeeding. Cochrane Database of Systematic Reviews 2005, Issue 2. Art. No.: CD001688.

Goldfeld S, Mapiza, N, Quach J, Reilly S, Ukoumunne OC, Wake M. Outcomes of a universal shared reading intervention by 2 years of age: The Let's Read trial. Pediatrics 2011; 127: 445-453.

IARC Handbooks of Cancer Prevention, Tobacco Control, Vol. 13: Evaluating the Effectiveness of Smoke-free Policies (2009: Lyon, France)

Levitt C, Shaw E, Wong S, Kaczorowski J. Systematic review of the literature on postpartum care: Effectiveness of interventions for smoking relapse prevention, cessation, and reduction in postpartum women. Birth 2007; 34(4): 341-347.

Lumbiganon P, Martis R, Laopaiboon M, Festin MR, Ho JJ, Hakimi M. Antenatal breastfeeding education for increasing breastfeeding duration. Cochrane Database of Systematic Reviews 2001, Issue 11. Art. No.: CD006425.

Lumley J, Chamberlain C, Dowswell T, Oliver S, Oakley L, Watson L. Interventions for promoting smoking cessation during pregnancy. Cochrane Database of Systematic Reviews 2009, Issue 3. Art. No.: CD001055.

MacMillan HL, Wathen CN, Barlow J, Fergusson DM, Leventhal JM, Taussig HN. Interventions to prevent child maltreatment and associated impairment. Lancet 2009; 373: 250-266.

National Collaborating Centre for Determinants of Health (NCCDH). Integrating social determinants of health and health equity into Canadian Public Health practice: Environmental scan. Public Health Agency of Canada 2010.

National Collaborating Centre for Healthy Public Policy (NCCHPP). Thirteen public interventions in Canada that have contributed to a reduction in health inequalities. Public Health Agency of Canada 2010.

Shaw E, Levitt C, Wong S, Kaczorowski J. Systematic review of the literature on postpartum care: Effectiveness of postpartum support to improve maternal parenting, mental health, quality of life, and physical health. Birth 2006; 33(3): 210-220.

Spiby H, McCormick F, Wallace L, Renfrew MJ, D'Souza L, Dyson L. A systematic review of education and evidence-based practice interventions with health professionals and breast feeding counselors on durations of breast feeding. Midwifery 2009; 25: 50-61.

Thomas H, Camiletti Y, Cava M, Feldman L, Underwood J, Wade K. Effectiveness of parenting groups with professional involvement in improving parent and child outcomes. Effective Public Health Practice Project 1999. Ontario Ministry of Health.

Turnbull C, Osborn DA. Home visits during pregnancy and after birth for women with an alcohol or drug problem. Cochrane Database of Systematic Reviews 2012, Issue 1. Art. No.: CD004456.

Velez ML, Jansson LM, Montoya ID, Schweitzer W, Golden A, Svikis D. Parenting knowledge among substance abusing women in treatment. Journal of Substance Abuse Treatment 2004; 27: 215-222.

Whaley SE, Jiang L, Gomez J, Jenks E. Literacy promotion for families participating in the women, infants and children program. Pediatrics 2011; 127: 454-461.

APPENDIX P: ENVIRONMENTAL SCAN

There is a wide range as to how many families receive a home visit. In Manitoba and Regina, nearly every mom gets one home visit. In Peel, home visits are not offered universally.

Almost all areas mentioned that they struggle with how to integrate technology to better support delivery of services. Some of the technology includes social networking media, texting, and the internet. Some areas are using an electronic health record (Saskatoon Health Region, and Peel Region). And some areas offer online prenatal modules as an alternative to the classroom setting delivery (Peel Region and Winnipeg Regional Health Authority).

Most areas have an info line in addition to a provincial health phone line. These vary from breastfeeding line, a postpartum depression line (in Saskatoon), to a more general parent information line. In Niagara, it also serves as a community support in-take line.

Most areas use public health nurses to deliver home visiting programs. The exception was in Winnipeg; they were the only area where paraprofessionals do the home visiting, and are supported and supervised by public health nurses. Ontario uses a blended model, where Niagara offers one nursing visit for every three paraprofessional home visitor visits. B.C. delivers a lay visitor home visiting program out of the Ministry for Children and Family Development, and a public health nurse home visiting program out of the Ministry of Health.

All programs stress the importance of breastfeeding and attachment.

Some areas with a large number of newcomers (immigrants and refugees) struggle with how to best meet their needs, such as materials in other languages, as well as navigating existing family resources. The Saskatoon and Regina health authorities recognized that needs of newcomers are different from high-risk populations, and often don't require the same intensive resources.

Very few areas do well with evaluating the effectiveness of existing programs, with Fraser Health being the exception. Manitoba recently completed an effectiveness evaluation on their home visiting program (Feb 2010). Saskatoon surveys for anxiety and depression at intake (prenatally), 28 weeks gestation, and postnatally. Future direction from the Institute for Healthcare Improvement's Triple Aim Initiative focuses on client experience surveys.

Some targeted programming begins prenatally (Saskatoon, Regina, and Fraser regional health authorities). It can be challenging to identify these women in the prenatal stage, but some programs are capturing about 50 per cent of program participants prenatally.

Almost all interviewees commented on poor integration with primary health and family physicians, regarding both family physician referrals to Public Health programs and information sharing. Hamilton may be a reference site for improving partnerships with family physicians, since they did a lot of work on this during a Nurse-Family-Partnership implementation.

There is also poor integration or information sharing with federal programs that service Aboriginal populations.

Most areas mentioned a gap in services between the time their targeted programming (home visiting) ends and prior to school-age children – usually the gap is between the ages of two and five. Some areas offer programs within departments or ministries of education and/or family (B.C., Sask., Ont. also with Ministry of Children and Youth Services) to address this gap, with varying degrees of integration or ease of transition. Saskatchewan's programming seems to be the exception with services well integrated with primary care (especially Regina's Four Directions Community Health Centre) and with the province-wide „KidsFirst' programming from the Ministry of Education.

FROM ENVIRONMENTAL SCAN INTERVIEWS:

MANITOBA: WINNIPEG REGIONAL HEALTH AUTHORITY

In Manitoba, there is a centralized referral for Public Health from hospital birthing units and from midwives. There may be some indication on the referral form for a priority contact, but generally, Public Health initiates the home visiting screen over the phone (within 24 hours for urban dwellers), and it is completed at the first home visit. Eighty to 90 per cent of mothers receive at least one home visit which occurs within the first seven days following discharge. Nursing functions related to postpartum assessment and intervention are outside the scope of their home visiting program (called Families First), since the health authority uses mostly paraprofessionals. They have daily breastfeeding clinics at various locations with one held on Saturdays. The public health nurses work in a generalist model which includes supporting the home visitors, offering a group-based session, hosting a breastfeeding clinic and other public health nurse functions. There are more resources for young families in Winnipeg than in surrounding areas and other regional health authorities. One challenge that has been identified through program evaluation is addressing the mental health needs of new moms. There is a targeted program (called Towards Flourishing) being piloted through the home visiting program to address this. Unique to Manitoba is the Healthy Child Act legislation which governs the delivery of the home visiting program as well as some others. Another challenge is incomplete information on forms. Unique to Winnipeg is a Public Health nursing practice council to help resolve issues. Highlights regarding use of technology include "insite" for practitioners to find information such as practice guidelines, online prenatal class registration and an online prenatal class.

