



Ontario Centre of Excellence
for Child and Youth
Mental Health

Bringing People and Knowledge Together to Strengthen Care.

Supporting Ontario's youngest minds: Investing in the mental health of children under 6

November 2014

Prepared by:

Dr. Jean Clinton
Angela Kays-Burden
Charles Carter
Komal Bhasin
Dr. John Cairney
Dr. Normand Carrey
Dr. Magdalena Janus
Dr. Chaya Kulkarni
Dr. Robin Williams

www.excellenceforchildandyouth.ca



Prepared by:

Dr. Jean Clinton, MD, FRCP (C)

Associate Clinical Professor, Department of Psychiatry and Behavioural Neuroscience, McMaster University

Angela Kays-Burden, MSW, RSW

Former Director of Innovative Practice, Reach Out Centre for Kids

Charles Carter, MPPM

Knowledge Broker, Ontario Centre of Excellence for Child and Youth Mental Health

Komal Bhasin, MSW, MHSc

Mental Health Consultant

Dr. John Cairney, Ph.D.

McMaster Family Medicine Professor of Child Health Research

Director of INCH (Infant and Child Health Research Lab)

Department of Family Medicine

Professor, Departments of Psychiatry and Behavioural Neurosciences & Kinesiology

McMaster University

Dr. Normand Carrey, MD

Associate Professor, Department of Psychiatry, Dalhousie University and IWK Health Center

Dr. Magdalena Janus, PhD

Associate Professor, Psychiatry & Behavioural Neuroscience, McMaster University, Offord Centre for Child Studies, McMaster University

Dr. Chaya Kulkarni, D.Ed.

Director of Infant Mental Health Promotion, Hospital for Sick Children

Dr. Robin Williams, MD

Clinical Professor, Department of Pediatrics, McMaster University

President-elect, Canadian Pediatric Society



Acknowledgements

This paper was initiated by the Ontario Centre of Excellence for Child and Youth Mental Health. It was developed in collaboration by a multi-disciplinary team with expertise in infant and child mental health to provide a link between the research evidence and a policy landscape that demands the efficient delivery of effective services.

We thank the policy and decision-makers who attended workshops, responded to e-mails and participated in individual interviews. We thank the family members who provided thoughtful feedback on an earlier draft of this paper. We thank as well the child and youth mental health agencies in Ontario and direct service providers who contributed their practice experiences and information to our scan of the current landscape in Ontario and beyond.



Table of contents

Executive summary	5
Introduction	10
Purpose and scope	11
Methodology	13
The link between brain development and early childhood mental health	13
International prevalence of mental health problems in children under 6	15
Risk factors and developmental trajectories	17
The provincial landscape	19
Scan of infant and early childhood mental health services in Ontario	21
Sector/system challenges	24
National/international context	27
An ideal framework: Promotion, prevention and early intervention	28
Conclusion and recommendations	36
References	40
Appendix I: List of policy informants	49
Appendix II : Environmental scan participants	50
Appendix III : Environmental scan questionnaire	51
Appendix IV : Jurisdictional scan policy examples and references	54



Executive summary

Ontario is focusing unprecedented attention on mental health, including large-scale changes to how the provincial child and youth mental health system is organized. Given the impact of early childhood experience on lifelong mental health and well-being (Boivin & Hertzman, 2012), this is an opportune time to take a life course approach to mental health and focus on the specific needs of infants and young children (ages 0-6 years), as well as their families. An ideal system for Ontario should build on existing resources and engage families and caregivers, service professionals working with infants and young children and whole communities in decision-making about systemic and policy initiatives.

Research has consistently demonstrated that the first six years of a child's life are crucially important (Centre on the Developing Child at Harvard, 2010). The brain grows and changes significantly, and is influenced considerably by the child's environment (Center on the Developing Child at Harvard, 2010; National Scientific Council on the Developing Child, 2004). Mental health is correlated with a number of social determinants, including income and income distribution, education, employment, food security, gender, race, ability, Aboriginal status, housing and early childhood development. Of the many determinants that influence early childhood development, a secure attachment between a baby and a caring adult is essential to healthy development (Schweinhart, 2003). The role of caregivers¹ in children's lives is critical, and the nature of these relationships is important in shaping development. Effective policy supports parents and caregivers and recognizes the significance of the relationship between child and caring adults. It should seek to create environments that promote secure attachment, prevent issues that disrupt these relationships and support appropriate intervention as soon as issues emerge.

