McMaster University

PHN-PREP

Healthy Babies Healthy Children Program Practices, Processes, and Policies:

Reflections from Ontario's Health Units

May 2023

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Background

Within the Ontario Public Health Standards: Requirements for Programs, Services, and Accountability (Standards) (Province of Ontario, 2021), it is required that:

HEALTHY GROWTH AND DEVELOPMENT REQUIREMENT 3.

The board of health shall provide all components of the Healthy Babies Healthy Children Program in accordance with the Healthy Babies Healthy Children Protocol, 2018 (or as current) (Ministry of Children, Community and Social Services).

In accordance with the Standards, Healthy Babies Healthy Children (HBHC) is a mandatory program implemented by boards of health in Ontario through the province's 34 health units and in partnership with hospitals and other health and social service providers. HBHC program services are delivered to individuals during the prenatal period and to families with children from birth up to their transition to school. HBHC program components include:

1. Service and system integration
2. Access to information and resources
3. Early identification and intervention screening
4. Assessment
5. Blended home visiting services
6. Access to information and resources
7. Service coordination
8. Referral to/from community services
9. Research and evaluation

An HBHC Guidance Document (Ministry of Children and Youth Services, 2012) provides information to support the local implementation and delivery of the program, including identification of required HBHC screening and assessment tools. In 2012, the original HBHC protocol was revised and new HBHC program enhancements were introduced, including the need to implement the following additional program components: a screening liaison model, a new HBHC Screening Tool, training and certification of public health nurses to administer NCAST Parent-Child Interaction Scales, use of Promoting Maternal Mental Health During Pregnancy, Keys to Infant Caregiving, and Partners in Parenting Education (PIPE) programs, Family Service Plans, provision of clinical supervision and reflective practice, increased reporting requirements in the HBHC provincial database (HCD-ISCIS and IRSS enhancements), and annual continuous quality improvement requirements. These program enhancements serve to increase the range of evidence-informed assessments, interventions, and services offered by HBHC.

HBHC PROGRAM DELIVERY: A DECADE OF CHALLENGES AND OPPORTUNITIES

The delivery of HBHC across the province of Ontario creates critical opportunities to identify and provide health promotion supports to pregnant individuals and caregivers, as well as their children, to enhance healthy child development and promote competent caregiving practices. In the decade since the introduction of the HBHC program enhancements, many health units have been challenged to deliver the program with fidelity to the protocol. While each health unit receives provincial funding from the Ontario Ministry of Children, Community and Social Services (MCCSS) to deliver HBHC, chronic underfunding paired with expanded program components, service targets, and deliverables, has resulted in many health units prioritizing and adjusting program service components. As a result, in some regions, local HBHC programs have been unable to fully meet provincial program benchmarks or service targets.

The COVID-19 pandemic also impacted HBHC service delivery. Public health measures to mitigate the transmission of COVID-19 disrupted screening and assessment processes and blended home visiting services. Across the province, 70% of HBHC teams reported that more than half of their HBHC public health nurses were redeployed to work in other programs, typically supporting case and contact management or vaccine delivery services (Jack et al., 2021). In many health units, this resulted in decreased capacity to: 1) complete in-depth assessments (IDAs); 2) provide home visiting supports to clients; 3) promote referrals to the program; and, 4) address client needs through service coordination (Jack et al., 2021). Referrals to other community programs also became limited, given similar workforce disruptions occurring across all health and social care sectors (Jack et al., 2021).

However, fewer disruptions to HBHC programming were noted in health units where senior public health leaders supported the prioritization of maintaining programming for those families experiencing social and economic disadvantage and who positioned HBHC as a component of their health unit's response to the pandemic (Jack et al., 2021). Beyond staff retention and attrition, many programs were required to contend with other workforce challenges including limited resources to provide HBHC orientation to new or returning staff, increased staff burnout coupled with limited opportunities for debriefing or supervision, and staff requests for extended leaves of absence (Jack et al., 2021).

During the pandemic, disruptions and decreases to service delivery occurred simultaneously with a period of uncertainty and increased stress in families, when critical public health supports were needed most. During the initial COVID-19 lockdown, families reported experiencing multiple stressors and that physical and social distancing measures negatively impacted parents' mental health and children's behaviour and well-being (Gonzalez et al., 2020). Throughout the pandemic, individuals from

Ontario in the prenatal and postpartum periods reported disruptions to care and services, increased prenatal anxiety, and clinically elevated rates of depression and insomnia (Khoury et al., 2021; Khoury et al., 2022). Nationally, police-reported rates of family violence and intimate partner violence increased (Statistics Canada, 2022). An increasing challenge for HBHC programming has thus become how to assess and address the needs of individuals and families within increasingly complex health and social needs, within a context of fewer human resources to meet those needs.

Despite the above-mentioned challenges, adaptations to HBHC program delivery during the pandemic, and in the current post-pandemic era, have created opportunities for innovation and reflection. Most notably, many HBHC programs have increased their utilization of technology within programming; recognized the flexibility of hybrid "home" visiting; renewed and strengthened internal and external partnerships; prioritized staff well-being and are reviewing programming alternatives to increase supports for equity-seeking populations during the prenatal and postpartum periods (Ontario Agency for Health Protection and Promotion, 2023).

PROJECT OBJECTIVES

At the request of MCCSS, this project was conducted to explore current HBHC program practices, processes, and policies at the health unit level that are perceived to be working well and to identify ongoing challenges to program delivery. Findings from this project will be used to help inform what guidance, training, and/or supports are required to ensure that the program remains responsive to the needs of pregnant individuals and families with young children in Ontario.

Objective

To explore current HBHC program practices, processes, and policies at the health unit level that are perceived to be working well and to identify ongoing challenges to program delivery.

Methodology

A sequential exploratory mixed methods approach to data collection and analysis was employed in this project. In the first phase of this project, the principles of qualitative description were used to guide decisions with respect to data generation and analysis. Each HBHC program (n=34) was invited to identify at least one HBHC manager (or designate) to participate in an interview. Between November 2022 and January 2023, a single (60 minute) interview was completed by a PHN-PREP project team member via videoconference with the designated respondent(s) from each health unit. If more than one designate was identified, they were interviewed together.

In the interview, respondents were asked to describe the single most unique component of their local HBHC program. To explore respondents' perspectives on what HBHC program practices are important to retain and their recommendations for program modifications, they were asked to then select and prioritize three (from a choice of seven) HBHC program components to discuss. Respondents were also asked to discuss what current practices or activities, as outlined in the current HBHC protocol, that their HBHC team are unable to implement or achieve with fidelity within the current HBHC funding envelope. The interview concluded by asking respondents to list the top three training needs for HBHC supervisors/managers, public health nurses (including hospital screening liaison nurses), family home visitors, and administrative/support staff.

Interviews were recorded with permission and the data were transcribed verbatim with identifying information removed. A rapid "turn-around" approach to qualitative analysis developed for implementation and policy research was used to summarize and synthesize these data. A team of nine individuals, three public health managers/professional practice leads and six researchers, all with extensive public health, healthy growth and development, nursing or home visiting program content expertise engaged in the analysis and interpretation process. The first step involved the development of a draft summary template document. Two team members then read one transcript in its entirety and used the draft template for data extraction while revising the template to ensure that all content domains were included. During a two-day meeting, the remaining 33 transcripts were divided among the nine analysts. To promote dependability in data extraction, four transcripts were reviewed and synthesized by three pairs of analysts. Once consistency in data extraction and synthesis had been established across all team members, the remaining transcripts were individually summarized within the domain templates. From the templates, data summarized for each domain were then collated by domain within an Excel spreadsheet. Data for each domain were then synthesized by a core member of the team.

As respondents in the interviews were instructed to identify and discuss three of seven program components, this resulted in a dataset where information across all program components were not consistently explored. Information shared in the interviews was also helpful to identify potential trends or changes to HBHC program delivery that were occurring in some health units. To address

this limitation, in the second phase of this project, a survey was constructed and distributed to an HBHC manager (or designate) in each of the 34 health units. During the qualitative analysis meeting, team members identified key concepts and prioritized questions to include in the survey. To minimize burden on respondents, the goal was to construct a survey that would take approximately 20-30 minutes to complete.

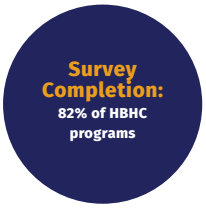
A survey with six sections was developed by an epidemiologist with extensive experience in measurement development and content expertise in healthy growth and development. The six sections were: 1) HBHC Team Composition; 2) Early Identification and Intervention Screening; 3) Blended Home Visiting Services; 4) Nurse-Family Partnership; 5) Documentation; and 6) PHN-PREP resources and activities. The section on Blended Home Visiting included detailed questions on a) maternal mental health and well-being; b) parenting programs; c) family service plans; and d) reflective supervision. The final version of the survey included between 40-99 questions, reflecting the use of branching logic where more/less questions can appear based on the respondent's previous answers.

The electronic survey was developed in REDCap. The draft survey was piloted by five project team members and revised based on feedback received. The link to the final survey was emailed to HBHC program managers (or designates) on February 28, 2023. Each HBHC program contact was requested to return one survey per health unit, however the individual completing the survey was able to consult with other members of their HBHC team.

Analysis of the quantitative survey data (descriptive statistics; frequency and percentage for the categorical variables) was performed using R (Version 4.1.1.) and visualized with bar charts generated using the ggplot package (Wickham, 2016). Findings from the qualitative and quantitative datasets are presented together, categorized by HBHC program component.

Key Findings

In the qualitative component of this project, interviews were conducted with at least one HBHC program manager (or designate) from all the 34 public health units. Overall, 55 individuals participated in the 34 interviews, including two (n=2) directors, 37 managers/supervisors, and 16 public health nurses. A total of 28/34 (82%) health units completed the survey.



HBHC PROGRAM INNOVATIONS

From past environmental scans and evaluations of the HBHC programs (e.g., Jack et al., 2021; Ontario Agency for Health Protection and Promotion, 2023), it was identified that each of the 34 health units have adapted the HBHC program to be responsive to local needs and to reflect what is possible to implement within the existing funding envelope. At the start of each qualitative interview, respondents were asked to reflect and describe local HBHC innovations that they perceived to be a unique strength of their programming.

An overarching theme threaded throughout all the interviews is that HBHC team leads identify that public health has a critical role in providing health promotion supports to pregnant individuals and families with young children. The HBHC team leads are committed to delivering a strong HBHC program with fidelity to the components outlined in both the HBHC Protocol (2018) and HBHC Guidance (2012); however, efforts to improve or meet program benchmarks and service delivery targets have been hampered and are perceived to be directly associated with the consistent underfunding of the program year after year.

Innovations in Home Visiting Practices

Multiple health units spoke about intentional program adaptations and enhancements to meet the needs of equity-seeking populations within their region. As a response to the increased complexity in servicing HBHC clients, respondents from three health units spoke about the decision to transition from a blended (public health nurse and family home visitor) to a professional (public health nurse-only) home visitation program model. Two additional public health units spoke about their decision to start providing the Nurse-Family Partnership program as a component of HBHC programming. With the introduction of Nurse-Family Partnership, opportunities for increasing outreach activities to prenatal referral sources and screening clients in the prenatal period were identified. One respondent noted that with the implementation and delivery of Nurse-Family Partnership as part of HBHC, this ensures that the health unit can identify and provide seamless services to clients identified with risk from early in pregnancy until the child is age 3 years. As this respondent further explained:

> *NFP [Nurse-Family Partnership] is one of our service delivery models under HBHC. So, we have traditional HBHC and then can offer NFP depending on the client. If we can connect with clients as soon as possible [in pregnancy], then we can have the most impact in terms of working with those families, developing their therapeutic relationships, working on goals, and helping them to get where they need to be. So, when the baby is born, they're in a much better place and much more support is established. So, we're actually receiving screens when clients are 5-6 weeks (gestation).*

Several health units highlighted their strategies to tailor HBHC to prioritize the provision of culturally safe care to specific populations within their regions, including Indigenous families, socially isolated clients (including those living in rural communities), Low-German speaking Mennonite communities, refugees, or pregnant women experiencing homelessness. Some health units noted that this level of program tailoring required securing additional funding (e.g., through a local health equity fund). One health unit identified that within their HBHC team, six public health nurses received training to collect socio-demographic data to document, measure and identify health disparities among equity-seeking populations.

Many innovations reflected the development and implementation of standardized nursing approaches to address clients' priority needs. One health unit spoke of concentrated efforts to develop practice guidance to support public health nurses to integrate the NCAST PCI scales consistently and regularly into their home visits. Another health unit championed their work to deliver high-quality PIPE programming. Seven health units chose to describe their localized responses to increasing nurses' skills and resources to identify, assess, and respond to maternal mental health concerns. Multiple health units specifically identified securing resources to train public health nurses to deliver cognitive-behavioural therapy (CBT) to clients experiencing perinatal distress, or depression or anxiety among women who are pregnant or in the first year of the postpartum period. Two health units explained that social workers were brought onto the HBHC team to provide similar mental health supports for clients on waitlists for community-based mental health services. Another health unit described the development and implementation of a postpartum depression pathway, that included guidance for public health nurses to complete a follow-up phone call with all individuals who responded "yes" to question 27 on the universal postpartum screen at 4-6 weeks postpartum and then again at six months.