BRITISH COLUMBIA: FRASER HEALTH

Fraser Health, the health authority responsible for the geographic area of B.C. spanning Burnaby to White Rock to Hope, has recently shifted to start identifying vulnerable moms during the prenatal stage. Approximately half of the participants of targeted programming are identified in the prenatal stage. Postnatally, Public Health initiates a phone-based assessment within 24 to 48 hours, and a decision is made to provide either a home visit or a clinic referral. Fraser Health Public Health used to be separated into four areas. As a result, the percentage of families receiving a home visit varies by region, from 40 per cent to 80 or 90 per cent. They are piloting

the standardization of universal home visits. Fraser Health expects 15 per cent of young families to be eligible for the new provincial family home visiting for vulnerable populations. The provincial Nurse-Family Partnership program to be rolled out in the 2012has strict criteria including single moms, those with low income and those under 25 years of age. Fraser Health expects three to five per cent of young families to be eligible for this home visiting model.

A recent review of nursing postpartum assessment (by telephone) revealed that about half of women were referred for additional care, most for public health nurse face-to-face follow-up, and some to a physician. Approximately 80 per cent of that need related to breastfeeding. Fraser Health is piloting a new decision tool for nurses to better understand their decision-making around eligibility for a home visit. Literature and prenatal experience suggest that 20 to 30 per cent of women are currently eligible for a home visit. With established feeding plans, the goal is to move to 100 per cent nursing assessment occurring in a community setting (clinic or group setting) rather than by a home visit.

BRITISH COLUMBIA: INTERIOR – THOMPSON/CARIBOO (MINISTRY FOR CHILDREN AND FAMILY DEVELOPMENT)

The Ministry of Child and Family Development (MCFD) in B.C. offers „Building Blocks' for preconception to age six which includes a universal home visiting component. The programming is delivered by home visitors with nursing consult. Most clients self-refer or are referred through Public Health or primary health. The home visiting component focuses on parenting behavior changes, attachment and healthy infant development but also includes a breastfeeding group.

ONTARIO: NIAGARA REGION

Most births take place at St. Catherine's hospital where a public health nurse meets new moms, administers the screening tool, and tells them about the home visiting (Healthy Babies Healthy Children, HBHC) program. Post discharge, moms get a phone call within 36 to 72 hours, and all new and breastfeeding moms are offered a home visit. Up to this post discharge call, contact with moms could have been three different public health nurses, but anecdotal evidence suggests that when it is the same nurse for all three, there is better uptake for the targeted home visiting program. The targeted home visiting program (Healthy Babies, Healthy Children) is a blended model using public health nurses for the initial visit with additional screen, and most visits are done by a family home visitor; three family home visitor visits to every one visit by a public health nurse. In addition, if a candidate for the home visiting program is identified prenatally, the expecting mother will be directed to community resources prior to birth. If an expectant mother is identified, and not in a prenatal class, she may be directed to a class for „Young and pregnant', and a public health nurse may do a one-on-one visit, directing her to community resources such as nutrition programming. Additional great resources for young families are the province-wide community-based Early Years Centres providing drop-in and group delivery of services including play areas, infant massage, outings, breastfeeding clinics, parenting sessions such as Triple P, and baby food instruction. There are also group mental health supports. The Ontario Early Years Centres are closely linked with the Parent Talk info line. One success unique to Niagara is good integration for those in the home visiting program with other community resources (interviewer's observation).

Provincially, a new screening tool is being piloted and fewer families in the universal stream will receive a home visit. Most breastfeeding moms will receive a home visit, but will be encouraged to make use of breastfeeding clinics.

Niagara is the only area in Ontario where the Public Health nurse is at the hospital (one other area in Ontario is piloting this model). Anecdotally, participation rates in Enhanced Home Visiting are higher, especially when the same nurse meets the family in the hospital, makes the phone call and the first home visit. Areas that do not have a public health nurse at the hospital struggle to have screening done properly (accurately and completely) and to promote Public Health programs.

ONTARIO: PEEL REGION

A hospital nurse delivers the postnatal screen which is faxed to the Public Health unit. Seventy-five per cent of families are contacted within 48 hours. Home visits are only for high-risk families; all others are referred to community resources. There is a phone line for young families called “Family Health Contact Centre” and families may be referred for home visit, an alternative entry point. The Family Health Contact Centre is well connected with the Ontario Early Years Centres. In addition, they offer a breastfeeding line, and isolated moms receive two home visits per day. As mentioned above for Niagara, the Healthy Babies, Healthy Children home visiting program is a blended model using paraprofessionals. This works well for high-risk clients, but for *very* high-risk clients, the home visit is conducted exclusively by a public health nurse. The *extreme* high-risk clients are not appropriate for nurse-led home visiting and would, as an example, be referred to local family and children’s services agencies. Currently, Peel Region is in the process of mapping their practices which will be complete early in 2012.

Unique to the Peel Region is that their model is very lean – there is no universal home visiting. Also unique are prenatal modules delivered online which are offered as an alternative to group settings. In addition, there are prenatal classes targeted to two different populations: young (teenaged) mothers and one for older mothers, and both extend into postpartum programming with drop-in options. Regarding staffing, public health nurses have guidelines for a home office environment where they can chart data for visits from their homes.

A necessary element of Peel’s model is their strong relationship with hospitals, where screening for risk will be moving to the bedside.

ONTARIO: HAMILTON REGION

There has been a recent trend toward increased identification of vulnerable families in the prenatal stage, primarily by primary physician referral. At birth, a hospital nurse does an initial screen which is forwarded to Public Health. The Ministry of Health mandates initial contact be made within 48 hours post-discharge. During the initial phone call, the public health nurse does a needs-based assessment for a home visit. The decision is based on needs such as significant breastfeeding issues or mental health concerns. There is a great deal of confidence in the process used to decide on a home visit versus referral to community supports. Approximately 35 per cent of families get at least one home visit. Using the same nurse for the initial follow-up

phone call, initial home visit and if needed, long-term home visiting fosters continuity of care and families are more likely to participate in the targeted home visiting program, Healthy Babies, Healthy Children.

There is also a liaison nurse three half-days at the hospital to assist with discharge planning. The public health nurse meets with high-risk families before they leave the hospital. Families may be expedited to the targeted home visiting program. In addition, Hamilton uses the Nurse-Family-Partnership model for higher-risk families. Based on risk factors, the criteria are more stringent for this intervention than for Healthy Babies, Healthy Children. Entry into the Nurse-Family-Partnership is at 21 weeks gestation.

Similar to the other regions in Ontario that were interviewed, Hamilton region uses the blended model to deliver Healthy Babies, Healthy Children, however, Hamilton was a pilot site for training family home visitors. As in other regions in Ontario, Hamilton has great support for delivery of community resources through the Early Years Centres including prenatal classes, and the larger centre hosts a breastfeeding clinic. Another feature similar to the two other Ontario sites is a supportive phone line called Health Connections that directs callers to information, resources, breastfeeding clinics and bookings, other breastfeeding support and answers questions related to reproductive health and children's health up to age six. Currently on the policy side, Hamilton Public Health is obtaining the Baby Friendly Initiative (BFI) designation.

One challenge faced in this region is the screening carried out by hospital nurses. Often the contact information is unreliable, and the necessary information for a screen is obtained by the public health nurse at the initial phone call. This may change when the province rolls out the new screening tool with the goal to reduce the need for so many initial Public Health phone calls, but is obviously contingent on hospital nurses accurately using the screen tool.

A unique feature hosted by Hamilton Early Years Centres is a "check it out clinic" where families can drop in monthly to their local centre to speak to a Public Health nurse, speech pathologist, dental hygienist and are linked to other resources. Public health nurses and Early Years Centre staff facilitate follow-up referrals. Attendance is increasing and the "check it out clinic" location rotates between centres.