Ontario's Ministry of Children and Youth Services (MCYS) identified infant and early childhood mental health as an issue that needs policy development to ensure the availability and accessibility of optimal and consistent services across the province. At the Ministry's request, this policy paper was initiated by the Ontario Centre of Excellence for Child and Youth Mental Health (the Centre), and written by a multi-disciplinary team with clinical and research expertise in infant and early childhood mental health, led by Dr Jean Clinton. The paper draws on the latest research evidence and information from environmental and jurisdictional scans to advance evidence-informed policy recommendations to strengthen infant and early childhood mental health services in our province. While the content of this paper is relevant to a number of stakeholder groups (e.g. families, youth, community partners), the primary audience for this paper includes policy makers from various government ministries, community leaders and organizational decision-makers. The paper is meant to establish a shared understanding of infant and early childhood mental health, summarize current evidence on effective policy and practice, provide a snapshot of the current system from a service provider perspective and make specific recommendations to ensure accessible mental health services during the early years of children's lives.

¹ Throughout this paper, the term "caregivers" includes child care providers and other caring adults who play a critical role in child development.



As Ontario's child and youth mental health sector transitions to a new system of integrated services², MCYS is working closely with other ministries³ in a shared attempt to prioritize mental health and repurpose resources for maximum impact. This presents an ideal opportunity to consider the needs of infants and children and the parents/caregivers who support them. Jurisdictions in Canada and other countries are developing policies based on a growing body of evidence that young children's experiences in the early years set the foundation for lifelong mental and physical health and well-being. These jurisdictions are also placing a greater emphasis on creating broader environments for young children that promote and support optimal mental health and skills that enhance resilience for all children, youth and families.

Studies of prevalence of mental disorder in children 0-6 years are not as common as those that look at children starting at age 4 years. Even when using conservative estimates, the prevalence of any mental health disorder for children between ages 4-17 years is 14% (Waddell, 2007). Serious mental health issues can occur in very young children and may manifest as serious social, emotional or behavioural problems (Zeanah et al., 2008) including aggression, hyperactivity, anxiety and depression (Egger & Angold, 2006). Egger & Angold (2006) reviewed four studies in younger children and prevalence of any disorder ranged from 14% to 26%. There is common belief that young children may outgrow early mental health problems, but longitudinal studies show that this is not the case (Breslau et al., 2014). In fact, the long-term social and economic impact of mental health problems among infants and young children is significant, making infant and early childhood mental health an issue of critical importance for government and communities. According to a family member we consulted in writing this paper:

Many of us with children who have diagnoses of mental health disorders or mental illnesses noticed concerns before the age of 6 years, but were unable to get the supports and services needed to effectively intervene and minimize the impact of these diagnoses for our children, our families and our communities.

The evidence is clear that prevention is better than cure, and earlier is usually better and more economical than waiting until the later years. Nobel Prize winning economist Dr. James Heckman conducted a cost-benefit analysis of targeted early years programs and found that investing in early childhood yielded a 7-10% annual rate of return (Heckman, 2012). He concluded that "(investing in) early childhood education is an efficient and effective investment for economic and workforce development. The earlier the investment, the greater the return" (Heckman, 2012, pp. 49-58).

Effective infant and early childhood mental health policy encompasses the full continuum of promotion, prevention and early intervention, with strategies targeted appropriately to the unique needs of families, schools and communities.

The elements of an effective framework include:

- universal promotion to reduce risk factors and promote protective factors
- early identification and intervention

² <http://www.children.gov.on.ca/htdocs/English/topics/specialneeds/mentalhealth/momh.aspx>

³ Ministry of Health and Long-Term Care, the Ministry of Children and Youth Services, and the Ministry of Education



- evidence-informed mental health programs and practices
- seeing caregivers and families as key in developing a system of care that meets their children’s mental health needs (Miles et al., 2010)

While most of Ontario’s communities provide a variety of valuable services, our environmental scan found that efforts vary across regions in Ontario and that there are gaps and inconsistencies in the provincial system of infant and early childhood mental health care. In an effort to advance a common understanding of infant and early childhood mental health that conveys the importance of a child’s social and emotional development, the U.S. *Zero to Three Infant Mental Health Task Force*⁴ developed the following definition, and later modified it to include all children under 6 years:

Infant and early childhood mental health, sometimes referred to as social and emotional development, is the developing capacity of the child from birth to five years of age to form close and secure adult and peer relationships, experience, manage and express a full range of emotions, and explore the environment and learn – all in the context of family, community, and culture (Cohen, Oser & Quigley, 2012, pg. 1).