One health unit spoke at length about their work to develop and implement a theoretically informed model of HBHC, underpinned by change theory, motivational interviewing approaches to facilitate behaviour changes, and the principles of trauma- and violence-informed care. Two health units spoke about the work initiated to provide nurses with the skills to support clients identify goals and then

focus their care on capacity-building and behaviour change; an approach to limit nurses and clients getting "stuck" on addressing the client's "crisis" of the day. Another two health units described the intentional decision to identify and implement standardized assessment tools to guide nursing practice, including use of the Ages and Stages Questionnaire (ASQ) and Ages and Stages Questionnaire – Social Emotional (ASQ-SE) instead of the LookSee (formerly the Nipissing Developmental District Screener). For one health unit, this switch then ensured that public health screening practices were in alignment with the tools used by other community partners. One health unit highlighted how they led the community adoption, implementation, and delivery of a community-wide infant and early mental health pathway. As the respondent explained:

> *One success internally at the health unit is the collective mindset about the importance of infant and early mental health. As an agency we've engaged with the modules from SickKids. I think we motivated and see the value of doing this work within HBHC and realizing the important impact that it can have on outcomes for all families. Then expanding beyond our health unit, we are very fortunate that we have like-minded partners that have also adopted this pathway.*

Innovations in HBHC Team Structure and Dynamics

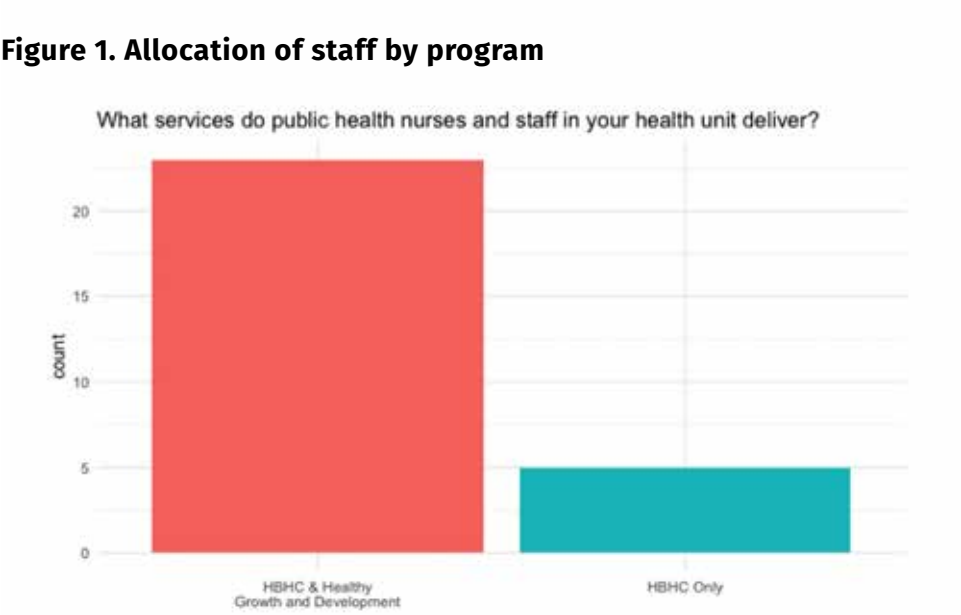
The importance and value of creating cultures of staff wellness where emotional and psychological safety is prioritized was highlighted by several health units. In reflecting on the challenges of working with clients with histories of trauma and complex health and social needs, several respondents spoke about their local commitment to provide opportunities for high quality reflective supervision and reflective practice for HBHC team members. At least four teams discussed the identification and establishment of a nurse team lead/program specialist or supervisor responsible for facilitating regular and consistent reflective supervision and providing opportunities for team members to debrief.

Different models of HBHC team structure and composition were highlighted. Two health units discussed the addition of a social worker to the team to provide additional support to clients, particularly with respect to providing support or psychotherapy to clients with mental health concerns. Several respondents spoke about hiring public health nurses with specialized skills to meet the needs of the community, this included hiring nurses who could provide HBHC services in a language other than English (most notably in French, Arabic, or Low-German). Another health unit indicated that their team included three lactation consultants that provided focused and specialized virtual, telephone and in-home supports for infant feeding. At least one health unit described identifying HBHC professionals who had part of their FTE allocated to leading continuous quality improvement initiatives and developing program policies and procedures.

Finally, four health units spoke to the value of having HBHC public health nurses "cross-trained" to support or work within other public health unit programs, usually Healthy Growth and Development programming (e.g., teaching prenatal classes, providing breastfeeding support or counselling, well-baby clinics, and engagement with EarlyON centres). One manager indicated that when nurses provided both HBHC and Healthy Growth and Development programming, that it had a positive impact on nurses' job satisfaction; another manager commented that when nurses work in more "generalist"

roles, it also provides greater opportunities to meet, connect, and work with families in multiple settings. From the survey, most health units (82%, n=23) reported having staff who deliver both HBHC and Healthy Growth and Development programming, and only five (18%) health units reported having staff that exclusively delivered HBHC programming (Figure 1).

Figure 1. Allocation of staff by program



Given the increasing complexity of families' lives, some health units spoke about the intentional transition to hiring "paraprofessional" rather than "lay" home visitors, explaining that individuals with post-secondary training in early childhood addictions, social services, or addictions counselling were more knowledgeable, confident, and skilled to work with families in the HBHC blended home visiting program. At least one team highlighted the successful establishment of a family home visitor coordinator, who worked to match incoming families with family home visitors and to maintain caseload balance.

Innovations in Identification and Assessment

Several respondents spoke to the strength of the partnerships established between the HBHC program and local hospitals or birthing centres. There was consensus among sites with an HBHC screening liaison hospital nurse that their work served to increase the quality and completion of universal postpartum screens, increase family awareness of the HBHC program, and facilitate client engagement during the postpartum period. One respondent further explained that with the allocation of additional funds (from outside of the HBHC funding envelope), that the role of the hospital screening liaison nurse was expanded to provide breastfeeding support (as a lactation consultant) to families at bedside in hospital. The perceived outcomes were that this HBHC public health nurse became a valuable member of the hospital team, breastfeeding initiation rates improved, and the number and quality of weekend postpartum screens improved.

In two health units, postpartum phone calls are completed – regardless of risk- with all mothers or new caregivers. Typically, the focus of the call is to assess infant feeding and to identify individual's needs for additional supports and services, and referrals as necessary. One of the managers commented that this first-line response to support new mothers/caregivers is critical in their region that covers a large geographic area and where primary care, and mental health services are limited.

Innovations in System Integration and Service Coordination

Respondents from five health units identified that their greatest strengths were grounded in the partnerships and collaborations established with other organizations and service providers across their regions. One health unit noted the implementation of region-wide service coordination guidelines, including the development and utilization of common assessment, referral, and coordination forms.

HBHC Protocol Program Components

HBHC program respondents were asked to select and then prioritize three HBHC program components to discuss in the in-depth interview; and when time allowed, some respondents voluntarily elected to also discuss a fourth HBHC program component. The HBHC program components that were most frequently selected for discussion included: 1) blended home visiting services (selected by 82% of health units); 2) early identification and intervention screening (selected by 79% of health units); and 3) assessment (selected by 53% of health units) (Table 1). The program component selected for discussion, listed by priority (e.g., that participants identified this as a critical program element to discuss with respect to modification and maintenance) are summarized in Table 2.

Table 1. Program Components Selected for Discussion

HBHC PROGRAM COMPONENT	# OF HEALTH UNITS THAT DISCUSSED PROGRAM COMPONENT IN INTERVIEW
Service & System Integration	14
Access to Information and Resources	3
Early Identification and Intervention Screening	27
Assessment	18
Blended Home Visiting Services	28
Service Coordination	9
Referral to/from Services	9

Table 2. HBHC Program Components as Ranked by Health Unit

	1ST CHOICE (N=34)	2ND CHOICE (N=34)	3RD CHOICE (N=32)
Service & System Integration	8	0	4
Access to Information and Resources	0	1	2
Early Identification and Intervention Screening	14	9	4
Assessment	5	8	4
Blended Home Visiting Services	6	10	10
Service Coordination	1	4	3
Referral to/from Services	0	2	5

SERVICE AND SYSTEM INTEGRATION

Respondents from 14 health units elected to speak about service and system integration practices, innovations, and recommendations for program enhancements. The establishment and maintenance of strong, collaborative relationships with community partners is perceived as critical to delivering HBHC with fidelity to the program protocol. In these regions, HBHC team members are recognized community leaders who are invested in strengthening existing partnerships while also rebuilding relationships with organizations that experienced high staff turnover during the pandemic.

> *We're connecting and integrating and building, re-building relationships in the community. It's almost like we're starting back at ground zero again. The players that were there before the pandemic, and before we left, are all changed and people don't know about HBHC services. So, we really are re-building after COVID.*

In describing their work to enhance service and system integration, respondents highlighted that common goals among all community partners were typically to: reduce service duplication, to change the culture of working in individual "silos," coordinate services for individuals accessing support from multiple organizations, and to develop strategies to identify and provide services to equity-seeking populations. In several regions, work at these partnership tables has focused on the development of formalized referral pathways, and use of common documentation or referral forms. It was noted that the use of consistent forms and processes within a region reflects a trauma-informed approach to care (e.g., a client does not have to re-tell their history or 'story' repeatedly).

Securing funding to embed or have an HBHC public health nurse serve as a liaison with other organizations was a common strategy used to increase awareness about HBHC, facilitate the identification and referral of eligible individuals to HBHC or other services, particularly individuals who may experience multiple systemic barriers to accessing and engaging with services. Many respondents spoke about the value and importance of maintaining the hospital screening liaison nurse role, to ensure the high-quality completion of the universal postpartum screen and to introduce and facilitate client contact with HBHC programming in the postpartum period. In this and other liaison roles, public health nurses also provide expert consultation support and guidance on topics including infant and early years mental health, breastfeeding, or health and development of infants. One respondent described securing funding from their local Family and Children Services Agency to serve as a liaison nurse to support social workers engaging with early childhood clients (< 2year):

> *The HBHC public health nurse is there [with Family and Children Services] as a consultant who is trying to build capacity within that agency to understand the needs and development of infants.*

Other strategies used by health units to enhance service and system integration included: 1) working within physical spaces shared with community supports and services; 2) coordinating joint training opportunities (e.g., Circle of Security Program facilitator training) for staff from multiple organizations (which facilitates use of common language, terms, documents, programs); and 3) partnering as active members at community "hubs," "roundtables," or "tables."

As a perceived outcome of HBHC nurses being deployed to other public health programs or HBHC managers coordinating multiple programs during the pandemic, some respondents noted an increase in "internal" service integration across programs. With other public health programs (e.g., sexual health, vaccine-preventable diseases) now looking to "combine" services with HBHC, e.g., engaging HBHC nurses to vaccinate clients. It was highlighted that better internal integration of services facilitates the provision of client-centered care and increases capacity for HBHC nurses to work at their full scope of nursing practice.

Regional Service & System Integration Innovations

Examples of initiatives that have been implemented to strengthen service and system integration are highlighted below.

SmartStartHub: Increased engagement between public health and local Children's Treatment Centres. This partnership has resulted in a clear pathway to facilitate public health nurse referrals of clients with children not meeting their developmental milestones.

KinderStart: Public health nurses working with local school boards to attend JK/SK registration. During this event, information packages about HBHC services are distributed as well as developmental screening of children completed.

Community Youth Hub-Public Health Partnership: System referral integration process established between community service provider and public health. This formalized structural approach has been beneficial as it ensures that services are coordinated for clients accessing services from both agencies.

Hospital-Based Teen Clinic-Public Health Partnership: Provides opportunity to identify clients in prenatal period eligible for HBHC or Homeless At-Risk Prenatal program.

Infant and Early Years Mental Health System Support: In one region, HBHC program identified as the central point of access for families with concerns around infant and early years mental health. Referral pathway, with HBHC as pathway starting point, developed in collaboration with community partners. Referrals are accepted through health unit intake and HBHC screen completed (or community partner facilitates completion of screen). The HBHC public health nurse meets with the family to complete the IDA, ASQ, ASQ-SE, and identify level and type of supports required by family, and then coordinates referral to services, including HBHC home visiting. In this community, the HBHC team is recognized as the community expert in infant development, infant mental health, and parenting support. System integration has capitalized on nurses' unique knowledge and skills and maximized the nurses' capacity to complete assessments and meet family needs.

Safe Transitions Community Committee: A local committee in one region, with HBHC at the table, to develop a strategy to identify families and individuals with risk-factors during pregnancy, so that in the postpartum phase, transition from hospital back to community will be facilitated.

Prenatal-Postpartum Transition: Another health unit described being part of collaboration that includes HBHC, hospital (center for births and NICU), head of pediatrics, local Canadian Mental Health Association Pregnant Parenting and Addictions program, Children's Aid Services, Midwives and First Nations Reserve nurses to create a protocol that identifies and then supports clients at risk so that the transition from hospital to home in the postpartum period is facilitated and clients remain connected to the system.

Public Health-Housing Initiative: A pilot project to support pregnant and parenting individuals with precarious housing to avoid entering shelter system.

Perinatal Mental Health Care: HBHC team working with local tables and partners to rollout the Provincial Council for Maternal and Child Health's "Care Pathway for the Management of Perinatal Mental Health." The pathway has been integrated into a local guideline and protocol for nursing practice.

Recommendations to Strengthen Service and System Integration

1. Develop and implement a province-led marketing campaign to increase awareness of HBHC program.

In the qualitative interviews, multiple respondents identified that during this post-pandemic period that there is an opportunity and significant need to increase awareness across the province about the availability of the HBHC program and the types of supports offered to pregnant individuals and families with young children. It was noted that a consistent, and updated approach to promoting the program may enhance referrals to and engagement with the program, particularly in the prenatal and "early childhood" years.

It was frequently raised that requiring all health units to individually develop these types of resources was a drain on time and resources, and where consistent messaging could be identified, it would be much more efficient for these types of resources to be developed at a provincial level. There is a request for provincial promotional materials to be developed that can then be tailored at the local level.

> *We need to think about HBHC provincially, not just at a local level, but provincially, and normalize this program, and that this is what we do as a province to support individuals with babies, to help support parents with parenting challenges…it would absolutely help at a local level…It would be helpful for community practitioners and families to know that HBHC exists. People don't always know that the 48-hour phone call that you got after you left the hospital was actually an HBHC nurse; they don't understand that they are screened in any way, shape, or form. Marketing this at a provincial level could really make change."*

In summary, respondents described multiple components of such a marketing campaign:

- ***Three identified target audiences:*** 1) pregnant individuals and families with children 0-6 years; 2) referral sources (with a focus on primary care providers, midwives; and hospitals); and 3) community partners providing supports and services to HBHC clients.
- ***Key messages to focus on:*** 1) pathways for prenatal referrals; 2) universal postpartum screening; 3) roles and skills of public health nurses working in HBHC and Nurse-Family Partnership; 4) range of services and supports available to pregnant individuals and families with young children; 5) process for initiating screens for prenatal and early childhood screening; and 6) descriptions of HBHC scope, role and mandate.
- ***Campaign outcomes:*** 1) increased number of referrals to HBHC program in prenatal, postpartum, and early childhood periods; and 2) increased number of pregnant individuals and parents/ caregivers (and their children) accessing and receiving HBHC services.

Cautionary note: Respondents indicated that a marketing campaign to raise awareness about the HBHC program may have the intended effect of increasing the number of universal screens and in-depth assessments completed and referrals to the blended home visiting program, particularly in the prenatal and early childhood periods. At the current time, without an increase in funding to increase staff resources, most health units would not have the capacity to respond to a significant increase in referrals.

2. **MCCSS to develop and support the implementation of system-integrated approach for completion of universal screening tool by referring partners and public health.**

There was a strong recommendation that system integration components of the HBHC protocol could be improved through a mandate from MCCSS requiring the development of memorandums of understanding between hospitals/birthing centers and public health with respect to completion of the universal screening tool in the postpartum period. Additionally, the development of a system-integrated provincial approach for completion of the universal screening tool by referring partners and public health is recommended.

There was also a recommendation to develop and disseminate consistent messaging, at a provincial level, to clarify the roles and responsibilities of public health and hospitals (with birthing centres) with respect to postpartum screening, identification, and provision of services.

3. **Increase HBHC funding to enhance health unit capacity to complete prenatal and early childhood screens.**

At a provincial level, the mandate is for screening, identification, and assessment at prenatal, postpartum, and early childhood stages. Within the current funding model, many respondents indicated that the priority within their health unit has been to focus on universal postpartum screening processes. However, there is a strong recommendation for increased funding and support to facilitate prenatal screening and identification, and as appropriate, referrals into the HBHC home visiting component.