Efficiencies have been gained by Healthy Babies, Healthy Children nurses using Innovation Services for Children Info System. Used in other regions in Ontario, this system is not a full electronic health record but a step in that direction. For efficiency, all public health nurses in Hamilton use Blackberries for communication and scheduling. One challenge is that the family home visitors use cell phones (through their agency); communication with nurses would be improved if they also used Blackberries.

SASKATCHEWAN: SASKATOON HEALTH REGION

The targeted public health programming for most of the Saskatoon Health Region begins prenatally. Most women self-refer. A prenatal outreach worker develops a relationship with the at-risk mother-to-be. Once the baby is born, a public health nurse follows up with home visit(s)

as required. This program is called Healthy Mothers Healthy Babies and lasts until six weeks postpartum. For the universal stream, a liaison nurse initiates contact prior to discharge for the Healthy and Home program offered from the hospital's maternal and newborn acute care unit for the purposes of early discharge. The Healthy and Home nurse plans a follow-up phone call and/or a home visit. At two weeks postpartum, the family is referred to Public Health primarily for immunizations. The early discharge Healthy and Home program does not reach the entire regional health authority boundaries, and in these communities, it is expected that the public health nurse will contact the mother within 72 hours whenever possible. The Department of Education offers a program called KidsFirst across the province which is an early childhood intervention program to support vulnerable families. It includes a home visiting component. Some participants enroll in the prenatal stage. In addition to the Public Health and KidsFirst program, the Canada Prenatal Nutrition Program has a presence through a nutritional program, Food for Thought, offered to vulnerable families wherein eight to 12 moms with their children attend a cooking class twice a week. Transportation and child care are provided. They offer ideas for low-cost and nutritious meals, cook together, and take some food home to share with families. Twice a year, a modified program is offered for newcomers to the area. Challenges include high rates of anxiety and depression in the vulnerable population; many of these women have to wait for mental health help. One of this health authority's strengths is its linkages between the different programs – KidsFirst, Healthy and Home, and Healthy Mother, Healthy Babies – where resources come from different budgets and sectors.

SASKATCHEWAN: REGINA QU'APPELLE HEALTH REGION

Public Health programming in the Regina Qu'Appelle Health Region is similar to Saskatoon's. The early discharge program is called Maternity Visiting Program (MVP) and does not quite extend to the more rural parts of the region. Moms in these rural communities would have a public health nurse follow up with them post discharge, similar to in Saskatoon. The program runs seven days a week with voicemail after hours. Those with access to the program are referred to Public Health within two weeks, and a public health nurse makes contact with every mother in five working days to determine if home visits are needed. At least one home visit is encouraged for all mothers. For at-risk mothers, Four Directions Community Health Centre offers two programs: Healthiest Babies Possible, and Sunrise Health Program, as well as other programs such as addiction services. The Healthiest Babies Possible program follows women during pregnancy and up to six months postpartum. It is culturally appropriate for Aboriginal populations, but serves any high-risk families. It includes community outreach workers, a public health nurse and a nutritionist. It is well integrated with medical follow-ups and referral for services is based on individual needs. Participants' transportation and child care expenses are covered while they attend sessions (as well as medical appointments). The Sunrise Health Program offers postpartum support including parenting classes for the Healthiest Babies Possible participants and others. A public health nurse is assigned to Regina Open Door Society providing prenatal and postnatal service for immigrant and refugee families.

NOVA SCOTIA: CAPITAL HEALTH DISTRICT

In the Capital Health district of Nova Scotia, a public health nurse is present at the local women's and children's health centre to administer the screening for at-risk families. In addition, public health receives a birth notice at discharge. Currently, there is no mechanism to identify at-risk families prenatally for postpartum home visiting. All families are contacted within 72 hours, but often high-risk families are contacted sooner, as they are triaged based upon the modified Parkyn screening tool. There is not a set assessment on the first phone contact, and approximately 45 per cent of families get at least one home visit. The families identified as vulnerable are eligible for enhanced home visits by nurses for up to three years. Community supports include a seven-day-a-week breastfeeding line, and lay home visitors operating out of not-for-profit family resource centres.

RESOURCES

Information was collected from each jurisdiction to compare public health resources regarding postnatal programming (see Table 1 below). The population size and number of births is compared to the number of families participating in the targeted programming. This percentage can be used as proxy for the stringency of the screening tool, with some challenges: some families decline participation, and these rates may not be consistent across areas. For comparison purposes, it is necessary to know how long vulnerable families are supported captured in „length of stay' which would directly impact human resources required for programming. Supports available outside of Public health would also impact resources required for programming, and these have also been captured in the table. One challenge with recording human resources by Full-Time Equivalents (FTEs) is that some units have staff dedicated to the delivery of programming for vulnerable populations, and others have a generalist model where some of their time is devoted to universal Public Health programming.

Table 1: Comparisons between regions regarding population size, targeted programming, and resources to support Public Health postnatal programming.

	Population		Targeted Programming		Resources	
Region	**Service Area Geo and Pop**	**# of births/ year**	**# of families/ year**	**Avg LOS (mo)**	**FTEs by profession**	**Other supports**
Fraser Health	1,607,394	17,000	1,500-3,000 (9%-17%)	Varies**	240 PHNs inc 14 NFP FTEs	MCFD Building Blocks
Peel	Mississauga, Brampton, Caledon Municipalities; 1,159,405	17,000	7,000 contacted	18	On 1 of 6 teams: 10-12 staff inc 1 admin, 2-4 family visitors, and rest nurses	Early Years Centres
Winnipeg	WRHA; 667,038	7741^	542 (7%)	17.5	Integrated Gen Model: 115 PHNs 51.5 HVs (0.2 PHN/HV)	
Hamilton District	504,559, inc suburban 697,911	4900	450-550 plus 100 NFP (11-13%)	?	23 PHNs for HBHC 5 FTEs for NFP 12.5 Family HV (HVs external agency)	Early Years Centres
Capital Health (N.S.)	~395,000	4400	700 (16%)	36?		
Regina (RQRHA)	266,386	3,800-4,000***	MVP – ALL urban PH -	MVP- .5 PH - varies	MVP 7.36 FTEs PH – 49.5 plus 6.2 FTEs for rural, see below for breakdown#	KidsFirst
Saskatoon	202,340 (Sask RHA)	3800	390 (10%)	6*	5 PHNs, a nutritionist, and 5 prenatal outreach	KidsFirst

					workers	
Niagara	Niagara region; 427,000	3578	358 (10%)	12	14.5 PHNs 7.2 HVs	Early Years Centres
Thompson/Cariboo B.C. (MCFD)	220,000					

^ local births only
* Sask. program runs prenatally until 6 weeks postpartum
**Also starts prenatally
*** Includes births from outside RHA
# Breakdown of FTEs for Regina: 2 teams of nurses in Regina City: Family-Child team (for prenatal to school-age) and a school team. There are 16.5 FTEs on the family-child team. Four Directions has 5 PHN FTEs, 3 Community health workers, and 2 Nurse Practitioners. Rural communities employ generalist model for PHN.

References available by request.

APPENDIX Q: INTERVIEW QUESTIONS FOR THE ENVIRONMENTAL SCAN

POSTPARTUM CARE – KEY-INFORMANT INTERVIEW QUESTIONS

Ask for program information in electronic format, also assessment/screening tool if willing to share

1. How do you ID new moms and babies in your area? Annual # of births in your area?
2. Is there a requirement for contact by Public Health, ex within 72 hours?
3. What does your jurisdiction do for postpartum care – universal stream?
4. What do you do for vulnerable populations? What is the number of families served in a given year? What is the average length of intervention?
5. Are these Public Health (or other) programs? Is the area serviced defined by geography? How large? Population?
6. What other postpartum community supports exist in the area? Are there gaps in services for new babies and their families?
7. How are the programs staffed?
8. What is working? What are the challenges?
9. How does technology support your goals for healthy babies and healthy communities?
10. How are you evaluating your programming?
11. Have there been any recent changes to programming, and if so, how were those decisions made?
12. In your area, what are the must-dos compared with the wish list for postpartum care?