International jurisdictions including Australia, Scotland, New Zealand, Norway and the United Kingdom have used this definition to develop child and youth mental health policy. It is this definition that is most often used by those working in the field of infant and early childhood mental health in Ontario and Canada, and the authors recommend that it be adopted for use by government to guide policy development in this province.

The following recommendations offer opportunities for immediate policy development while establishing the foundation for longer-term system change. They have been crafted to build on existing government investments and leverage mental health policies and strategies currently underway. Based on the literature, leading policy in other jurisdictions and the results of an environmental scan, the authors propose the following recommendations:

1. **Engage families and caregivers together with service providers in developing and implementing infant and early childhood mental health policy and system planning.** This includes working together to conceptualize information and resource systems that contribute to promotion; develop care pathways, and collaborate to develop and provide training and education for service providers.
2. **Adopt and promote the *Zero to Three* definition of infant and early childhood mental health across all sectors** including health, mental health, child development, education, youth justice and child welfare. This definition states that “infant and early childhood mental health, sometimes referred to as social and emotional development, is the developing capacity of the child from birth to five years of age to form close and secure

⁴ Zero to Three is a national non-profit organization in the United States that informs trains and supports professionals, policy makers and parents in their efforts to improve the lives of infants and toddlers. More information can be found at: www.zerotothree.org



adult and peer relationships, experience, manage and express a full range of emotions, and explore the environment and learn – all in the context of family, community, and culture (Cohen, Oser & Quigley, 2012, pg. 1).

3. **Ensure the provision of infant and early childhood mental health promotion, prevention and intervention in all provincial service areas.** The system of care in each service area should include access to information and resources to support the mental health of infants and young children. The system should make use of existing resources to enhance prevention and leverage natural connections between families and the system to address infant and early childhood mental health in one place. The system of care should also provide targeted support for populations that are identified as at-risk, include evidence-informed interventions and provide clear pathways to care. The system should see the client as the child *and* family/caregiver, working together within an inter-generational treatment model.
4. **Invest in training the infant and early childhood mental health workforce, recognizing the many roles and sectors with a direct stake in infant and early childhood mental health.** This can be accomplished through building on existing in-service training to develop coordinated workforce training so that all those who work with infants and children are able to recognize risk factors and children who are experiencing challenges and refer families to appropriate support. Professionals can be trained depending on the degree of specialization needed: awareness for all (including knowledge about how best to engage families), literacy for some, and expertise for a few. Concrete strategies include on-site coaches at the local level, agency practice leads and infant and early childhood mental health communities of practice. This should include education of medical students and other professionals.
5. **Strengthen data collection, monitoring and research on infant and early childhood mental health and improve communication among ministries.** The infant and early childhood mental health field in Ontario would benefit from a provincial initiative to enhance data linkage, sharing and expansion of surveillance systems and data sets. Early identification systems for infants using evidence-informed tools should feed into data collection and reporting systems to better monitor population health. The government's role in developing effective policy should be evaluated.
6. **Adopt a government-wide approach to infant and early childhood mental health and designate one ministry to coordinate these efforts.** This should begin with a provincial, multi-sector, multi-disciplinary advisory group that meaningfully engages families and caregivers along with service providers as partners to advise on and evaluate progress on infant and early childhood mental health policy development and implementation. As child and youth mental health system transition progresses and care pathways are developed, the ministries must identify clear roles and responsibilities required within the system of care that support infants, young children, their families/caregivers and communities.



While the recommendations in this paper stem directly from clinical and research evidence and practitioners involved in infant and early childhood mental health promotion, prevention and intervention, acting on these recommendations will require meaningful engagement with families and caregivers along with service providers to verify the nature and scope of these priorities and plan for implementation. The meaningful engagement of families and caregivers that represent the diversity of Ontario's population (including but not limited to Francophone, First Nations, Inuit, Métis, newcomers, differently-abled and LGBTTQ) will be essential in moving these recommendations forward.