There was also a clear recommendation to add community outreach work conducted by public health nurses to the HBHC guidance document and funding structure so that this essential work, which drives program awareness, referrals, and engagement, is required as part of the HBHC program.

4. **Retire current HCD-ISCIS and develop new HBHC information system that supports service and system integration and coordination**

A pervasive barrier to seamless service and system integration is the absence of a single provincial information system accessible by public health and referring partners that includes an integrated referral system and electronic medical record solution. The challenges associated with data entry and report generation associated with the current Healthy Child Development-Integrated Services for Children Information System (HCD-ISCIS) were highlighted as time-consuming barriers to implementing with fidelity all the core components of the HBHC program as outlined in the HBHC Protocol. Furthermore, a lack of confidence in the quality and consistency of the data, as well as challenges to producing useful reports, limits the usability of the data to improve practice or as part of continuous quality improvement activities.

Among HBHC managers and nurses who were deployed to work in vaccine and case and contact management programs during the pandemic, their experiences working in the COVaxON tool demonstrated to them the possibility and potential of working with an updated information system.

> *I think ISCIS needs an overhaul. It is a struggle with wanting to put everything in ISCIS. It slows down our documentation and it's not user friendly. A provincial system similar to CCM/COVaxON that can be accessed provincially would be great, even just for the ease of clients moving between health units.*

Repeated challenges and concerns associated with data management and ISCIS include:

- Staff engage in duplicate documentation, entering client data into multiple systems including BORN, HCD-ISCIS, and client charts. Data entry has become cumbersome and time-consuming.
- Everything is all over the place instead of being in one area. It would be a lot more seamless if we had everything in all one spot versus all these different areas.
- Outdated technology further contributes to an ineffective use of time e.g., continued use of fobs rather than employment of two-factor authentication to access online databases.
- A lack of regular training opportunities or access to up-to-date training materials for new and returning staff.

ACCESS TO INFORMATION AND RESOURCES

Across the qualitative narratives, working with local program and community partners to develop and provide tailored information, resources, and program information to families within their region was highly valued. However, respondents identified several program components or topic areas, where a provincial approach to the development and dissemination of standardized information would be valued and reduce duplication. Many respondents expressed frustration, with what was perceived as duplication of efforts across all health units, to develop general health information for individuals and families. It was repeatedly identified that this was an inefficient use of time and resources, and that there were concerns then about variability in services offered or information/resources available to clients between health units. It was identified that for some clients, particularly those living in semi-rural areas outside of large urban areas, there is not always an awareness of public health region boundaries, so they increasingly access information about available supports/services from multiple health unit websites. Smaller health units in particular spoke to the challenges they experience in identifying staff time and expertise to develop and revise program promotional materials and program content.

As one respondent summarized:

> *Across every public health unit, we are trying to develop our own content like the prenatal practice guidelines, like the parenting practice guidelines for all parents. Which is, again, time and resource intensive. It also requires time and resources to keep the guidelines current and evidence-based. Having a page, that is created by the province for people to go to and navigate and explore would be great.*

From across the interviews, a summary of the types of resources or program content that respondents recommended be developed and standardized at a provincial level are listed below.

HBHC Program Promotional Materials

- Pamphlet/online resources targeted to referral sources with information on program services, client eligibility, referral pathways (e.g., for primary care providers, physicians, hospitals, midwives)
- Pamphlet/online resources for individuals in prenatal, postpartum, or early childhood periods -to increase awareness of the types of support/services available through HBHC.

Prenatal, Postpartum, Parenting and Healthy Child Growth and Development Information (public-facing)

- Provincially developed website/page where caregivers (including those who do not screen into HBHC) could access up-to-date, evidence-informed information about parenting practices (tailored to developmental stage), care of the newborn (including immediately after discharge), developmental milestones etc.
- Information on parent-child attachment
- Information on parental health
- Information on maternal mental health
- Information on prenatal health
- Information on postpartum health

Regional Innovations

Three health units spoke to their local initiatives to contact and provide information universally to all postpartum families. These health units contact all families, regardless of risk, following discharge from hospital (either via SMS texting or phone call/phone call attempt + letter). One health unit talked about the development of a newborn guide.

Newborn Guide: Hardcopy resource developed in collaboration with local hospital and distributed to all families in the postpartum period (either at time of discharge or from obstetrician, pediatrician, or public health unit staff).

EARLY IDENTIFICATION AND INTERVENTION SCREENING

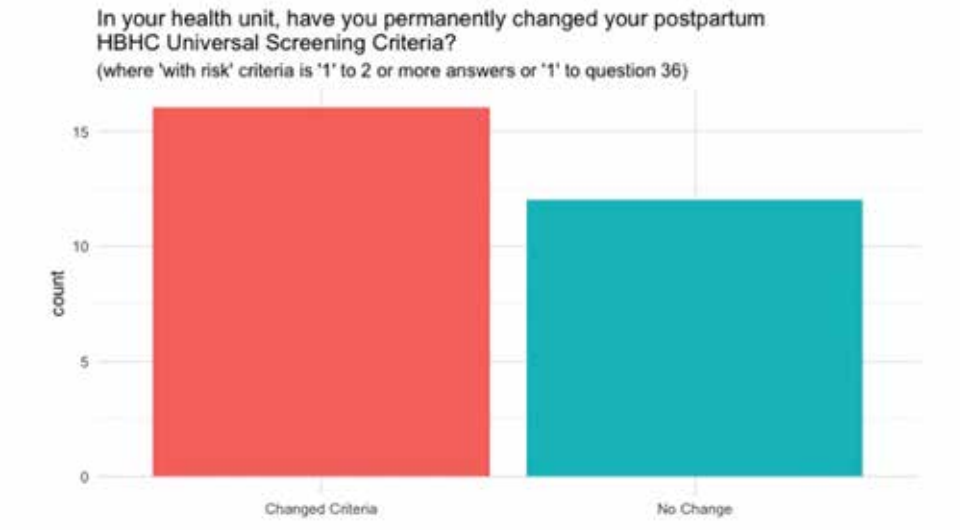
HBHC program managers are in regular contact with their provincial and regional HBHC peers, which leads to an awareness that the HBHC program components are implemented and delivered in different ways across the region. As health units locally adapt the HBHC program, program managers share resources and ideas with each other. However, there is a recognition and awareness that many of their program adaptations, typically driven by a lack of funding to implement the program with fidelity, leaves HBHC program leaders feeling like they are in "breach of protocol." Across most interviews, there was a critical need among respondents for an updated HBHC guidance document and a request for increased standardization with respect to the use (and interpretation) of early identification and intervention screening processes and assessment tools. It was noted that this would facilitate a more consistent approach to program delivery across the province, and that managers would not be in a position where they are required to reach out to other managers to "find out what they are doing."

There was strong consensus across participants that the identification and screening of individuals for entry into the HBHC program as a core componet that needs to be maintained. Even though there is variation across the province with respect to staffing and implementation, there is strong endorsement also for continued utilization of hospital screening liaison nurses and maintaining the universal screening process (and tool) in the postpartum period.

Most respondents expressed confidence in their local procedures and practices to offer and use the HBHC screen in the postpartum period to all individuals who give birth in their region. In this post-pandemic period, there is an identified need for an increased investment in outreach services and campaigns to promote and increase awareness about the postpartum screening process among referral sources, particularly in areas where this is a need to re-establish or strengthen partnerships.

The use of the same universal screen across the province is valued, however some participants described modifying their local "response to screening" to determine risk more accurately. From the survey data, 57% (16 health units) confirmed that they have changed their universal screening criteria (Figure 2).

Figure 2. Number of health units with adapted criteria to determine risk from universal screen in postpartum period.



An assumption underpinning this change was that by increasing the "at-risk" score, this would reduce the number of IDAs needed and that nurses could more accurately identify individuals likely to accept and remain engaged in the HBHC program. Several health units indicated that changes to their response to screening was driven by a lack of staff available to complete the number of IDAs required if an "at-risk" score of 2+ was maintained. Several health units spoke to local modifications implemented, including: 1) increasing "at-risk" score; 2) introducing a "triage tool" to identify higher risk clients; and 3) combining the risk score along with professional nursing judgment to determine which families are offered an IDA. As one respondent explained:

> *Our triage tool has really helped. We've saved a lot of time. If we followed the HBHC guidelines, well, it's very front-loaded on nursing time, and they spent all their time doing IDAs on families that never came into the program.*

There is recognition amongst respondents that across the province there are varied "responses to screening," and that some health units, given a lack of funding, are having to adjust interpretation of risk criteria and thus prioritize which families receive services. Given awareness of differences between how health units implement and deliver the HBHC program, this was another area where respondents desired application of a consistent process across the province and that there is a need for province-led standardization with respect to the response to screening. Additionally, across respondents there were individuals who remained in support of maintaining the current 36-item universal screen, whereas others expressed that a shortened tool might reduce burden on hospital staff and increase completion rates.

Several respondents noted a need for strategies to improve data entry into BORN and additional training for public health and hospital staff with respect to BORN data entry.

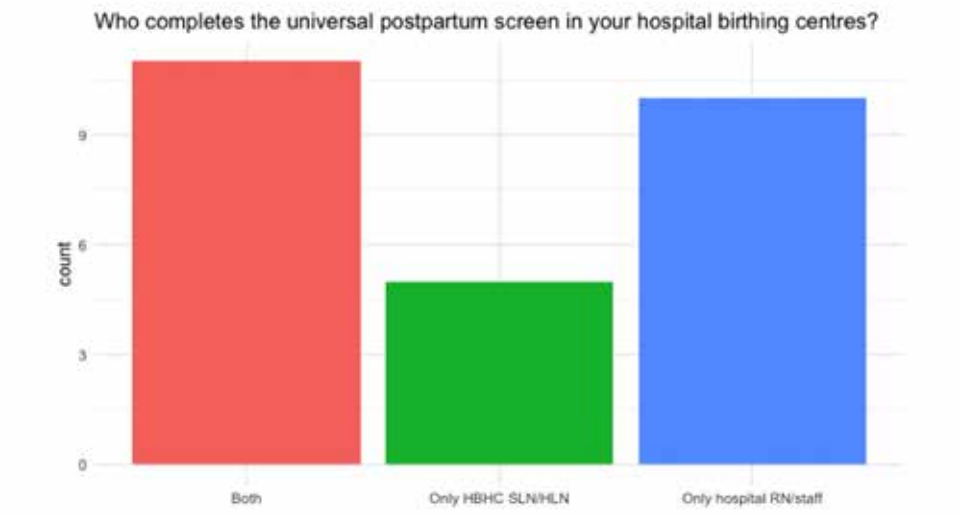
While most respondents indicated support for prenatal and early childhood screening and interest in specifically promoting more prenatal referrals, they identified that efforts to promote, offer, and use the HBHC screen in the prenatal and early childhood periods are limited when health units must prioritize service delivery within the context of a "flatlined" program funding envelope. Many respondents discussed a lack of available resources to support consistent outreach efforts and educational initiatives to support primary care providers, midwives, and obstetricians increase their awareness of the prenatal screen and referral processes. However, health units who offer Nurse-Family Partnership as part of HBHC programming, identified that implementation and delivery of this program has served as a strategy to identify and screen more individuals in the prenatal period, and for those who do not meet the Nurse-Family Partnership program criteria, they are then referred to the HBHC program.

To increase prenatal screening rates, two public health units spoke about local initiatives to complete the screen with individuals who contact the health unit to register for prenatal classes. Another health unit spoke about their success in implementing an online prenatal self-referral process which increased prenatal screens. It was also identified that if there was a provincial approach to prenatal registration or communication from the province to prenatal referral sources (e.g., primary care providers, family physicians, and obstetricians) to promote the program and to describe a common, system-wide approach to prenatal referrals, that this would increase the number of referrals. One respondent stated, "*if MCCSS and the Ministry of Health could just put a little bit of weight behind the prenatal referral process, that would definitely help.*"

Hospital Screening Liaison Nurses

In the survey, 26/28 (93%) of health units reported having at least one hospital screening liaison nurse on the HBHC team. There is variation across regions with respect to who is responsible for completing the universal screen during the postpartum period in hospitals or birthing centers. In health units with a hospital screening liaison nurse, 62% (n=16) report that this nurse attends the hospital five days/week, with only two health units (7.7%) reporting that they provide coverage seven days/week. Four health units (15.4%) report providing coverage for this role on weekends (Figure 3).

Figure 3. Professionals responsible for completing universal postpartum screen



From the survey, information about the roles and responsibilities of hospital screening liaison nurses was collected and is summarized in Table 3.

Table 3. Responsibilities of the hospital screening liaison nurse

RESPONSIBILITIES OF THE HOSPITAL SCREENING LIAISON NURSE	N (HEALTH UNITS)	%
Complete universal postpartum screen	15	53.6
Provide education/training to hospital nursing staff	21	75.0
Coordinate or participate in CQI activities with hospital staff	11	39.3
Provide new parent with information about HBHC program	21	75.0
Initiate In-Depth Assessment Contact (IDAC) at bedside	10	35.7
Provide breastfeeding support	11	39.3
Enter BORN data	15	53.6

While there is variation in the number, roles and responsibilities of hospital screening liaison nurses, most health units identified that integration of this role into the local hospital/birthing centre supported the completion of high-quality screening. As one respondent explained:

> *There is no way that we would be getting the screening rates that we have if we didn't have a screening liaison nurse there [in the hospital]. I think that the Ministry [MCCSS] needs to ensure there's enough investment to ensure that there is at least one screening liaison nurse per hospital.*

In many communities, hospital screening liaison nurses create a bridge for families between the hospital and HBHC services. Several health units described the value in having screening liaison nurses complete the screens with families at the bedside, initiate the IDAC/IDA, and provide families with information about HBHC services and support. As one manager shared:

> *The PHN screening liaison, when they see a client at bedside, they can tell the individual, "I think you could benefit from our program, I'm going to tell you the name of your nurse, here's her phone number, and she going to come see you next Tuesday at 10:00 AM." So, the client is booked before she leaves the hospital, so when she leaves, she knows who the nurse will be coming to see her, she has her name and extension. It's been working really well for us.*

A small number of health units referenced screening liaison nurses working with and strengthening their relationships with local midwifery teams, particularly to increase their awareness and use of the universal screen.

Again, respondents were acutely aware of differences between health units with respect to the number, use, roles, and responsibilities of hospital screening liaison nurses and the lack of consistency between HBHC programs. At least one health unit expressed a limited presence of a hospital screening liaison nurse within their community. They further indicated that with increased funding, it would be their priority to have a screening liaison nurse on-site to complete or collect universal screens, complete breastfeeding consultations, provide other public health messaging, and support caregivers to connect to the HBHC program for the postpartum period.

Recommendations for HBHC program modifications or enhancements

Below is a list of specific HBHC program modifications, specific to early identification and intervention screening, that respondents identified for future consideration and standardization across the province.