APPENDIX R: CAPITAL HEALTH'S & THE NATIONAL COLLABORATING CENTRE FOR METHODS AND TOOLS' DECISION-MAKING TOOL

Capital Health's Decision-Making Tool:

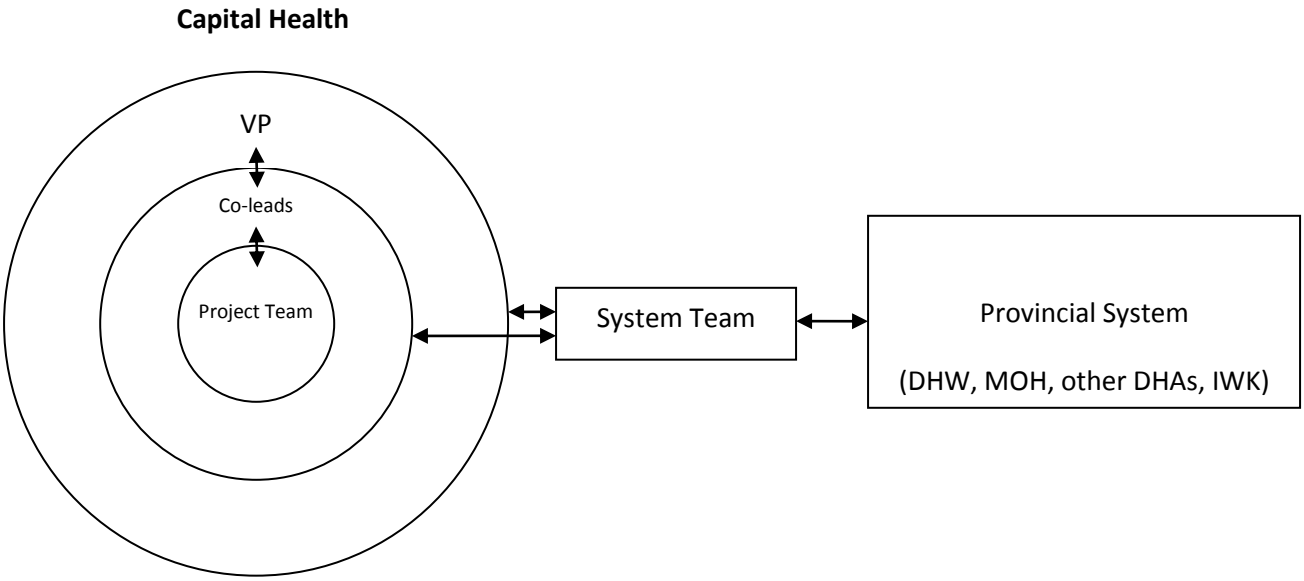
http://www.cdha.nshealth.ca/system/files/sites/97/documents/decision-making-tool-evidence-ethics-and-economics.pdf

The National Collaborating Centre for Methods and Tools' Decision-Making Tool:

See http://www.nccmt.ca/en/modules/eidm/evidence/model.php for more information

APPENDIX S: DECISION-MAKING PATHWAYS USED BY PUBLIC HEALTH IN THE SITUATIONAL ASSESSMENT

(Double-headed arrows represent the two-way flow of decision-making input and/or information.)



Co-leads: Director of Public Health and Medical Officer of Health, Capital Health

VP: Vice-President, Person-Centred Health, Capital Health

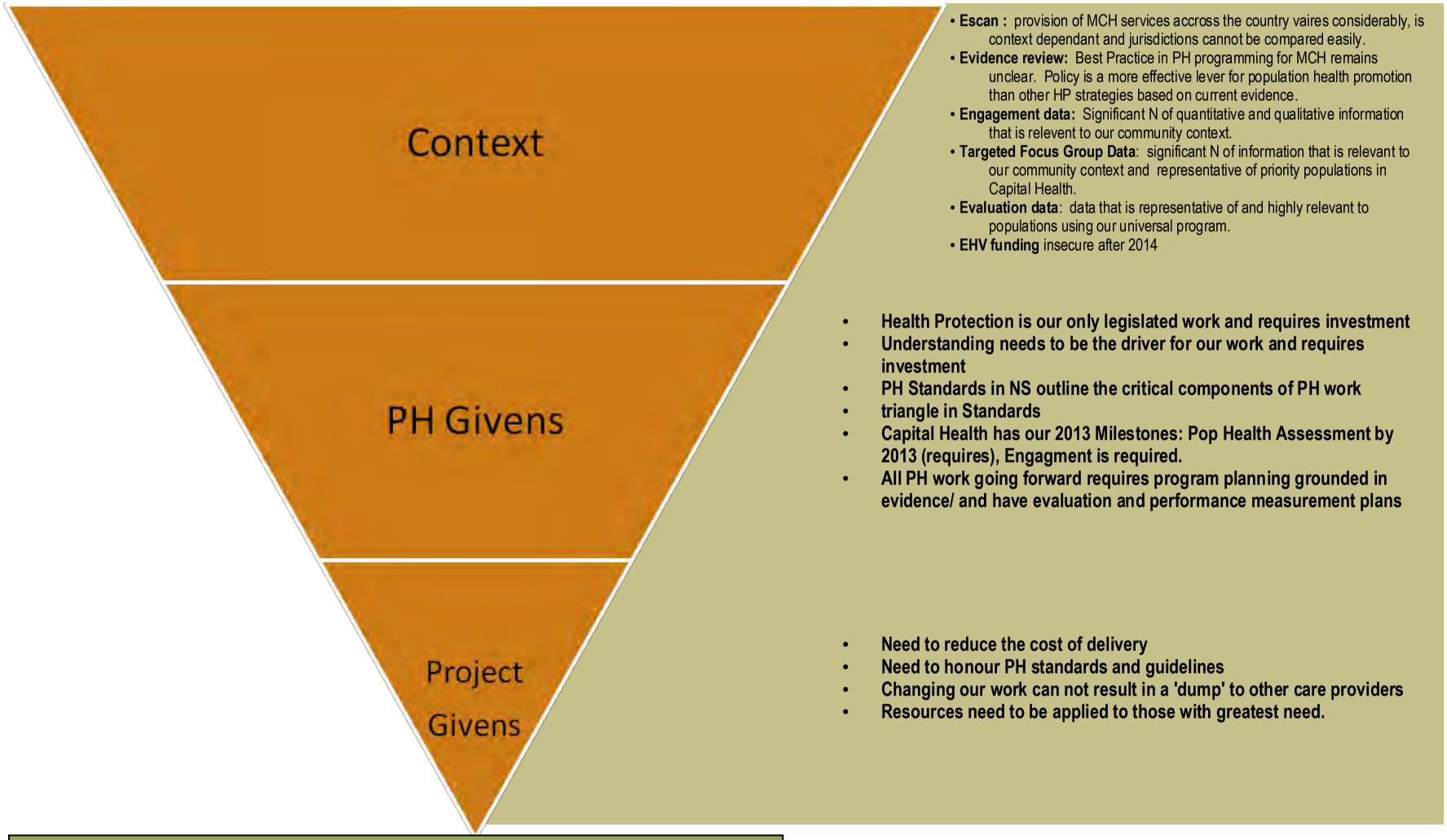
DHW: Nova Scotia Department of Health and Wellness