There are opportunities to leverage existing strategies by scaling up, building on or integrating interventions within the natural settings where children spend most of their time and have the most significant relationships (Zeanah, 2009). By promoting and encouraging local development of integrated care systems within service areas and across ministries, existing public investment can be used more efficiently, improving collaboration and reducing duplication. In an ideal system, comprehensive infant and early childhood mental health policy creates universal access to conditions that support early child development, and works at all levels – for families and caregivers, service providers, communities and the province (Boivin & Hertzman, 2012).

A prosperous and vibrant future for Ontario depends on the health and well-being of its youngest members and their families. By working across sectors and embracing a life-course approach to mental health that includes attention to the specific needs of infants, young children and their families, Ontario can work with families and professionals to reduce costs, avoid duplicating services, leverage existing effective services and ultimately improve mental health outcomes across the lifespan.



Introduction

This policy paper was initiated by the Ontario Centre of Excellence for Child and Youth Mental Health (the Centre), and written by a multi-disciplinary team with clinical and research expertise in infant and early childhood mental health, led by Dr. Jean Clinton. Ontario's Ministry of Children and Youth Services (MCYS) identified infant and early childhood mental health as an issue that requires policy development to ensure the availability and accessibility of optimal and consistent services across the province. Although services are described as meeting needs of children 0-18, very few programs address the needs of children under 6 years. This paper draws on the latest research evidence and information from environmental and jurisdictional scans to advance evidence-informed policy recommendations that would strengthen infant and early childhood mental health services in our province.

As Ontario's child and youth mental health sector embarks on a system-level transition aimed at ensuring coordinated system of care (for more detail⁵), MCYS is working closely with other ministries in a shared attempt to prioritize mental health and repurpose resources for maximum impact. The context is ideal, then, to focus our attention on the needs of infants and children under six years of age and their families/caregivers. Jurisdictions in Canada and other countries are developing policies based on a growing body of evidence that young children's experiences lay the foundation for life-long mental health and well-being. These jurisdictions are also placing a greater emphasis on addressing contextual factors that promote and support optimal mental health and skills that enhance resilience for all children, youth and families.

Interventions taking place in infancy and early childhood offer significant opportunity for social and economic return on public investment, making the issue of early intervention one of critical importance for government and communities (Boivin & Hertzman, 2012). Ontario has many excellent examples of collaborative work in the infant and early childhood mental health sectors; however, there are significant systemic challenges that get in the way of families accessing mental health support. These include, but are not limited to, service gaps, lack of clear service pathways, and inconsistent planning and coordination among service providers. This paper describes some of these challenges but aims to build on Ontario's strengths to develop an optimal provincial infant and early childhood mental health system.

⁵ <http://www.children.gov.on.ca/htdocs/English/topics/specialneeds/mentalhealth/momh.aspx>)



Purpose and scope

In this paper, we draw on research literature and information from environmental and jurisdictional scans to make targeted, evidence-informed policy recommendations that would strengthen Ontario's response to infant and early childhood mental health. While families who have experienced Ontario's child and youth mental health system were not engaged throughout the process of developing this paper, we sought feedback from a small group of parents (n=7) affiliated with Parents for Children's Mental Health (www.pcmh.ca), who commented on an earlier draft of this document. Although the views and perspectives of this group informed this paper, we acknowledge the lack of family engagement and the relatively homogeneous composition of the group with whom we consulted. An overarching recommendation from our work, then, is to ensure that families and caregivers are fully engaged in developing and implementing infant and early childhood mental health policy and system planning.

There are a number of important considerations in shaping an approach to infant and early childhood mental health. Any approach, however, needs to include an understanding of specific issues related to particularly vulnerable populations and an extended focus on the role of the pregnancy through early years environment on development. Special populations include:

- children who experience maltreatment
- those living in socio-economic disadvantage
- those whose parents/caregivers themselves struggle with significant mental health problems (such as depression, substance abuse, etc.)
- ethno-culturally diverse groups (e.g. First Nations, Inuit and Métis, and refugee and newcomer infants and young children)
- those involved in other systems (e.g. child welfare)
- those with neurodevelopmental disorders such as obsessive compulsive disorder, Tourette syndrome or developmental delays

A race, gender and class analysis and an understanding of the systems of power that mark different groups' experiences in relation to infant and early childhood mental health are essential before policy decisions are made. While we attend to each of these areas throughout the paper to some degree, an in-depth focus on these factors is beyond the scope of this work.