Universal Screening Tool

- Adapt to reflect inclusive language and diverse family/caregiver types.
- Consider weighting of risk indicators and revise tool to provide better "predictive" power to identify families most in need of services and supports.
- Require a consistent approach to determining "at-risk" across the province.
- Provincial mandate, requirement, or memorandum of understanding with hospitals, requiring completion of universal screen in postpartum period.
- Recognition, through allocation of increased funding, of the importance of outreach efforts and relationship building to increase number of screens completed and referrals to HBHC.

Screening Liaison Nurse

- Develop standardized training and resources for screening liaison nurses to use (e.g., PowerPoint presentations, key messages, tools).
- Allocate screening liaison nurse funding to match number of hospitals and birth rate in the geographical area.
- Standardized training for hospital staff to complete screens and enter data into BORN accurately and efficiently.

From the survey, 24/26 (92%) health units indicated that there would be interest among their local hospital screening liaison nurses to participate in a provincial community of practice that would include monthly meetings and a virtual space to share resources and strategies.

ASSESSMENT

Overall, promoting a consistent approach to assessment across the province was identified as a critical activity to be both maintained and improved.

It was identified that when specific assessments or interventions are named in the HBHC Guidance document (e.g., NCAST-PCI scales, PIPE, Family Assessment), that this has promoted consistent uptake across the province. In general, there is strong support for maintaining:

- Universal screen process and tool; however, there is awareness among participants that there is variation between HBHC programs on the local responses to screening, and there is an expressed desire for a Ministry recommendation on response to screening.
- NCAST-PCI Scales (Feeding and Teaching), particularly when supported by guidance on how assessment information can inform family home visitor actions and public health nurse interventions.
- Edinburgh Postnatal Depression Scale; however, guidance on how often this scale should be administered is requested.

One respondent commented that:

> *NCAST is critical to maintain because it is probably one of the few standardized evidence-based gold-standard assessment tools that we have to inform our practice for HBHC.*

Response to Families with risk (postpartum) by 48 hours of discharge from birth admission

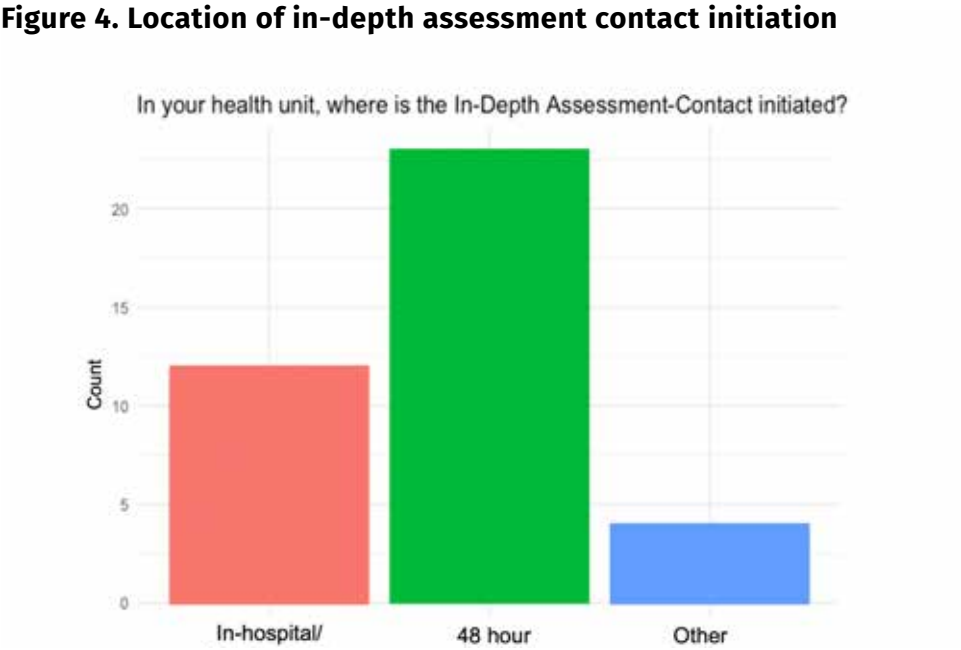
In the qualitative interviews, at least three public health units identified that they have instituted practices to contact all individuals (regardless of risk score as determined by the universal screen) by telephone in the postpartum period.

Overall, there is strong support across respondents for maintaining a public health contact with individuals/families following their discharge from a birth admission. However, some health units noted that it is challenging to meet the benchmark of 48-hours when staffing is reduced. Thus, there was a request to amend the protocol to provide increased flexibility (e.g., respond to all families within 72 hours of being discharged from a birth admission) on the timing for contact.

In-depth assessment

In compliance with the HBHC protocol, all health units conduct an IDA to confirm risk and to guide intervention. The IDA contact may occur in-hospital and during the 48-hour phone call (Figure 4). It was also confirmed that the IDA may be initiated at any point following completion of the universal screen in the prenatal or early identification periods or determined by nursing clinical judgment.

Figure 4. Location of in-depth assessment contact initiation



Following completion of the IDA contact, most health units (79%) confirm that clients are not waitlisted prior to receiving an IDA (Figure 5). Similarly, most health units (93%) do not report maintaining a waitlist between the completion of the IDA and enrollment and initiation in the home visiting component (Figure 6).

Figure 5. Waitlist for IDA

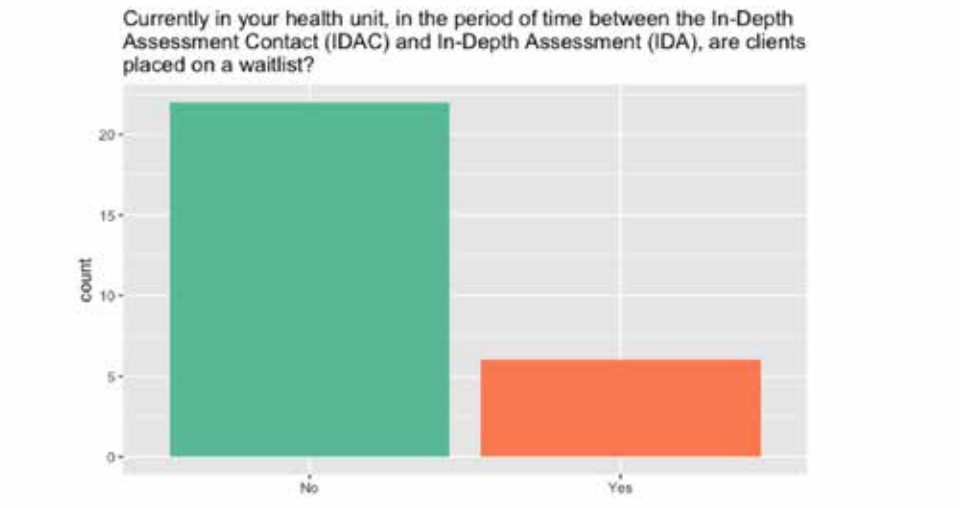
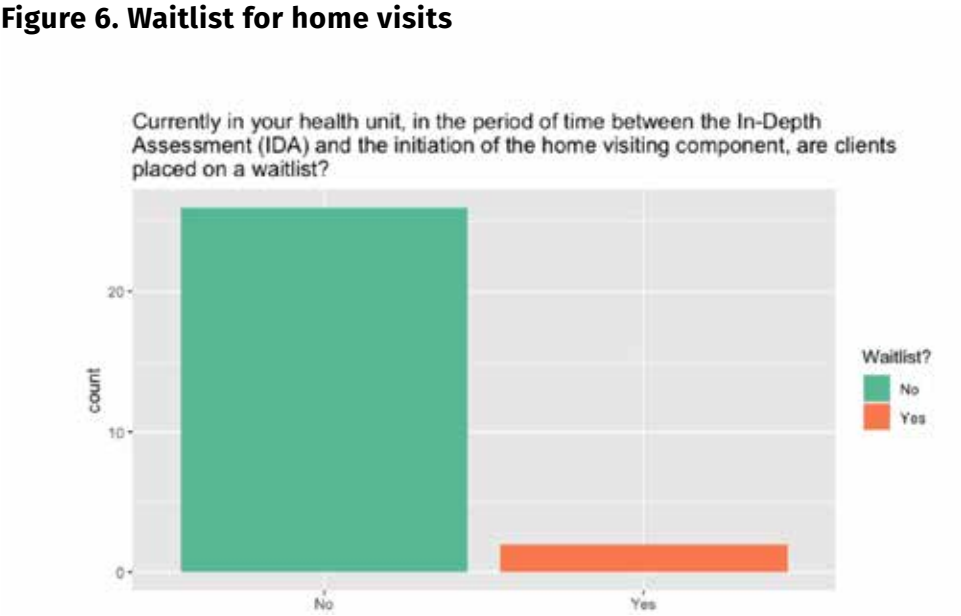


Figure 6. Waitlist for home visits



In the qualitative interviews, respondents identified the need to review, revise, and update the Family Assessment and the IDA process. Recommended changes include:

- Development of separate Family Assessment tools for clients assessed in prenatal, postpartum, or early intervention periods.
- Identification of valid and reliable tools (where available) to administer to inform ratings/score for certain sections (e.g., for Question 3, 13, 14, 19). See Figure 7.
- Guidance around timing/flexibility to complete IDA.
- Re-assess the "dotted line for a mandatory consultation with child protection" as this practice conflicts with strengths-based nursing practice; concerns that when this practice is viewed through an equity, diversity, and inclusion lens, it creates potentially disproportionate risk for reporting Indigenous families or families from other cultural backgrounds. Instead, recommendation is to provide strong training to public health nurses on how to consider and interpret risks and use clinical judgment about when suspected/observed child maltreatment is occurring, and when a mandatory report is required.
- Given the sensitivity of the questions and length of the assessment, review guidance to ensure that timing and completion of IDA is underpinned by principles of trauma- and violence-informed care, including support and guidance for use of a life history timeline approach to completing the Family Assessment.
- Evolve assessment to capture and reflect concepts like health equity, anti-oppression, gender (including gender neutral language), cultural diversity, and trauma- and violence-informed care.
- Guidance on how the tool can be used to identify/categorize risks and strengths, and then used to establish a client-centered plan of care.

Figure 7. Enhanced Measures to Complete the In-Depth Assessment

In the survey, 25% of health units indicated that public health nurses use structured evidenced-informed assessment tools or valid and reliable measures as part of the process to complete the IDA. Examples include:

Intimate partner violence: IPV indicator-based assessment, Routine, Universal, Comprehensive Screening (RUCS) approach

Perinatal mental health: Edinburgh Postnatal Depression Scale, General Anxiety Disorder (GAD-7) Scale, Patient Health Questionnaire-2 (PHQ-2)

Assessment of Readiness for Behaviour Change: 5A approach (ask, assess, advise, agree, assist), Tobacco minimal contact intervention (MCI), Covid vaccine MCI

Substance Use: CAGE Alcohol Questionnaire

Child Growth and Development: Ages & Stages Questionnaire: Social-Emotional, Second Edition (ASQ:SE-2), Ages & Stages Questionnaire, Third Edition (ASQ-3), Feeding assessment

Social supports/Use of community resources: completion of eco-map, Community Life Skills (CLS)

Family functioning: Family Assessment Instrument (FAI)

Post-partum well-being: Initial post-partum contact (IPC)

Participants identified needs for identifying and adopting (provincially) additional assessment tools (accompanied with practice guidance) to inform nursing practice, including (but not limited to):

- Patient Health Questionnaire 2 (PHQ-2)
- Patient Health Questionnaire-9 (PHQ-9)
- General Anxiety Disorder-7 (GAD-7)
- Ages & Stages Questionnaire-3 (ASQ-3); along with recommendations for frequency of assessment
- Assessments for healthy growth and development, including speech and language
- Assessment of Paternal Perinatal Depression
- Suicide Risk Assessment
- Risk Assessment for Femicide (such as administration of the Danger Assessment within the context of intimate partner violence)
- Strategy to identify adverse and positive childhood experiences (ACES/PACES)

One respondent provided this reflection:

> *If HBHC is going to be a provincial program, then the assessments should be the same across Ontario. I know there's innovations and people are doing things differently [across different health units].*

Another HBHC manager shared that the lack of provincial endorsement for use of a specific tool may, in some health units, become a barrier to improving practice. Commenting on her experience to seek support to implement a program enhancement locally using additional assessment tools, approval was not received from senior administration with the rationale being that "it's not part of the HBHC protocol."

ASSESSMENT TO INFORM INTERVENTION

The assessment of clients' and their children's needs, health, and well-being was identified as a critical component of practice. It was confirmed that the collection and interpretation of comprehensive assessment data, which is used to inform the development of the family service plan, is foundational to the program. One respondent spoke positively about their local approach to implementing "family friendly service plans" where the client identifies their priority needs, and HBHC team members develop a service plan that is strengths-based and where the nurse is skilled in motivational interviewing to support the client engage in behaviour change to meet their identified goal. The manager noted that this approach has improved client uptake and engagement in the program, including increased follow-through in meeting their identified goals. As the manager summarized,

> *This is really putting it back on the family for them to self-identify whether they see it as a problem or not, but they may not, and whether they actually want to work on it.*

A significant challenge is being able to document assessment findings and intervention plans within existing IT systems (e.g., ISCIS). It was noted that teams are not able to accurately enter data from assessment tools (e.g., including from the NCAST-PCI Scales, ASQ:SE, NutriSTEP etc.) into ISCIS. Several health units spoke about plans to implement or experiences implementing electronic medical record (EMR) systems to document assessment findings and plans for intervention. From the survey, 60% (n=16) of responding health units confirmed local implementation of an EMR or electronic health record.

Some health units also discussed developing local "logs" or "tracking" forms to document the number and type (e.g., in-person, virtual) of home visits completed, as this information is not able to be accurately entered into ISCIS. However, a common and pervasive concern was "double documenting" or that team members spend a significant amount of time entering data and documenting practice into the local EMR systems, tracking forms, and ISCIS. One respondent, from a health unit that has not implemented a separate EMR system, noted that:

> *We're one of the few health units that doesn't currently utilize a separate [EMR] system. We would be open to exploring it if we had funding for one that was good that we could get into that wouldn't cause us to do a lot of duplicate documentation. But if we're sticking with ISCIS, there's lots of feedback to give to it as well. There are tons of challenges with how things are set up there, we can't upload anything electronically into ISCIS which is a huge barrier; we can't accurately capture the referrals that we make in ISCIS.*

The respondent continues to describe the challenges when health units use ISCIS as their primary documentation system:

> *There's lots of challenges about the system that doesn't allow us to document efficiently. We need to pull a record for a client, for example a PHI or court request, it's a nightmare. It's not built effectively like a solid client record. There are so many improvements that could be made to that system that would help us to have more time to focus on client care and less time struggling with a database.*

There is an emergent need for an efficient and useful information system that supports practice. Multiple respondents also expressed a concern about their limited capacity to run reports from ISCIS that teams can use to assess practice, identify needs, and use data to inform future interventions with clients. A common request is for the development and distribution of an updated ISCIS manual to increase efficiencies and dedicated resources to ensuring that the manual is kept "up to date." As one HBHC manager explained:

> *I had plans to better integrate NCAST and PIPE into our practice. I wanted to monitor that. So how many are we doing? What is the change in a client's scores? Because I think that is an incentive to staff if they see this information in an aggregate report. I also wanted to pull data on individual practitioners to monitor who is getting stronger at embracing these [assessments and interventions] and getting them into practice, and maybe who needed some more support. I don't think those reports are available because of the change the Ministry made to the module. And if it is available, then I need help understanding how to do that. I'm new and I can't even tell you how to pull reports.*

The development or revision of care pathways was identified as an important strategy to organize care and services for families. There were recommendations for the development of standardized care pathways, supported by training and practice guidance, to:

- Identify and respond to maternal/perinatal mental health, including guidance on how to administer, score, and interpret the PHQ-9, GAD-7, and a suicide risk assessment.
- Identify and respond to intimate partner violence.