MOH: Medical Officer of Health

DHAs: District health authorities

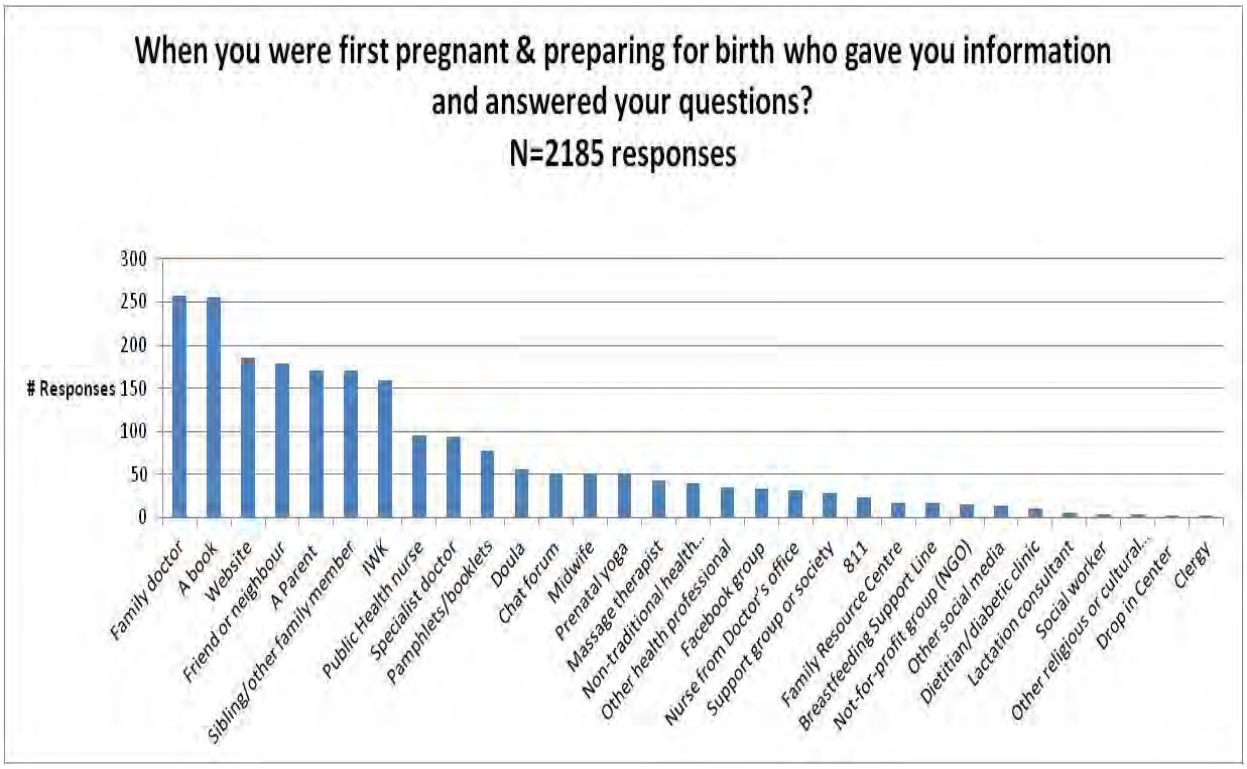
IWK: IWK Health Centre

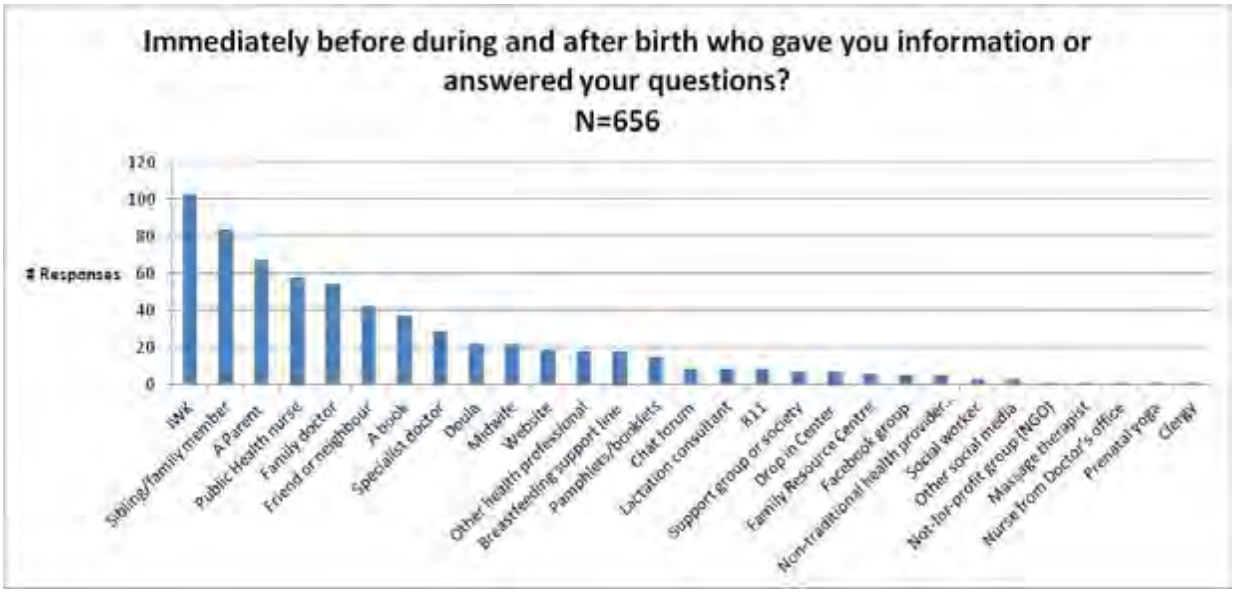
APPENDIX T: DECISION-MAKING MODEL USED BY PUBLIC HEALTH IN THE SITUATIONAL ASSESSMENT