While the content of this paper is relevant to a number of stakeholder groups (e.g. families, youth, community partners), the primary audience for this paper includes policy makers from various government ministries, community leaders and organizational decision-makers. The five goals of this paper are:

1. **Establish a foundational understanding** of infant and early childhood mental health, and emphasize the significance of this critical developmental period for long-term impact through adolescence, adulthood and across the life course.



2. **Summarize available findings** on the estimated prevalence of mental health disorders among infants and young children in Ontario, risk factors for mental health disorders, and qualities of successful health promotion, prevention and early intervention strategies.
3. **Provide an overview** of the policy and practice landscape focused on infant and early childhood mental health through:
 - A description of Ontario’s current efforts that include a focus on infant and early childhood mental health, including *Open Minds Healthy Minds: Ontario’s Comprehensive Mental Health and Addictions Strategy; Moving on Mental Health; Make No Little Plans, Ontario’s Public Health Sector Strategic Plan; and School Mental Health ASSIST*.
 - An environmental scan of Ontario school districts and community agencies including children’s mental health, child welfare, public health, community health, childcare and special needs resourcing partners.
 - A jurisdictional scan of infant and early childhood policy in provinces outside Ontario and countries outside Canada.
4. **Provide a compelling rationale** for policy makers, families, community leaders and organizational decision-makers to work in partnership with families to develop an integrated and coordinated set of infant and early childhood mental health policies (which include recommendations for directing measurement/monitoring of efforts).
5. **Present specific policy recommendations** that are grounded in the latest knowledge in this area, and which reflect attention to the full continuum of a system of care (which includes the promotion of mental wellness and resiliency, prevention of mental health problems and disorders, and early intervention and treatment).

Definition of infant and early childhood mental health

The World Health Organization (WHO) states that better health outcomes are achieved through an inter-sectoral approach that includes adopting a common language that works across sectors (WHO, 2004). In an effort to advance a unified understanding of infant and early childhood mental health that conveys the importance of a child’s social and emotional development, the *Zero to Three Infant Mental Health Task Force*⁶ (which includes family/parent representatives) developed the following definition, and later modified it to include all children under 6 years old⁷.

⁶ Zero to Three is a national non-profit organization in the United States that informs, trains and supports professionals, policy makers and parents in their efforts to improve the lives of infants and toddlers. More information can be found at: www.zerotothree.org

⁷ The 2000 National Research Council and Institute of Medicine report *From Neurons to Neighbourhoods* identified that focusing disproportionately on birth to three years was not ideal, since the 0-3 age range “begins too late and ends too soon”.



Infant and early childhood mental health, sometimes referred to as social and emotional development, is the developing capacity of the child from birth to five years of age to form close and secure adult and peer relationships, experience, manage and express a full range of emotions, and explore the environment and learn – all in the context of family, community, and culture (Zero to Three: Making it Happen, 2012).

Many international jurisdictions (including Australia, Scotland, New Zealand, Norway and the United Kingdom) are using the *Zero to Three* definition to develop policy. This definition is also used in Ontario and Canada by organizations and agencies (e.g. Mothercraft in Toronto and the Infant Mental Health Promotion coalition based at Toronto’s Hospital for Sick Children), as well as individual practitioners working in the field of infant and early childhood mental health. We also use this definition to ground the present paper and the policy recommendations that emerge from this work.

Methodology

This paper was developed by an interdisciplinary team of infant and early childhood mental health professionals. The authors worked with staff from the Ontario Centre of Excellence for Child and Youth Mental Health (the Centre) to gather information, review current literature on infant and early childhood mental health (including mental health frameworks, policy documents and evidence-informed practices provincially, nationally and internationally), and conduct environmental and jurisdictional scans. The environmental scan gathered qualitative survey information on the perspectives and practices of community-based child and youth mental health, public health, education, childcare, and child welfare sectors. The jurisdictional scan sampled publicly available policy documents in English posted on the websites of national, state or provincial health ministries of Organization for Economic Co-operation and Development countries and their states. Select community and government stakeholders were engaged through telephone calls and face-to-face meetings to further probe field experience, and innovative practices in infant and early childhood mental health (see Appendix 1 for a list of policy makers who helped inform the focus of this paper).