- Identify and respond to child development needs.
- Identify and address ACES & PACES from both a primary and secondary prevention perspective.

At the local level, several health units spoke about locally arranged initiatives to develop policies and procedures to guide HBHC responses to identify and respond to intimate partner violence, including the provision of training for HBHC staff.

Participants also identified that as new assessment tools are recommended or introduced, then they must be accompanied by opportunities for training in how to administer, score, and interpret findings from the assessment, along with guidance on how assessment findings can inform nursing interventions or family home visitor actions. At least one individual identified that there is interest among public health staff to be able to access the Developmental Screening and Strategies for Support Training that is offered by the Infant and Early Mental Health Promotion program through SickKids.

BLENDED HOME VISITING SERVICES

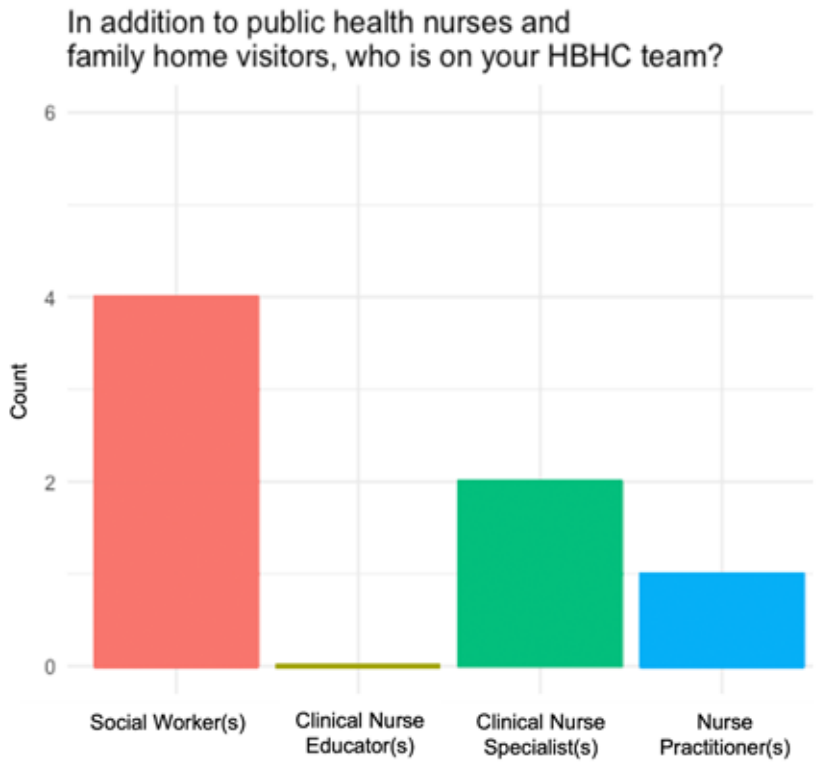
Within the HBHC protocol, it states, "The board of health shall use a blended model of home visiting by public health nurses, family home visitors and other professionals as approved by the ministry." **In the survey, 89% (n=25) health units reported maintaining a blended model of home visiting, with three health units (11%) indicating a transition to providing a nurse-only model of home visitation.** In the qualitative interviews, 14 of the 28 health units who provided comments on the "Blended Home Visiting Services" component of the HBHC protocol endorsed maintaining the use of a blended model of home visiting. At least four health units indicated a need for the HBHC guidance to be reviewed and revised to include current evidence with respect to the effectiveness of lay or paraprofessional home visitors in improving parent or child health outcomes.

Among health units where a decision to offer home visits by public health nurses only has been implemented, there is a request for an amendment to the HBHC protocol to allow flexibility for the delivery of nurse-led models of home visiting, so that these health units do not remain "in contravention" to the protocol. Some health units have implemented, or are considering, under the umbrella of HBHC offering both a blended home visiting program as well as a nurse-only home visitation model, typically tailored to identify and meet the needs of individuals experiencing high levels of social and economic disadvantage.

Woven through many of the qualitative narratives were indications that respondents perceived that the HBHC Guidance (2012) document required updating. Notably, multiple respondents identified needs for expanded practice guidance (e.g., what, when, and how often to complete assessments), and the development of care pathways, updating of family service plans and clear indicators (or measurable outcomes) of program success. A revised HBHC Guidance document would also include information on hybrid (e.g., in-person and virtual) home visiting. In the qualitative interviews, some health units noted their development or adoption of a theoretical and evidence-informed model to guide the delivery of their HBHC program. There were recommendations that the development or adoption of a model to guide program practice across the province would be valuable.

In addition to public health nurses and family home visitors, HBHC teams across the province include a range of other professionals. Four health units report the addition of a social worker role to the team and three health units have advanced practice nursing roles (Figure 8). Other professionals on HBHC teams at different health units include the following: Health Promotion Specialists, Registered Practical Nurses, Registered Dietitians, or Continuous Quality Improvement Officers.

Figure 8. HBHC Team Composition (in addition to public health nurses and family home visitors)



SUPPORT FOR BLENDED HOME VISITING AS PROGRAM COMPONENT TO MAINTAIN

In the interviews, multiple respondents expressed strong support for maintaining the blended model of home visiting. Discussion of successful components of blended home visiting program models included reference to:

- Strong working relationships between public health nurses and family home visitors.
- Value placed on family home visitors' work in providing coaching and role modelling to families.
- Family home visitors have an important role in reinforcing public health nurses' messages and supporting clients to enhance their parenting skills.
- The increased amount of time that family home visitors can spend working with families.
- Blended model provides public health nurses with more time to focus on nursing interventions and assessments.
- Family home visitors have the time and flexibility to link and accompany families to community-based programs.

An overarching theme was that within the HBHC program, there should be flexibility for public health nurses to collaborate with families to develop, implement and regularly assess a home visitation plan that meets the client's identified priorities and needs, and that allows for the use of clinical nursing judgment to determine:

- Type of home visitor(s) required, which may change or be altered during the client's tenure in the program.
- Number of home visits, provided by each "type" of home visitor, that is determined by need, and not a "ratio" approach (which was identified as not a client-centered practice).
- Frequency of home visits.
- Mode (e.g., in-person, telephone, videoconference, SMS messaging) - with in-person encounters being maintained as the "gold standard" and alternate forms of contact negotiated between client and home visitor on a case-by-case basis.
- Location of encounter (if face-to-face).
- Length of time enrolled in HBHC program.

In the interviews, several respondents spoke to the need for HBHC teams to have the flexibility to provide the level, number, and type of home visiting support to match client needs. It was noted that clients with multiple complex and chronic health and social needs might initially be best served through home visits with a public health nurse or social worker, given that the complexity of many

clients' needs are deemed "out of scope" for family home visitors. As one manager indicated, it is critical for an HBHC program to have both nurses and family home visitors, and capacity to "match the right service to the right client."

One respondent described the different home visiting models implemented within their health unit and how having a range of options was critical to meet the needs of diverse client populations:

> *We value both family home visitors and public health nurses. We also have Nurse-Family Partnership. For our high-risk, first-time, young parents, Nurse-Family Partnership is fantastic. They need a more intensive model of home visitation compared to some of our other families. They really benefit from the public health nurse in terms of screening, assessment, health teaching, and intervention on health-focused issues. In contrast, other families benefit more from having a family home visitor. They help them with practicing activities and accessing community-based resources. So, we work hard to ensure we provide the right, supported service to the right family.*

Family Home Visitors

Most health units (88%) directly employ their family home visitors, with only two health units reporting that family home visitors are employees of and sub-contracted from another community organization. One health unit reported both hiring family home visitors internally and sub-contracting some home visitors from another organization.

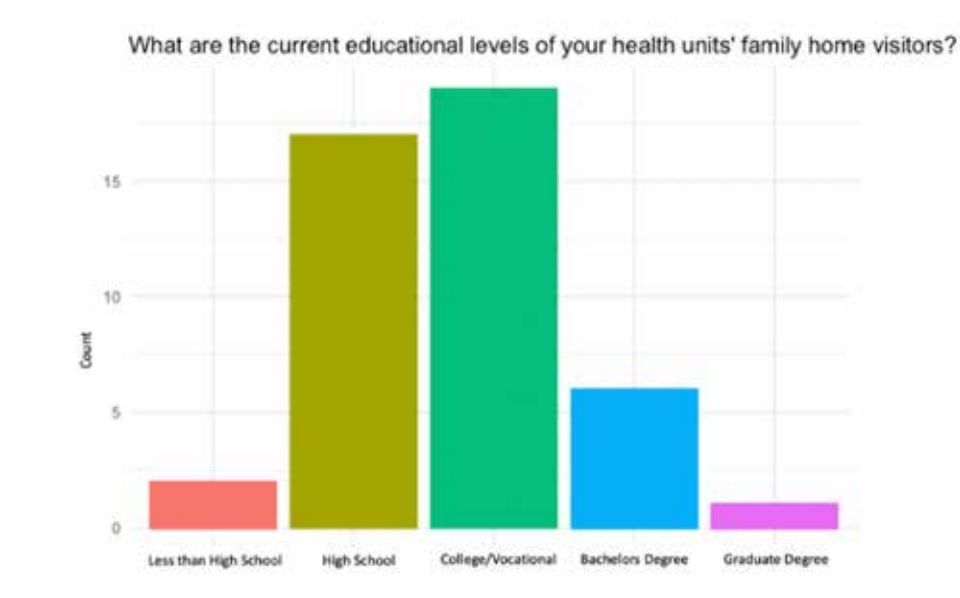
Several managers noted how valuable it has been within their organization to develop and clearly document the distinct roles and responsibilities of public health nurses and family home visitors, including for each home visitor type, description of competencies, scope of practice, and nature of relationship & communications strategies between both. Other health unit respondents noted that there is a need for clarification from the Ministry with respect to family home visitors' required competencies, educational requirements, and skill/knowledge base. Some health units spoke of concerns about the potential for "role scope creep" to occur among family home visitors; again, reinforcing the need for a review of the scope and responsibilities associated with this role.

In the interviews, several respondents reflected that the "role" and work of family home visitors has changed and evolved since the original launch of HBHC, yet this reality is not documented or reflected in the guidance document. This has also created challenges for public health nurses in being able to determine what remains "in" or "out" of the scope of practice for family home visitors. As one respondent shared:

> *When HBHC first rolled out, it was really meant to be a layperson in that role. It really was peer support. Clients weren't as complex, so the family home visitors could provide the parenting support. But now, family home visitors are needing to support families with all of these other issues that families are experiencing. It is not as straightforward as it was when the HBHC program originally launched.*

Given the increasing complexity of clients enrolled in HBHC, several respondents indicated that their current hiring practices for family home visitors reflect that they are hiring individuals who are "paraprofessional" rather than "lay" or "peer" home visitors. In the survey, most health units (92%) reported having a minimum level of education as part of the job requirement, with 65% identifying this as "completion of high school" and 35% indicating they only hire individuals who have completed post-secondary education at the college or vocational school level. The current education levels of family home visitors across the province are summarized in Figure 9.

Figure 9. Current education levels of family home visitors (n=28 health units)



It was discussed that family home visitors with higher levels of education or specific credentials (e.g., early childhood educator) entered the role with the knowledge and skills to develop therapeutic alliances with families and promote healthy parenting. For the health units, there is also an increased sense of accountability when hiring individuals who are part of a regulatory body.

With respect to family home visitor practice, health units also identified what is currently needed to better support individuals in this role.

- Visit-to-visit guidelines to support family home visitors plan activities to address client needs, along with guidance or instructions on how to introduce, discuss and then debrief on the selected topic.
- An online or e-learning orientation program for family home visitors new to the HBHC program.
- Development of a "library" of client-facing activities that family home visitors can use in their work with families.
- Updated guidance on how often a case review should be conducted/per family between a public health nurse and a family home visitor.
- Access to high-quality training and support for the delivery of PIPE curriculum.
- Development of a provincial community of practice for family home visitors.
- Implementation of continuing education opportunities for family home visitors.

ADOPTION OF MODELS OF PUBLIC HEALTH NURSE HOME VISITATION PROGRAMS

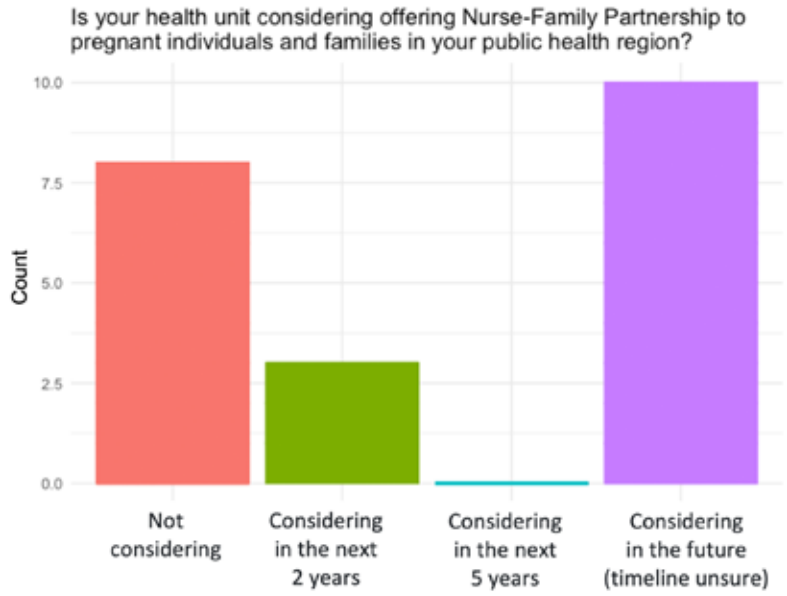
Through both the interviews and the survey, it was identified that there are health units that: 1) maintain a blended model of home visiting, but have some families (based on need), who receive nurse-only visits; 2) no longer employ family home visitors in the HBHC program and provide only home visits by a public health nurse.