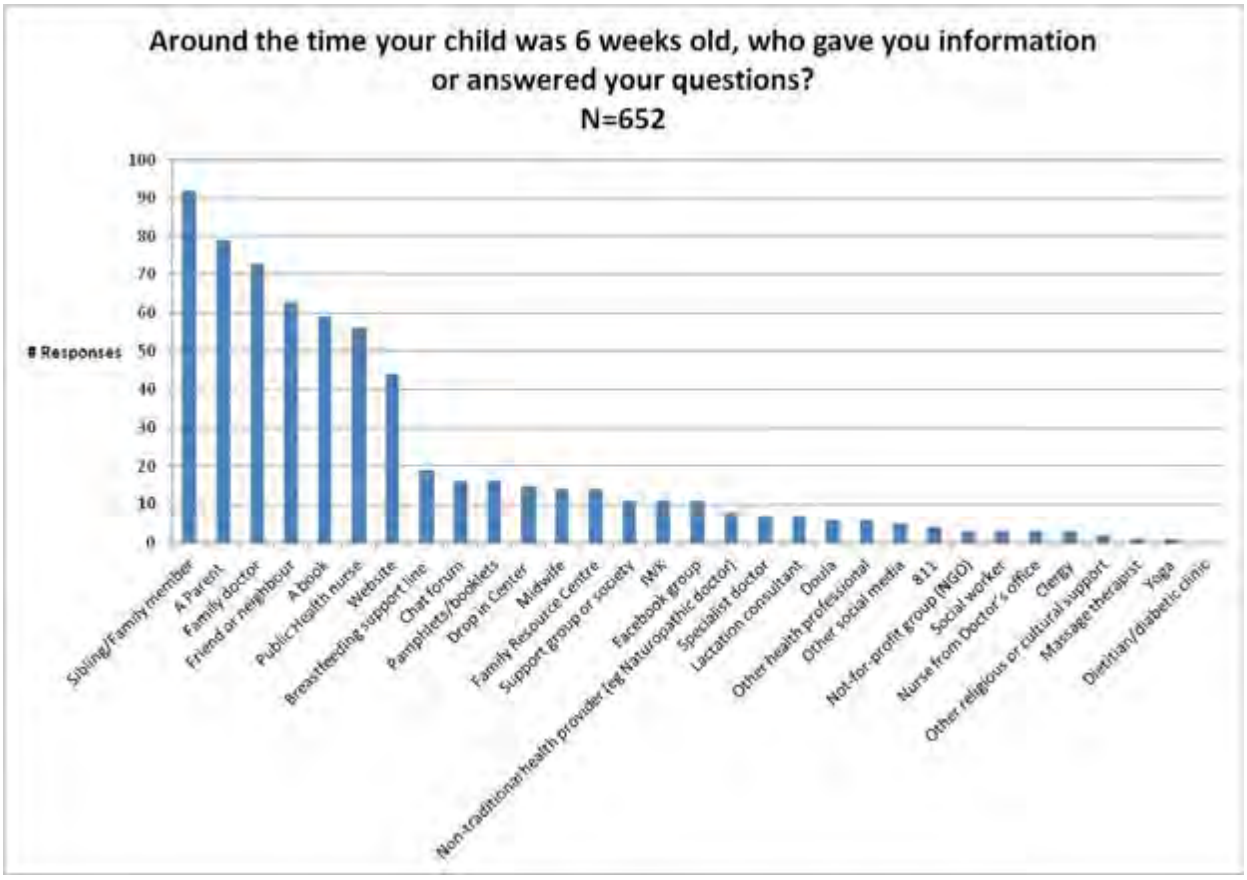


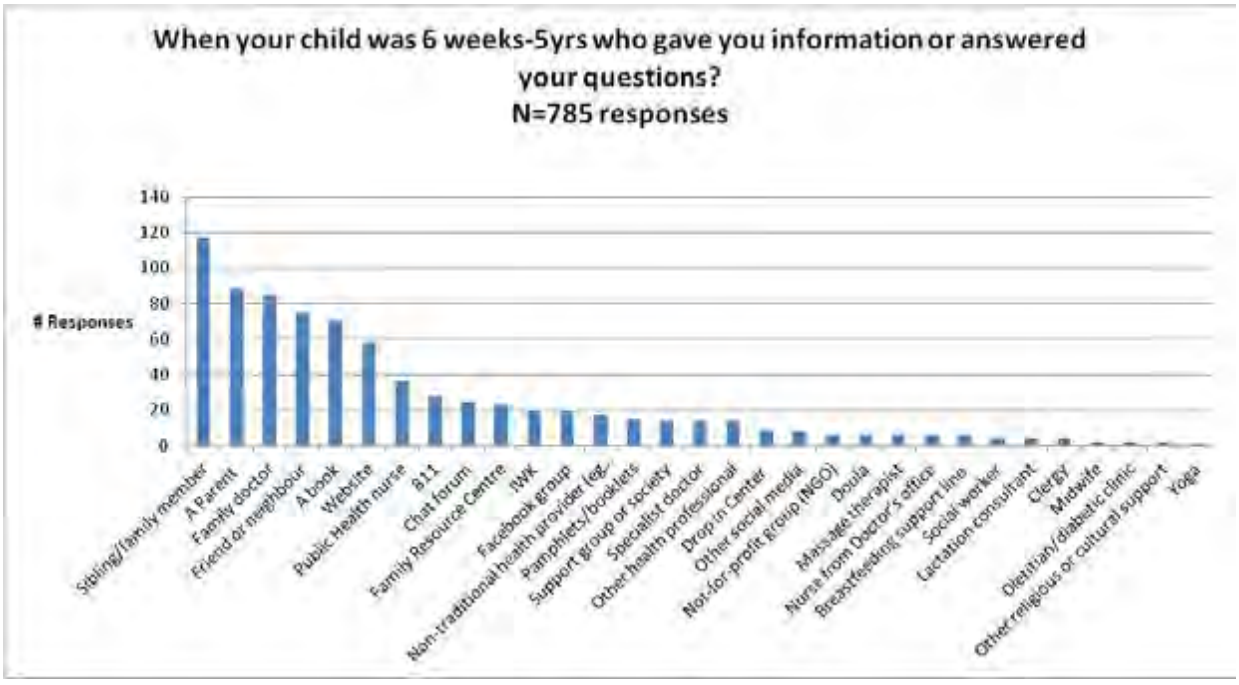
Recommendations for how the Healthy Beginnings program will change.