The writing team engaged with policy makers at strategic points during the development of this paper to learn about ministry interests in infant and early childhood mental health and refine the purpose and direction of the research. Members of the Centre’s Advisory Committee (which included perspectives from family members) also provided feedback on an early draft of the paper. While broad consultations with service users did not take place (an important limitation of this paper), families who have experienced Ontario’s child and youth mental health system were invited to share their input on the recommendations, and changes were made to reflect this critical perspective.

The link between brain development and early childhood mental health

There is no other period of brain development that is as critical to setting the stage for human growth, development, and positive or negative mental health as the first six years of a child’s life (Centre on the Developing Child at Harvard, 2010). Between birth and six years of age, an infant’s brain triples in size as the physical circuitry of the brain is established, and more than 700 synapses (connections) take place per second in the first years of life (Shonkoff et al., 2012). A human brain develops from the bottom up, with basic functions developing first (e.g. the senses), followed by



more complex functions (e.g. self-regulation and complex thought). Children's environments and experiences shape how the brain develops; therefore, a solid start is required for optimal brain development later on (National Scientific Council on the Developing Child, 2008/2012).

Brain development is intrinsically linked to many factors, including, but not limited to, adequate nutrition, a secure attachment relationship with a caregiver, appropriate stimulation and parenting, safe housing and communities, and enriching early childhood experiences. The development of a secure, predictable, responsive and nurturing infant-caregiver relationship is critical, and the daily, frequent, back and forth interactions between infant/young children and caregivers sculpt the pathways of the developing brain (National Scientific Council on the Developing Child, 2004). This ability of the brain to be modified by experience, known as brain plasticity, can be either positive or negative. Exposure to positive stimulation has a positive impact on development; unfortunately negative experiences such as maltreatment also have an effect. For example, in studies of language development, babies whose caregivers talked to them a lot acquired more words, on average, than those who did so with less frequency (Hart & Risley, 1995, 2003; Fernald, Marchman & Weisleder, 2013), and those who are soothed and co-regulated by their caregivers consistently develop the capacities to soothe themselves over time (Schore & Schore, 2008). Patterns of behaviour, empathy, and capacity for developing/sustaining relationships, emotional responses and social abilities are established during infancy and early childhood (Greenspan & Shanker, 2006).

“Childhood is an extremely sensitive period in human development, during which the brain, especially the circuitry governing emotion, attention, self-control and stress, is shaped by the interplay of the child's genes and experiences. As children grow, the biological and environmental factors that determine their development become increasingly intertwined. When the environment is a secure, positive one, these factors join forces to help maximize their potential” (Boivin & Hertzman, 2012, pg. 2).

It is important to note that mental illness can and does occur even in the presence of good attachment and healthy, nurturing environment. Environmental risk factors can threaten early childhood development, including mental health (National Scientific Council on the Developing Child, 2005/2014). Toxic stress (severe and prolonged stress in the absence of buffering relationships) can lead to significant changes in brain cells and alter the way they develop in the infant or young child (Garner, Shankoff & Seigel, 2012). Caregivers and infants experience toxic stress together, which can include stressors such as poverty, traumatic life events, unemployment, loss of culture, child maltreatment and/or a family member's mental illness. With respect to the developing brain, areas that are particularly sensitive to toxic stress are the same ones required for learning, memory and self-regulation – the core capacities in mental well-being and resilience (Boivin & Hertzman, 2012). Toxic stress may not only influence a child's health early on, but can also have a significant impact on later childhood, adolescence and long-term adult physical and mental health (Centre on the Developing Child at Harvard, 2010). As caregivers are the ones who are doing the monumental work of buffering this stress, addressing the sources of toxic stress is essential; the role of communities to support caregivers in mediating the effects of toxic stress is also crucial. Recent research also reinforces the importance of fathers in mediating toxic stress



(Sarkadi, 2008). This is reflected in a number of effective programs in Ontario designed to intentionally reach out to fathers to support their involvement/engagement in the lives of their young children (e.g. the Walpole Island *Native Fathers Learning* program and the *Step by Step Guide* produced by Ontario's Best Start Resource Centre).