During the qualitative interviews, respondents from health units with "nurse-only" home visiting typically discussed that the decision to move away from a blended model of home visiting was typically influenced by the need to address increasingly complex family needs by a health care professional (e.g., public health nurse) with the appropriate level of knowledge and skills. As one respondent reflected:

> *The clients that we are seeing here are showing that we need to have a health care provider who can respond to clients who are [experiencing multiple challenges] and require a lot of assurance and support… We needed our public health nurses because our family home visitors were challenged in terms of providing mental health support for a client with depression, with high anxiety. We have had clients and their partners disclosing suicidal ideation. Family home visitors were not feeling well equipped to deal with that in the moment.*

As of March 2023, seven health units have implemented the evidence-based Nurse-Family Partnership program within their HBHC programming. This is a model of nurse home visiting that starts early in pregnancy (no later than the 28th week gestation) and continues until the child's second birthday. Individuals are eligible for the program if they are young, preparing to parent for the first-time, and experience significant levels of social and economic disadvantage. Other Ontario health units are considering the option to implement Nurse-Family Partnership (see Table 10). Some health units indicated that their future decisions to implement Nurse-Family Partnership will be informed by any additional funding provided by the province.

Table 10. Decision-making with respect to Nurse-Family Partnership implementation



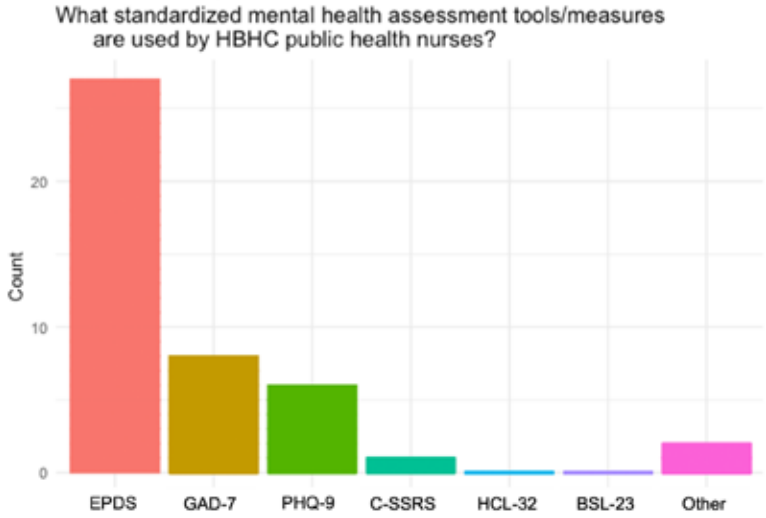
Among respondents from health units where Nurse-Family Partnership had been implemented, several noted how the addition of this program had strengthened overall delivery of the HBHC program. Implementation of Nurse-Family Partnership resulted in new or strengthened prenatal referral pathways, earlier engagement of young pregnant individuals with high levels of risk in home visiting, and increased quality of reflective supervision for all public health nurses on the team.

Assessment and response to perinatal mental health in home visiting

Best practice guidance to support nurses identify, assess, and respond to mental health disorders during the perinatal period continues to be highlighted as a significant practice and professional development need.

In the survey, health units were asked to identify standardized mental health assessment tools or measures that are used by public health nurses to assess clients' mental health concerns in the perinatal period. Almost all health units (96%) report use of the Edinburgh Postnatal Depression Scale to screen individuals for depression in the perinatal period. Fewer than 1/3 of health units utilize additional validated tools to screen for or assess mental health concerns in the perinatal period (Figure 11).

Figure 11. Standardized assessments used by HBHC public health nurses



In the HBHC Guidance Document (2012), it is indicated that the completion of an in-depth assessment for pregnant individuals identified with risk will be informed "broadly by the themes present in the NCAST-Promoting Maternal Mental Health During Pregnancy" resources (p. 61). It is also noted that "training and orientation of HBHC staff will incorporate education directives provided by the ministry" with respect to NCAST Promoting Maternal Mental Health During Pregnancy, Keys to Caregiving and Parent-Child Interaction (PCI)" (p. 73).

In the survey, most health units (86%) confirmed that HBHC public health nurses use the Promoting Maternal Mental Health During Pregnancy resources. Several different strategies for training nurses to use these resources are currently used (Figure 12). In the open text section of the survey, multiple health units identified using the online Best Start Modules (Health Nexus) to orient nurses to these resources.

Figure 12. Approaches to training on Promoting Maternal Mental Health During Pregnancy

The Parent-Child Relationship Programs at the Barnard Center provide the Promoting Maternal Mental Health During Pregnancy resources, which are available for health units to purchase for public health nurses on the HBHC teams. Program materials include a theory and practice book, an interventions book with USB flash drive, and a pocket assessment guide. Despite a high number of health units reporting use of this program, there is considerable variation across health units as to which of the program resources are provided to nurses (Figure 13).

Figure 13. Promoting Maternal Mental Health During Pregnancy Program Resources Provided by Health Unit to Nurses

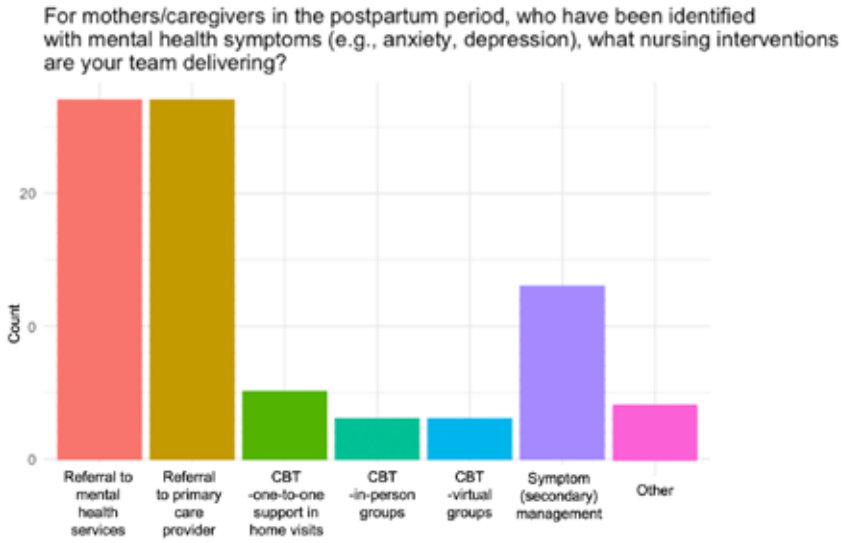
In the current HBHC model, services delivered by HBHC nurses have primarily focused on the assessment of client needs and then referral to other supports and services. Increasingly, given waitlists or a lack of services in the community, HBHC nurses are "holding clients" until referral and providing nursing interventions to respond to clients' mental health symptoms. As one manager explained:

> *We are looking to provide cognitive behavioural therapy training for our nurses. What needs to happen, what needs to be addressed by MCCSS is to [provide] the supportive tools, resources, and skill development for nurses since it's within their scope of nursing practice. That must happen, it has to evolve. If we want to be able to effectively support clients for the 12 months recommended by HBHC, then we need to have the tools to support families to do that. We need to evolve the HBHC program to include therapeutic interventions, as opposed to just assessment and education.*

Several health units identified locally driven initiatives to improve practice responses for the identification and response to perinatal mental health concerns. These initiatives have included adoption and adaption of the Provincial Council for Maternal and Child Health "Care Pathway for the Management of Perinatal Mental Health," comprehensive training to deliver cognitive behavioural therapy (CBT), and the adoption of additional mental health assessment tools (e.g., PHQ-2, PHQ-7). While a consistent nursing response following screening for perinatal mental health concerns is to refer the client to mental health services or to a primary care provider (Figure 14), increasingly health units are investing in the advancement of nursing skills to intervene directly with clients in the postpartum period. To date, 43% (12 of 28 health units) indicated that HBHC public health nurses have completed or are currently completing training to deliver CBT. Another 43% of health units expressed interest in having their HBHC public health nurses trained to deliver CBT, however, have not yet secured funding. Of note, approximately 11% of health units have engaged public health nurses to offer either one-to-one CBT or group-based CBT to eligible clients.

It is important to note that access to this type of advanced training is another area of the program where health units are acutely aware of the differences between local HBHC programs; with several health units expressing an interest in providing CBT or advanced mental health training for their nurses but identifying a lack of funding to do so.

Figure 14. Nursing interventions for mental health symptoms during the postpartum period



Several respondents, when speaking to their local mental health innovations, confirmed though that they are looking to the Ministry for additional guidance with respect to addressing perinatal mental health. It was also noted that additional guidance, and even "top-down policies" are required to support HBHC professionals increase their knowledge, skills, and confidence in how to utilize assessment data to inform subsequent interventions. Specific examples given were related to administration, interpretation and response to suicide risk assessments and risk assessments (within the context of intimate partner violence). Interest was expressed in supporting a community of practice where individuals can discuss and learn from other health unit partners regarding the adoption and utilization of new care pathways, including assessment tools.

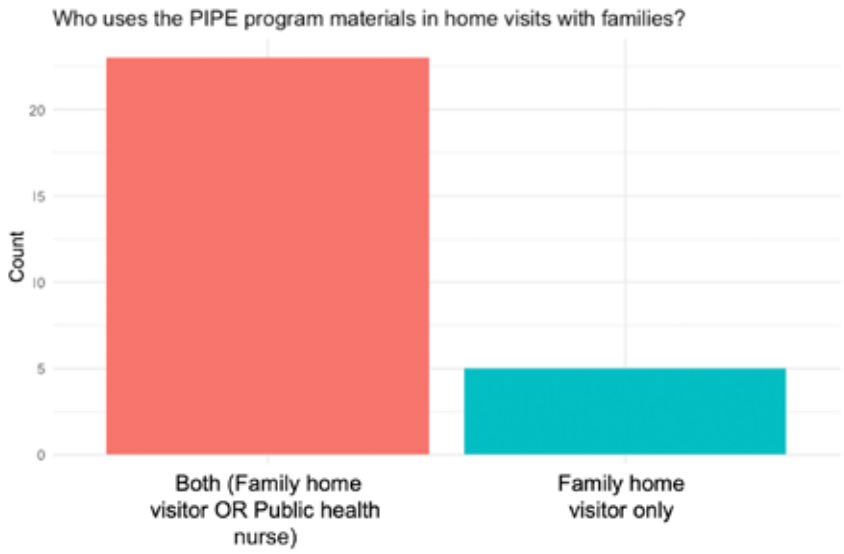
HEALTHY ATTACHMENT AND POSITIVE PARENTING INTERVENTIONS

Healthy attachment and positive parenting are two identified goals of the blended home visiting program. The HBHC Guidance (2012) identifies that these goals (and others) are achieved using assessments and interventions, including the NCAST Parent-Child Interaction (PCI) Feeding and Teaching Scales and Partners in Parenting Education (PIPE) Curriculum.

In the qualitative interviews, respondents from many health units strongly endorsed maintaining the use of the NCAST PCI Scales to identify client goals and inform nurse and family home visitor interventions. One health unit spoke about local work to develop guidance on "how, why, and when" these scales are used and that they host annual intervention interpretation sessions for public health nurses and family home visitors to develop knowledge about appropriate interventions to implement to address needs identified following completion of the feeding and teaching scales in practice.

With respect to PIPE, 89% (25/28) of health units indicated in their survey response that PIPE activities are used in home visits with families. In just over half of the health units who responded (52%) family home visitors introduce and use PIPE materials with families; and in 1/3 of health units, both public health nurses and family home visitors are trained to use PIPE with families (Figure 15).

Figure 15. Use of PIPE materials by home visitor role



The PIPE program was developed by the "How to Read Your Baby" organization. This organization requires that new PIPE users complete PIPE comprehensive training, taught by certified PIPE Trainers, before using the four-step process of the PIPE Instructional Model with parents or caregivers. The "How to Read Your Baby" organization offers both on-site and e-learning options for PIPE training.

In Ontario, only two health units report providing funding for staff to attend training through the "How to Read Your Baby" organization. A respondent from one of these health units noted that, "*the formal training is thorough and helped orient [staff] to the program. Without it, we would have inconsistent implementation.*" At least one respondent indicated not being aware that formal training for PIPE was even available.

Another two health units report developing their own PIPE training. Most health units (60%) however indicate that the PIPE training they provide internally consists mostly of requiring new staff to engage in self-study by reviewing and reading existing program materials or policies and procedures. This may also include informal "peer-to-peer" coaching on how to use the materials. It was noted that the PIPE training developed by Best Start remains a core part of HBHC orientation at many health units. Two health units reported that no training on how to use PIPE materials in home visits is provided.

The need for high-quality, consistent, and comprehensive training for both public health nurses and family home visitors on how to apply PIPE in home visits with families was confirmed across both the qualitative interview and quantitative survey data. Respondents from both data sources indicated that securing funding to send staff for PIPE training through "How to Read Your Baby" is a persistent barrier and that provincial support is required to train HBHC staff on PIPE. It was noted that provincially supported training for PIPE has not been offered since 2012.

Some respondents noted the value of using PIPE topics/units to address caregiver or child needs identified through the NCAST- Parent-Child Interaction Scales. Concerns however were also raised about the continued recommendation for HBHC teams to use PIPE. Some respondents noted that PIPE materials have not been reviewed or updated in the last decade, and the materials do not reflect diversity with respect to language, practice, or images used. It was also identified that without the training to use PIPE, there is a perception that the PIPE program is not being implemented with fidelity, with one respondent commenting, "*family home visitors use the resources, but they don't use the program comprehensively.*"

In the survey, health units also provided information on other formal parenting programs that HBHC public health nurses (Figure 16) and family home visitors (Figure 17) are trained to provide to families in their regions.