APPENDIX U: SELF-REPORTED SOURCES OF INFORMATION FROM PREGNANCY UNTIL THE INFANT IS SCHOOL-AGED

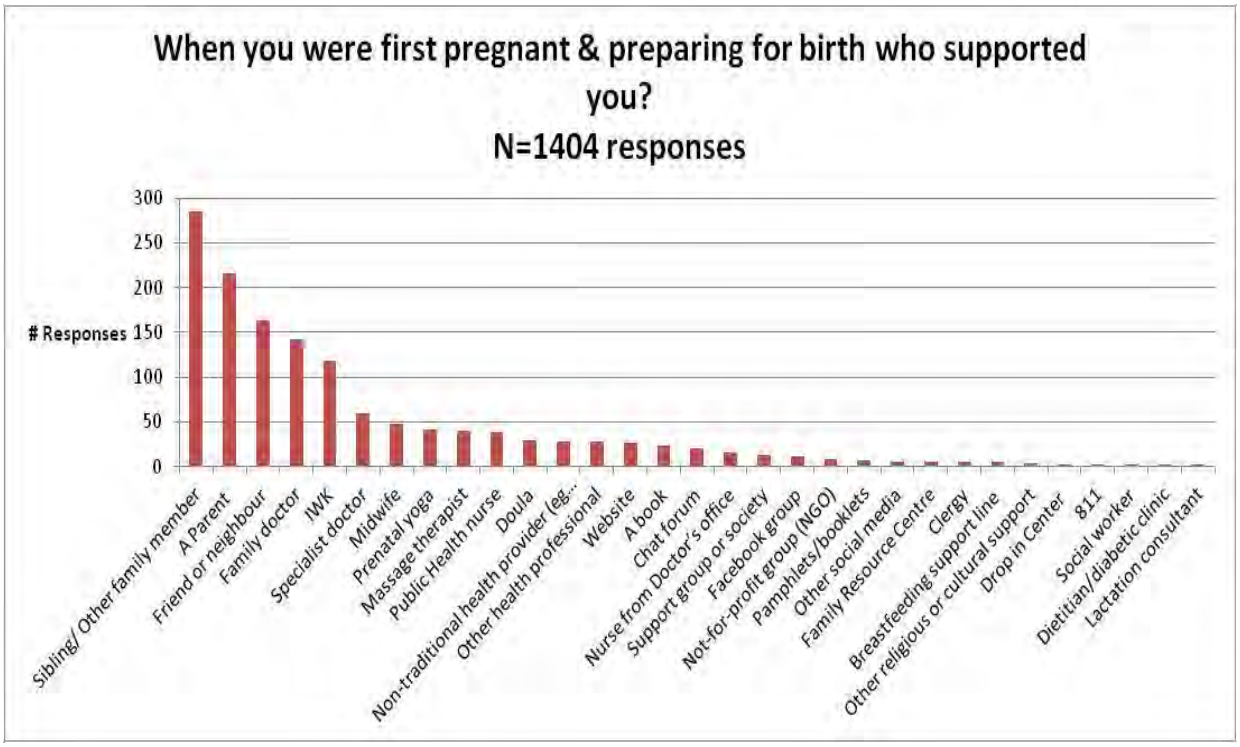


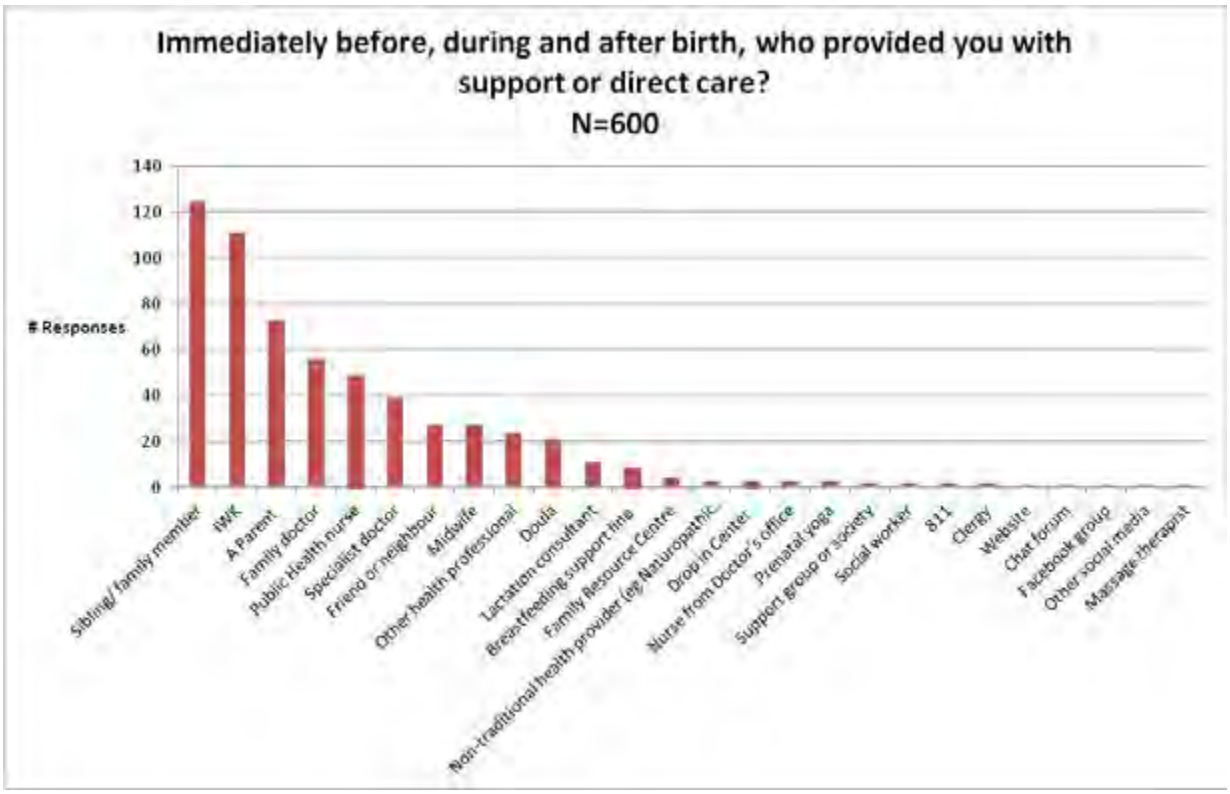


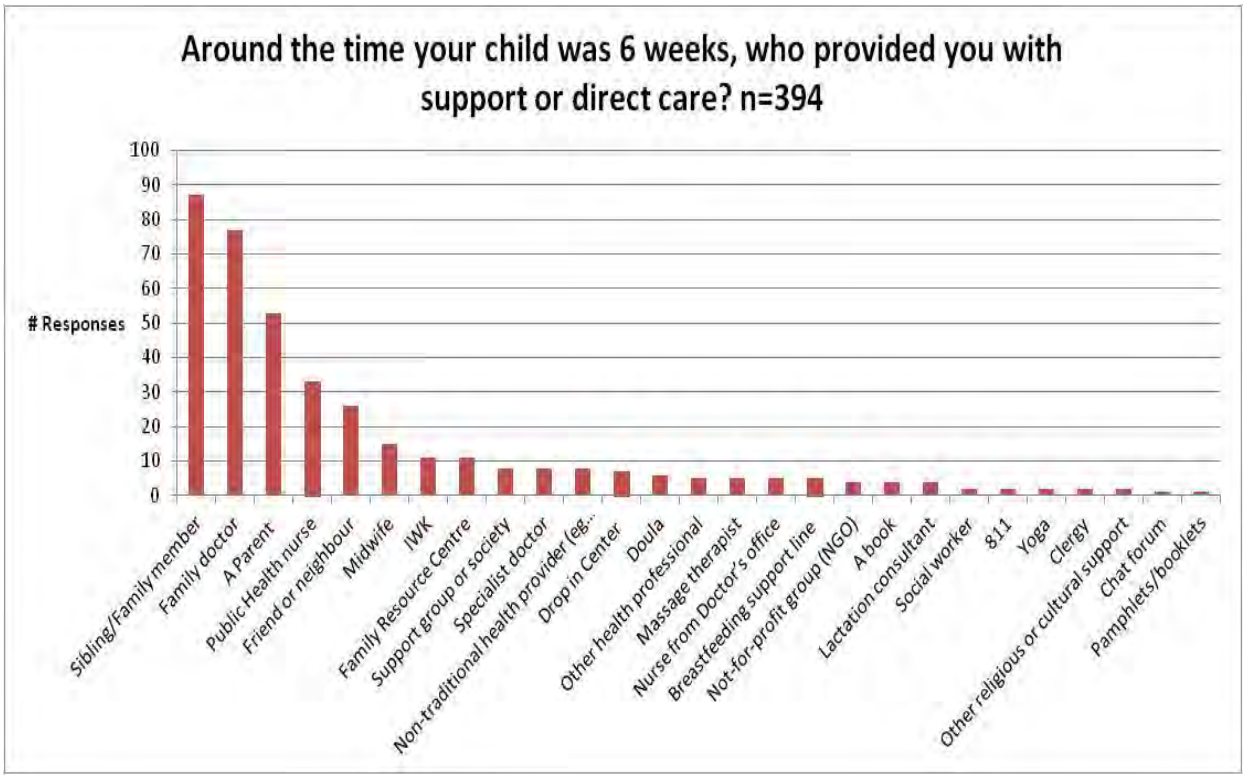

Around the time your child was 6 weeks old, who gave you information or answered your questions?
N=652
# Responses
100
90
80
70
60
50
40
30
20
10
0
Sibling/Family member
A Parent
Family doctor
Friend or neighbour
A book
Public Health nurse
Website
Breastfeeding support line
Chat forum
Pamphlets/booklets
Drop in Center
Midwife
Family Resource Centre
Support group or society
NWK
Facebook group
Non-traditional health provider (eg Naturopathic doctor)
Specialist doctor
Lactation consultant
Doula
Other health professional
Other social media
811
Not-for-profit group (NGO)
Social worker
Nurse from Doctor's office
Other religious or cultural support
Massage therapist
Yoga
Dietitian/diabetic clinic