Figure 16. Parenting Programs provided by HBHC public health nurses

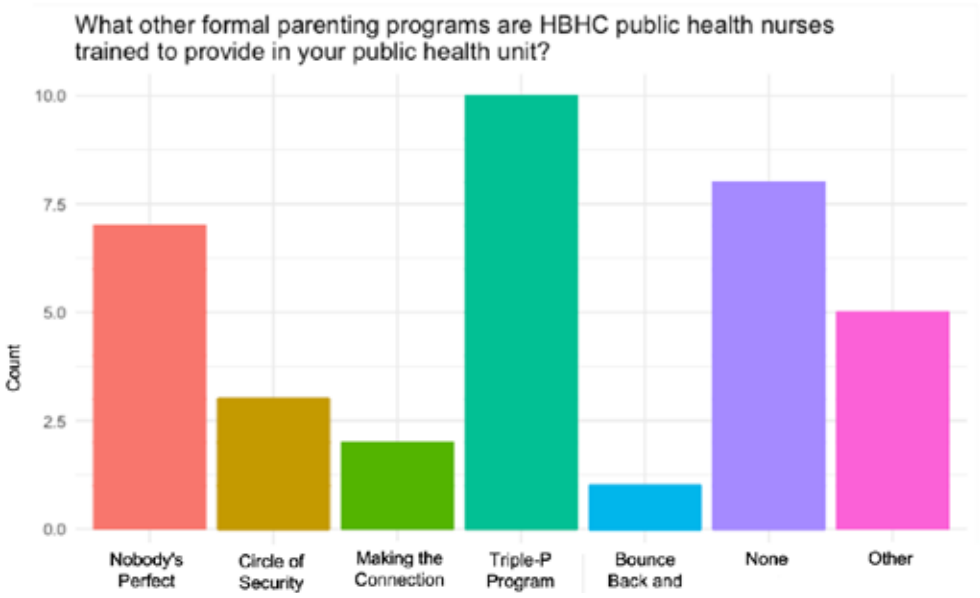
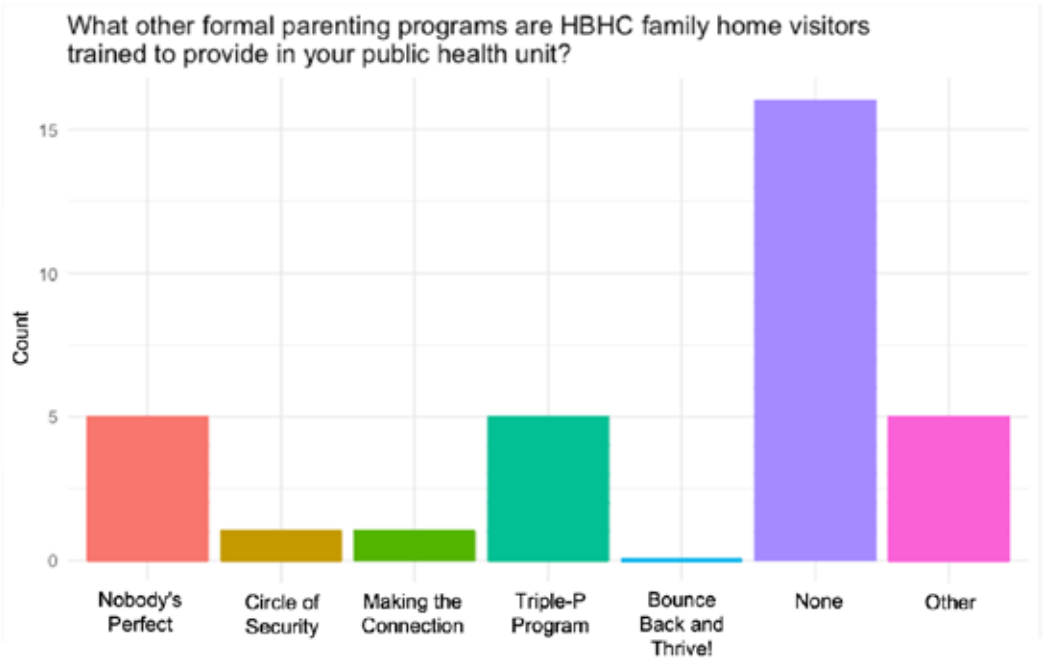


Figure 17. Parenting programs provided by family home visitors



REFLECTIVE SUPERVISION

The provision of high-quality reflective supervision to HBHC public health nurses and family home visitors was a topic that was commonly raised by respondents in the qualitative interviews. A small number of health units spoke to their specific and locally developed innovations to provide reflective supervision to HBHC team members. In these health units, reflective supervision was noted as an important strategy to promote staff well-being, enhance reflective practice, and to provide a space for discussion about the work of providing care to families with chronic and complex needs. One respondent explained:

> *Reflective supervision is a key component to supporting staff. The family home visitors report to the Manager who provides them with reflective supervision. The public health nurses report to the supervisor who provides them with reflective supervision. As well as 1:1 supervision, we do group reflective practice, with the family home visitors and public health nurses each meeting on their own and case reflection every two months.*

From the survey, 60% of health units confirmed that reflective supervision is an intentional practice and core component of their local HBHC program. While it was common for the HBHC manager to provide reflective supervision, HBHC supervisors and/or team leads were also responsible for guiding this practice (Figure 18). In the health units where reflective supervision is provided, 50% of respondents indicated that it is scheduled monthly and "as needed or requested" with the public health nurse (Figure 19). It was also shared that in the Nurse-Family Partnership program, that a program requirement is to provide weekly one-to-one reflective supervision sessions with each nurse.

Figure 18. HBHC team member responsible for providing reflective supervision

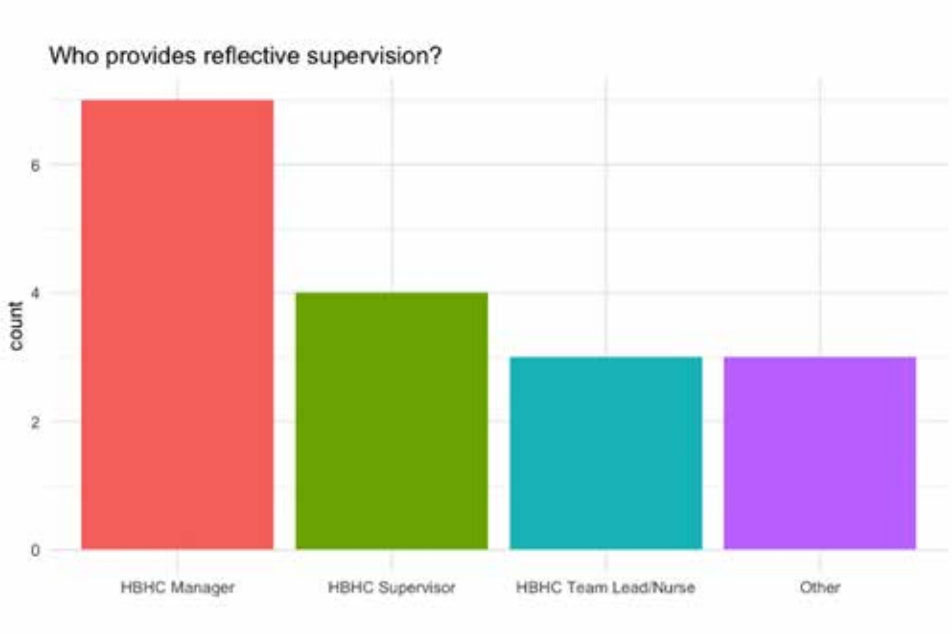
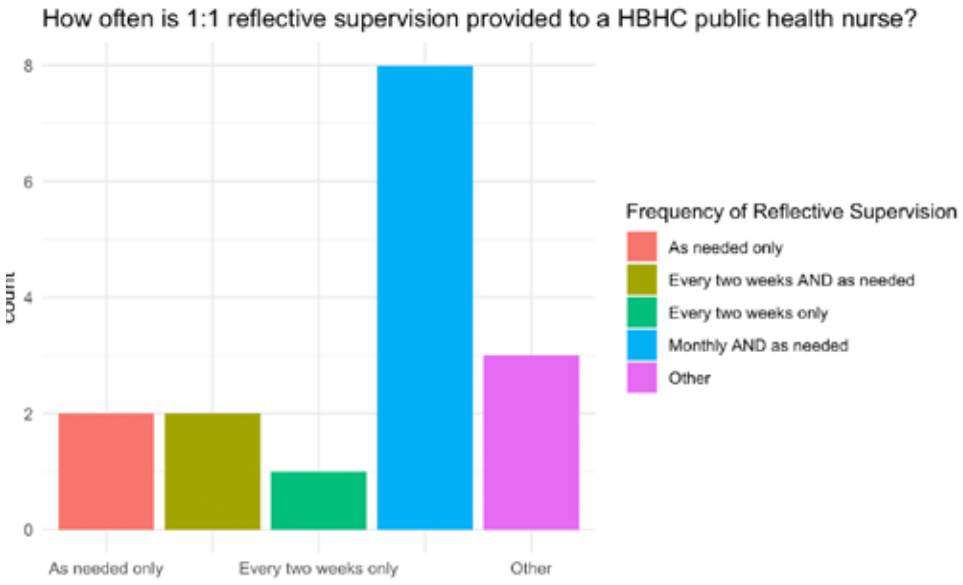


Figure 19. Frequency of reflective supervision



While multiple respondents indicated not knowing if they were following a specific model of reflective supervision, other health units listed a range of reflective supervision models or approaches used to guide this practice including:

- Gibbs Reflective Model
- Alliance for the Advancement of Infant Mental Health
- Best Practice for Reflective Supervision in Home Visiting
- PHN-PREP reflective supervision checklists
- Centers for Disease Control and Prevention community of practice guide and formal debriefing theory
- Previous training provided through MCYS for HBHC Managers
- Zero to Three

Health units also identified barriers to providing reflective supervision to public health nurses on the HBHC team, with a lack of supervisor time to provide 1:1 scheduled sessions being the most common barrier (Table 4).

Table 4. Barriers to providing reflective supervision

BARRIER	N (HEALTH UNITS)	%
Supervisor - lack of knowledge and skills on how to provide reflective supervision	6	21.4
Supervisor- lack of time to provide 1:1 scheduled (e.g., weekly) supervision to public health nurses	8	28.6
Supervisor - lack of confidence in providing reflective supervision	4	14.3
HBHC Program - reflective supervision not identified as a required program element	5	17.9
Other: 1: We provide 1:1 monthly clinical supervision where caseload and other issues are discussed with the supervisor and we also offer group reflective practice monthly run by staff for staff with 0 management involved. 2: New to position with a large staff. Developing relationships with staff. Have recently purchased reflective supervision resources (from Zero to Three) & reviewing Gibb model to learn and implement a reflective practice model of supervision with my staff.	2	7.1

Finally, it was identified that leaders require comprehensive and high-quality training in reflective supervision. One respondent explained that:

> *Reflective supervision competency development is a journey that is enhanced by standardized and structured support and materials.*

SERVICE COORDINATION AND REFERRAL TO COMMUNITY SERVICES

In the qualitative interviews, nine health units chose to discuss their service coordination successes as well as recommendations for enhancing this HBHC program component. Nine health units also elected to discuss the referral to community services component. The topics and recommendations for both components were similar and interconnected. Therefore, the synthesis of data from these two domains are presented together in this section.

There was consensus that the establishment of partnerships between HBHC and community partners is central to service coordination. One health unit described the successful local development of a formal service coordination model that is strengths-based, client-centred and based on the concept of "ONE family, ONE plan." Several respondents identified that the implementation of local processes to ensure that families have one-entry point to access multiple and diverse community services has been accomplished in their communities.

Several respondents noted that relationships and partnerships changed over the course of the pandemic and efforts to (re)-establish these were ongoing. Health units are focused on both connecting with agencies to facilitate referrals to HBHC, as well as strengthening collaborations to facilitate HBHC nurses' referrals to other community partners. Increasingly loss of services or long wait lists among community-based partners was identified as a pervasive challenge for public health nurses seeking to connect HBHC clients to needed services and supports. Increasingly, HBHC teams identified servicing families who lack a primary care provider.

To address the loss of community services, some health units spoke about the work undertaken by HBHC public health nurses, including working with internal immunization teams to coordinate immunizations for infants, children, and parents/caregivers on their caseload. The lack of mental health services to refer to, along with increasing need for mental health supports among HBHC clients, has been a driving factor for many health units to prioritize training public health nurses to provide CBT, rather than have clients sit on wait lists. Other respondents provided recommendations for

adding a nurse practitioner to their HBHC team, to address needs of clients without a primary care provider (e.g., prescribing contraceptives) or reinstating lactation consultants as part of HBHC.

These challenges impact public health nurses' abilities to deliver HBHC and raises questions about caseload. One health unit noted that with increased public health nurse time allocated to addressing the challenges of service coordination, less time is available to address other program goals with clients, including parenting, healthy attachment, or child growth and development. This respondent noted that the health unit is considering adding a social worker to the team to provide support for service coordination.

Additional recommendations for evolving HBHC program guidance with respect to service coordination include:

- Develop consistent processes for transferring HBHC clients between health units.
- Provide clarification with respect to HBHC program indicators for service coordination.
- Develop a "real-time" dashboard on HBHC nurse activities (including service coordination).

Fidelity to HBHC Protocol

At the end of each qualitative interview, respondents were asked to reflect on and then highlight the practices or activities, as outlined in the HBHC Protocol, that they are unable to implement with fidelity given their current funding envelope. As one respondent explained:

> *It's been at 0% budget increase for years and years and years. Because that has continued to happen, with cost-of-living increases and collective bargaining increases with the unions that means attrition of staff, there's no way around it. We have gone from a program that at one point had over 20 FTE of public health nurses and we are now down to 14 FTE. Even when we have natural attrition, we are unable to replace those positions because there isn't the funding to do it.*

The lack of HBHC funding has created a context where managers express challenges in maintaining a stable program that is able to provide a range of services and supports to meet the needs of all families in their local communities. Increasingly, many health units are having to prioritize service delivery to meet the needs of clients at "highest risk" identified through the universal screen administered in the postpartum period.

Respondents from several health units spoke to accessing external funds (e.g., from Healthy Growth and Development, the Canada Prenatal Nutrition Program) to augment their local budget to deliver the HBHC program.

Participants' responses are organized by HBHC program component.

EARLY IDENTIFICATION AND INTERVENTION SCREENING

- Unable to fund screening hospital liaison nurses for all local hospitals.
- Stopped administration of 18-month screen.
- Significant reduction (along with no efforts to enhance) in administration of universal screen in prenatal and early childhood periods.
- Unable to meet benchmarks for prenatal screens – often associated with lack of funds and resources to develop referral pathways and to engage in outreach efforts to promote referrals to program.
- Unable to meet benchmarks for early childhood screens.

- Unable to complete postpartum contact within 48 hours – associated with reduced staff capacity to contact individuals within time frame; increased number of challenges with individuals not answering phone calls; not receiving completed screens from hospitals in a timely manner.

- Extended wait periods for initiation and completion of IDA (one health unit reports wait time of four weeks).

ASSESSMENT

- Unable to implement NCAST PCI scales with fidelity, given lack of funding to purchase required materials (i.e., Teaching Administration Kit for each nurse).

- Limited time (particularly during the pandemic) to certify or re-certify all public health nurses to administer the PCI scales.

- Unable to track completion of PCI scales in HCD-ISCIS.

BLENDED HOME VISITING SERVICES

- Unable to deliver blended home visiting program – transitioned to nurse-only model and prioritized services to meet needs of clients at highest risk.

- Unable to accommodate need for in-person home visits/encounters due to lack of funding to cover mileage costs.

- Lack funding to hire new family home visitors; family home visitors who left the program during the program have not been replaced.

- Lack of capacity to offer IDA or home visiting services to all families that screen with risk (or 2+).

- Unable to provide clinical or reflective supervision because of limited time, lack of skill development/training, high supervisor caseloads of nurses and/or family home visitors or managing multiple responsibilities across programs.

- Limited capacity for family home visitors and public health nurses to carry reasonable caseloads given the increased complexity faced by clients.

- Unable to replace vacant positions due to budget restraints.

- Creation of waitlist to address high demand and low capacity for home visiting services.

REFERRAL TO/FROM COMMUNITY SERVICES

- Limited to no capacity to engage in outreach efforts to develop, enhance or promote referral pathways either to or from HBHC.
- Limited capacity to renew or re-establish partnerships with family physicians or midwives.