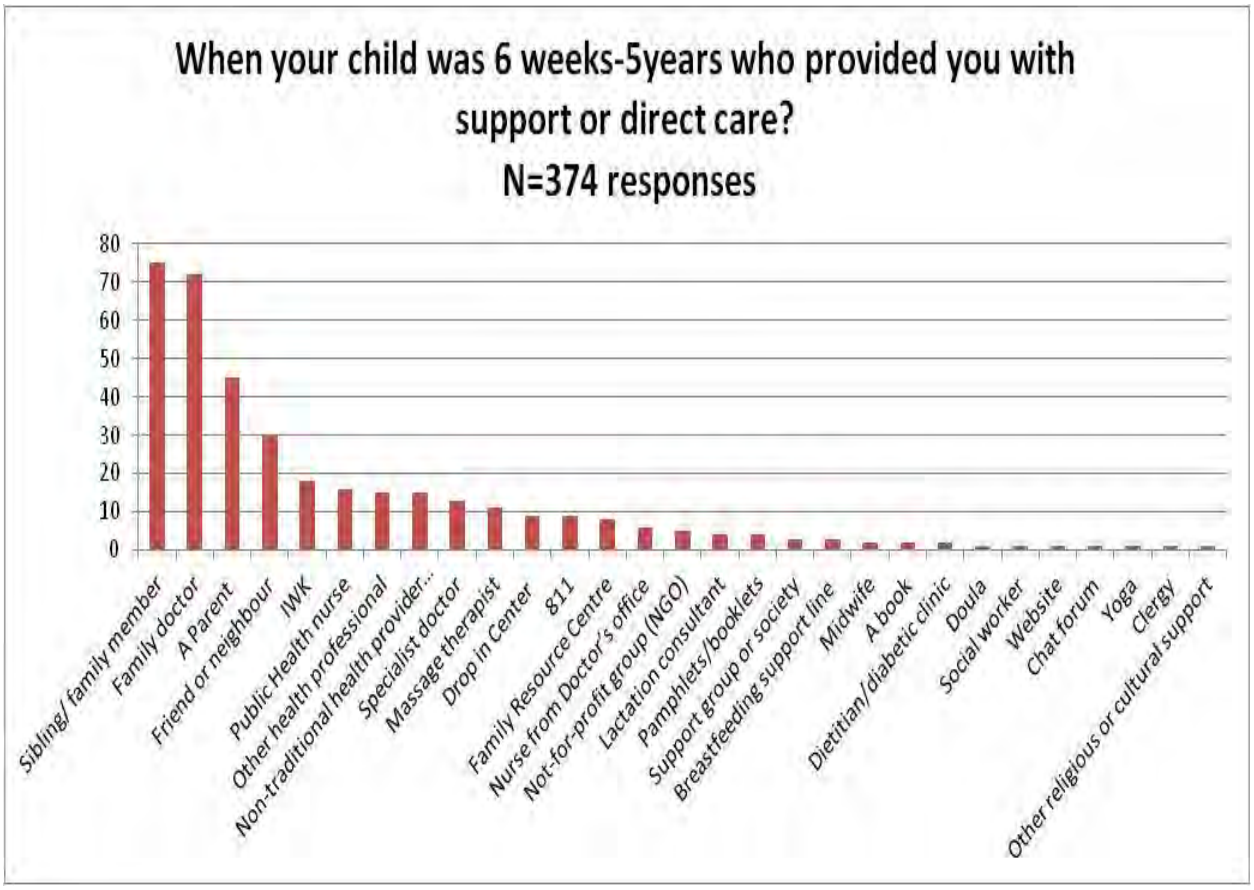

When your child was 6 weeks-5yrs who gave you information or answered your questions?
N=785 responses
# Responses
140
120
100
80
60
40
20
0
Sibling/family member
A Parent
Family doctor
Friend or neighbour
A book
Website
Public Health nurse
811
Chat forum
Family Resource Centre
NWK
Facebook group
Non-traditional health provider (eg.
Pamphlets/booklets
Support group or society
Specialist doctor
Other health professional
Drop in Center
Other social media
Not-for-profit group (NGO)
Doula
Massage therapist
Nurse from Doctor's office
Breastfeeding support line
Social worker
Lactation consultant
Clergy
Midwife
Dietitian/diabetic clinic
Other religious or cultural support
Yoga

APPENDIX V: SELF-REPORTED SOURCES OF SUPPORT FROM PREGNANCY UNTIL THE INFANT IS SCHOOL-AGED




Immediately before, during and after birth, who provided you with support or direct care?
N=600
# Responses
140
120
100
80
60
40
20
0
Sibling/ family member
IWK
A Parent
Family doctor
Public Health nurse
Specialist doctor
Friend or neighbour
Midwife
Other health professional
Doula
Lactation consultant
Breastfeeding support line
Family Resource Centre
Non-traditional health provider (eg. Naturopathic...
Drop in Center
Nurse from Doctor's office
Prenatal yoga
Support group or society
Social worker
811
Clergy
Website
Chat forum
Facebook group
Other social media
Massage therapist


Around the time your child was 6 weeks, who provided you with support or direct care? n=394
Responses
100
90
80
70
60
50
40
30
20
10
0
Sibling/Family member
Family doctor
A Parent
Public Health nurse
Friend or neighbour
Midwife
IWK
Family Resource Centre
Support group or society
Specialist doctor
Non-traditional health provider (eg...
Drop in Center
Doula
Other health professional
Massage therapist
Nurse from Doctor's office
Breastfeeding support line
Not-for-profit group (NGO)
A book
Lactation consultant
Social worker
811
Yoga
Clergy
Other religious or cultural support
Chat forum
Pamphlets/booklets


When your child was 6 weeks-5years who provided you with support or direct care?
N=374 responses
80
70
60
50
40
30
20
10
0
Sibling/ family member
Family doctor
A Parent
Friend or neighbour
IWK
Public Health nurse
Other health professional
Non-traditional health provider...
Specialist doctor
Massage therapist
Drop in Center
811
Family Resource Centre
Nurse from Doctor's office
Not-for-profit group (NGO)
Lactation consultant
Pamphlets/booklets
Support group or society
Breastfeeding support line
Midwife
A book
Dietitian/diabetic clinic
Doula
Social worker
Website
Chat forum
Yoga
Clergy
Other religious or cultural support

APPENDIX W: LIST OF HEALTHY BEGINNINGS FOCUS GROUP SESSIONS

Focus Group Host Agency*	Date	Community Health Board
Hants Learning Network Association	20-Feb	West Hants-Uniacke
Family Resource Centre of Hants County	21-Feb	West Hants-Uniacke
Hants Shore Community Health Centre	24-Feb	West Hants-Uniacke
Uniacke Library	22-Feb	West Hants-Uniacke
Windsor Library	22-Feb	West Hants-Uniacke
Oasis Family Support Centre	28-Feb	West Hants-Uniacke
Preston and Area Family Resource Centre in East Preston	6-Mar	Southeastern
Good Shepherd Church	22-Feb	Southeastern
Eastern Passage mom and tot group	Unknown	Southeastern
Middle Musquodoboit Family Resource Centre	15-Feb	Eastern Shore Musquodoboit
Musquodoboit Harbour Library	28-Feb	Eastern Shore Musquodoboit
Oyster Pond	29-Feb	Eastern Shore Musquodoboit
Leaplace Resource Centre / Food bank merged	Unknown	Eastern Shore Musquodoboit
Chebucto Family Centre Spryfield	22-Feb	Chebucto West
Rockingstone Heights School Spryfield	23-Feb	Chebucto West
YMCA Centre for Immigrant Programs in Fairview	28-Feb	Chebucto West

Fairview Parent n Tot	21-Feb	Halifax/Chebucto West
Citadel High Youth Health Centre	28-Feb	Halifax
North Preston	7-Mar	Southeastern
Mosque	1-Mar	Dartmouth
Memory Lane Family Centre	2-Mar	Cobequid
Francophone parents focus group	2-Mar	All boards

*Some agencies hosted more than one focus group

Capital Health
Public Health Services

A different today. A better tomorrow.