RESEARCH AND EVALUATION

- Unable to engage in any research initiatives.
- Inequitable access to funding by different health units affects program capacity to do research, programming, intervention, staff orientation and training.

Participants were also asked to identify what innovations or practices they would like to implement within their HBHC program but are currently limited by a lack of funding. Below is a summary of their responses.

- To be able to offer a range of services tailored to meet the unique needs of all populations of families, including specific programs to meet the needs of families at higher risk (e.g., implementation of Nurse-Family Partnership program).
- Greater focus on professional development and training to meet the complex needs of pregnant individuals and families serviced in the program, including mental health needs and parenting concerns (e.g., CBT training for public health nurses, Developmental Screening and Strategies for Support Training offered through SickKids, training for staff to deliver evidence-based parenting programs like Triple P or Circle of Security, PIPE training for staff).
- Public health nurse caseload numbers that would allow nurses time to develop therapeutic relationships with clients, and to increase frequency of home visits to assess and then intervene to address clients' health and social needs.
- Resources to support managers to focus on supporting their staff and promoting staff well-being, including training and promotion for use of reflective supervision.
- Greater marketing/promotion of HBHC program to support increases in number of prenatal referrals and engagement of pregnant individuals in home visiting starting in the prenatal period. Incentives for: 1) physicians to complete universal screen in prenatal, postpartum, and early childhood periods; 2) families who enroll.
- Transfer of breastfeeding and breastfeeding support from Healthy Growth and Development to HBHC.
- Reinstatement of hospital screening liaison nurse or increase role of hospital screening liaison nurse in hospital to collect screens, complete breastfeeding consults, provide public health messaging, and connect with mothers to increase their awareness of public health supports available upon discharge.

- Protected time and resources to formally support public health nurses engaging in community outreach efforts to promote the program, strengthen partnerships with community organizations, provide education with respect to completing universal screen, and establishing referral processes.

- Funding for the purchase of program materials and supplies (e.g., NCAST “toys” for use with PCI scales, incentives (vouchers, program engagement “hooks”) for clients), improved technology for staff (cell phones) and devices for clients to reduce digital divide, and interpretation services.

- Funding to enhance quality of home visiting services, including supports for home visitors (e.g., remove local cap to family home visitors’ hours of work, hire social worker, psychologist, or nurse practitioner to HBHC team).

- Provide or increase frequency of high quality clinical and reflective supervision.

- Need for more advanced data collection system that integrates with other EMRs/EHRs.

Professional Development Needs

To conclude, in the qualitative interviews, respondents from each health unit were asked to list the top three training and professional development needs for HBHC managers/supervisors (Table 5), public health nurses (Table 6), hospital screening liaison nurses (Table 7), family home visitors (Table 8) and administrative staff (Table 9). Recommendations were provided to establish and maintain communities of practice (with regular opportunities to meet as well as a virtual space to share resources) for HBHC managers/supervisors, family home visitors and screening liaison nurses. The need to first develop standardized home visiting public health nurse competencies was also identified.

Table 5. Professional development priorities: HBHC managers/supervisors

MOST FREQUENTLY MENTIONED TOPICS	OTHER TOPICS
Reflective supervision • Reflective supervision model • Skill development for initiating, providing, and debriefing • Strategies to promote staff well-being including addressing burnout, compassion fatigue, vicarious trauma, negotiating boundaries with clients Trauma- and violence-informed care Change management Talent management Leadership training Development of coaching skills	Equity, diversity, and inclusion/ inclusivity training Budget management Clinical supervision • Evaluation tool/checklist to guide manager observation of home visits Program performance measures Home visit safety guidelines HBHC protocol review Infant and early years mental health training Motivational interviewing HBHC program delivery training – including review of PIPE and NCAST

Table 6. Professional development priorities: HBHC public health nurses

MOST FREQUENTLY MENTIONED TOPICS	OTHER TOPICS
Mental health • Skill development in therapeutic interventions that can be used while clients are on waitlists for mental health services, including CBT and interpersonal psychotherapy • Maternal mental health • Infant mental health Application of trauma- and violence-informed care practices Standardized and sustained availability of training (for new and existing staff) on: • PIPE • NCAST program resources • Evidence-based parenting programs including Circle of Security, Triple P Motivational interviewing	Standardized HBHC orientation program, including: • ISCIS training • Review of program guidance on timing, frequency and best practices associated with completion of assessments Ages & Stages Questionnaire (administration, scoring, interpretation, link to intervention) Sexual health; updated information on contraceptives Cultural sensitivity training Attachment, including neural pathways, serve & return attachment Therapeutic relationships/therapeutic communication Communication between nurses and family home visitors Engagement of families in home visiting Identification and response to substance use Autism training Strategies for navigating compassion fatigue and vicarious trauma Equity, diversity, and inclusion/inclusivity training Identification and response to intimate partner violence Perinatal bereavement Infant sleep training (e.g., Parent-Child Relationship Programs' "Beginning Rhythms") Speech and language

Table 7. Professional development priorities: Hospital screening liaison nurses

MOST FREQUENTLY MENTIONED TOPICS	OTHER TOPICS
Standardized BORN training Development of collaborative relationships/ partnerships Communication Adult-learning principles • teaching/health education skills Trauma- and violence-informed care	Breastfeeding Change management Identification and response to mental health concerns Vicarious trauma Orientation to Children's Aid Services Identification and response to intimate partner violence Health promotion and marketing

Table 8. Professional development priorities: Family home visitors

MOST FREQUENTLY MENTIONED TOPICS	OTHER TOPICS
Parenting and healthy attachment • Updated PIPE training, including guidance for program delivery (or training for a replacement program) Healthy attachment Growth and development milestones Therapeutic relationships • Establishing boundaries • Engaging families • Discharge and "saying good-bye" Trauma- and violence-informed care	Mental health • Promoting Maternal Mental Health During Pregnancy • Mental Health First Aid Staff wellness • Vicarious trauma • Self-care • Reflective practice Bereavement training Goal oriented home visiting ISCIS training Motivational interviewing Ages & Stages Questionnaire Developmental service plans High-risk home visiting (e.g., Invest in Kids training) Autism Activity development strategies (e.g., create library of client-facing activities) Bridges out of Poverty

Table 9. Professional development priorities: Administrative staff

MOST FREQUENTLY MENTIONED TOPICS
ISCIS and IRSS training and guidelines
DATAMART training
BORN training
Communication skills grounded in principles of trauma- and violence-informed care
Training to support CQI initiatives

Discussion

Across all health units, there is confirmation that through the delivery of HBHC that public health has a critical role in providing health promotion supports to improve a range of health and social outcomes among pregnant individuals and families with young children. At the health unit level, program stakeholders are strongly committed to the principle of delivering an HBHC program in fidelity to the program principles, components, and activities outlined in the HBHC Protocol (2018) and HBHC Guidance (2012) documents. However, efforts to improve or meet program benchmarks and service delivery targets have been significantly hampered and are perceived to be directly associated with the consistent underfunding of the program over the last decade. Furthermore, this lack of funding to support program delivery (particularly related to the public health nurse and family home visitor staffing levels) has led to local adaptations which are fundamentally changing the goals and objectives of the program. In many communities, the program is moving from a "medium" risk program to a "high" risk program and the different populations that the program can serve is increasingly shrinking.

There are many program strengths and local innovations to acknowledge as HBHC teams continue to reinstate and resume full-service delivery during this (post) pandemic period. Notably, HBHC team leaders are skilled in establishing and maintain strong, collaborative relationships with community partners. In several regions they are invested in strengthening existing partnerships and collaborations, while also re-establishing relationships with organizations that experienced staff turnover during the pandemic. HBHC program managers and staff are leaders at community tables developing, implementing innovative approaches to service and system integration, and promoting seamless approaches to service coordination. Their work is reflected in the implementation of equity-oriented models of service integration that are trauma-informed and client centred. During this period, many HBHC teams have also adapted the program to prioritize service delivery to identify and address the increasingly complex needs of equity-seeking populations within their regions.

Most respondents expressed confidence in their local procedures and practices to offer and use the HBHC screen in the postpartum period with individuals who give birth in their region. The inclusion of a hospital screening liaison nurse on the HBHC team is described as a critical program strength. The work of these nurses is perceived to influence the number and quality of screens completed in the postpartum period, awareness about public health services, the initiation of the in-depth assessment and subsequent referrals to and follow-up by public health. With respect to completion of the universal screen in the prenatal and early childhood program entry stages, most health units acknowledged having limited resources to invest in outreach efforts to promote referrals to HBHC during these stages; and using available resources to prioritize screening in the postpartum period. This reflects a previous trend in declining rates of completed prenatal and early childhood screens (Ontario Agency for Health Protection and Promotion, 2023).

To support HBHC teams' efforts to strengthen community partnerships, increase screening and referral rates across all three program phases, and to increase awareness of HBHC programs and services among pregnant individuals, families, and referral sources (including physicians and midwives), there was a strong recommendation for the development and launch of a provincial HBHC marketing campaign. Health units indicated that a provincial campaign, accompanied by promotional materials that could be tailored with local contact information, would be valuable to increasing overall awareness of program services and support. This recommendation however was accompanied by a strong cautionary note, the launch of a promotional campaign would need to be accompanied by increased program funding, as most health units with current staffing levels would not be able to manage any increases in the number of referrals that might occur.

The most common theme woven across narratives was that the devolution of the HBHC program across regions has resulted the delivery of a program that lacks standardization across the province. While respondents valued the flexibility to tailor the program to meet the needs of local populations, many respondents highlighted that some local adaptations or enhancements have had an unintended consequence of producing inequities between health units in delivering HBHC services. There is also an acute awareness that many program adaptations, often driven by a lack of sufficient funding to implement the program with fidelity, leave HBHC program leaders feeling like the are in "breach of protocol" and expressing a need for the program protocol and guidance to be updated to reflect current practice.

Of note, there is awareness of the variation in screening criteria changes being used across health units to identify those most at risk following completion of the universal screen in the postpartum period. In a recent report, it was identified that eight different strategies are being used (Ontario Agency for Health Promotion and Protection, 2023). These screening criteria changes decrease the number of eligible clients, identify those most at-risk, and increase likelihood that the client is confirmed as "high risk" during the IDA (Ontario Agency for Health Promotion and Protection, 2023). Variation in service delivery was also noted with respect to local responses to the universal screen, use, roles and functions of hospital screening liaison nurses, number and types of nursing assessment tools used, home visitation program model(s), clients served, qualifications and roles of family home visitors, the scope of nursing practice applied in home visits, use, type, or quality of reflective supervision, approaches to promote healthy attachment and positive parenting, and professional development opportunities.

Therefore, there is a critical need for an updated theoretical model or framework to underpin the program which would help to standardize important program components and desired outcomes. There was consensus about the immediate need for a review and update of the HBHC Guidance (2012) document. A revised program framework would also help to address needs among health units for provincial-level guidance in multiple areas including: program eligibility (screening score), standardized staffing, assessment tools including updates to the Family Assessment and IDA process, visit-by-visit curricula for home visiting, and the implementation and use of evidence-based programs to promote healthy attachment and parenting outcomes.

Notable changes are occurring within the blended model of home visiting. Given the increasing acuity of clients, there appears to be a trend that health units have transitioned away from a lay to a paraprofessional model of home visiting with respect to the employment of family home visitors. This is influencing a requested need for revised and standardized guidance with respect to family home visitor qualifications, roles, and scope of practice. While strong support for a blended model of home visiting remains in most health units, there is a need for flexibility (as determined by local need) to implement nurse-models of home visitation as part of their suite of public health services offered through HBHC. Endorsement in the HBHC guidance document of nurse-led models of home visiting would ensure that clients and families with multiple risks (e.g., concerns related to housing stability, food insecurity, experiences of trauma including intimate partner violence or child maltreatment, and mental health, including substance use concerns) could receive nursing assessments and interventions to address these complex concerns. Health units with Nurse-Family Partnership have noted that the integration of this program into existing services has only strengthened their delivery of HBHC. This includes the creation of new pathways for identifying, enrolling, and home visiting young pregnant individuals experiencing significant levels of social and economic advantage early in pregnancy.

Within the delivery of home visiting services to families, there are a few program activities requiring revision and standardization that are important to highlight. First, there is a persistent and emergent need for guidance, practice tools, and training to improve public health nurses' knowledge, skills, and confidence to identify, address and respond to clients experiencing mental health concerns (including substance use). Second, while there is strong support for the continued use by nurses of the NCAST PCI Scales to inform practice, there is a need for the province to review their recommendations for the types of evidence-informed programs that HBHC should offer to clients to promote healthy attachment and positive parenting. Health units have raised concerns that staff delivering the program have identified that the PIPE program materials are outdated and do not reflect principles of diversity and inclusion. Additionally, with only two health units reporting that new home visitors attend the required training for new PIPE instructors, the PIPE program is not consistently being implemented with fidelity to the training requirements outlined by the program developers, the "How to Read Your Baby" organization. The use of internally developed approaches to orient new staff to PIPE has resulted in family home visitors and public health nurses lacking the knowledge and skills on how to use the materials effectively with families, or how to select PIPE activities to address concerns identified following completion of the NCAST PCI scales. The need for high-quality, consistent, and comprehensive training for both public health nurses and family home visitors on how to apply PIPE in home visits with families was confirmed across both the qualitative interview and quantitative survey data. Respondents from both data sources indicated that securing funding to send staff for PIPE training through "How to Read Your Baby" is a persistent barrier and that provincial support is required to train HBHC staff on PIPE. It was noted that provincially supported training for PIPE has not been offered since 2012. Finally, there is significant variation in approaches and models to reflective supervision employed in programs across the country. In some health units, it was also noted that there is limited supervisor or manager capacity to provide high-quality reflective supervision.

Finally, another core requirement that would improve HBHC is an effective information system or data infrastructure to support documentation of client encounters, referral pathways (internal and external to the health unit), and reporting requirements for both the HBHC and Nurse-Family Partnership programs. The current information system reduces staff efficiency through "double documentation," and limits opportunities to have reports of accurate data to inform continuous quality improvement initiatives. This reinforces findings from the evaluation of HBHC return to service delivery during the post-pandemic period where it was also documented that the ISCIS system does not include data that is reflective of actual home visiting practice and that challenges with data entry, data accuracy and completeness have compromised the reputation and believability of the data in ISCIS and the indicators reported on (Ontario Agency for Health Protection and Promotion, 2023).

Conclusion

The HBHC program, including community collaborations to improve system integration and the services provided to improve caregiver and child health outcomes, is highly valued across the province. Increasingly, a lack of funding to support the program has limit health units' capacity to implement and deliver the program with fidelity to the HBHC protocol and guidance documents and has fundamentally changed which families are served by this program and the assessments or services received. Moving forward, there is an imminent need for the program protocol and guidance to be reviewed, revised, and updated to reflect current program practices and policy goals and increasing acuity of clients/families.

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