How infants and young children ask for help

While older children may communicate their distress through language, infants' and very young children's responses to stress are most often reflected in their behaviours and their actual growth patterns. For example, mental health problems in infants and young children become obvious when the usual developmental tasks of infancy and early childhood do not unfold as expected (e.g. language acquisition, physical development) (Boyce, 2011), and these problems are invasive, pervasive and interfere with daily functioning. Infant and early childhood mental health problems can be exhibited through irritability, withdrawal, excessive crying, feeding and sleep disorders, and a general failure to thrive (Zeanah, 2009).

When early mental health difficulties are not appropriately treated, they can become serious and more complex, making them harder to address over time (Lieberman & VanHorn, 2005). The emergence of aggressive behaviour is a good example. While some expression of aggression is developmentally typical in a two-year-old, such behaviours are usually responded to and addressed by attuned parents and caregivers and significant adults in the child's life (e.g. early childhood educators and others) and will not become a problem. However, a small but significant group of children demonstrating excessive aggression at this early age require early identification and intervention to increase self-regulation and to learn ways to deal with frustration.

International prevalence of mental health challenges in children under six

Using conservative estimates, the prevalence of any mental health disorder for children between 4-17 years of age is 14% (Waddell, 2007). Significant mental health issues can and do exist in very young children, and tend to manifest as serious social, emotional or behavioural problems (Zeanah, 2009). The most common disorders in the early years are depression, anxiety, attention deficit hyperactivity disorder, oppositional defiance and aggression (Wichstrøm et al., 2012). Compared to children and adolescents, however, there is relatively little data on the prevalence of mental health problems in children 0 to 6 years of age. Egger and Angold (2006) reviewed four studies, all of which used community or population-based samples and different methods to assess mental health problems in preschool children (e.g. parent-reported questionnaires, structured clinical interviews, clinical consensus). The prevalence of any disorder across these studies ranged from 14% to 26%. Prevalence figures were also generated for specific, common disorders including attention deficit hyperactivity disorder (2% - 6%), depression (.3 - 2%) and anxiety disorders (9%).

Egger and Angold (2005) found that approximately 17% of children ages 2-5 years meet diagnostic criteria for mental health problems. Studies conducted in Denmark, Norway and Germany support these findings and report the prevalence of any social-emotional disorder in the 0-6 age group to be between 12% and 18% (Furniss et al., 2006; Skovgaard et al., 2007; Wichstrom et al., 2012). While the European context varies on a number of dimensions when compared to our Canadian setting, these figures are useful for providing a broad picture of prevalence for this age range.



If young children are not provided appropriate help, emotional difficulties that emerge early in life can become more serious disorders over time (National Scientific Council on the Developing Child 2008/2012, pg. 6).

Research shows that diagnoses for disorders in the early years are fairly stable and can persist from 3 to 6 years of age (Bufferd et al., 2012). A recent review (Fryers and Brugha, 2013) indicates that the existence of chronic anxiety and aggression in childhood, even when not formally diagnosed, can predict the presence of a diagnosable mental disorder later in life. Adolescent and adult mental health problems such as depression and aggression have been shown to manifest themselves in childhood and often become noticeable as poor academic achievement in school in later years (Fontaine et al., 2011; Tremblay, 2006).

The Early Development Instrument (EDI) is a questionnaire developed at the Offord Centre for Child Studies at McMaster University⁸. It is evidence-based and measures five core areas of early child development that are known to be good predictors of health, education and social outcomes: physical health and well-being; language and cognitive development; social competence; emotional maturity; and communication skills and general knowledge. The EDI is population-level measure and not an individual diagnostic tool, and it is useful for informing communities about the development of their young children. Recent EDI data from Ontario shows the percentage of children with vulnerabilities at school entry related to physical, social, emotional, language, or cognitive development has been stable over the last nine years at about 30%. This is in addition to the 4% who have been identified as having special needs, which include physical and cognitive delays. This evidence suggests, then, that these vulnerabilities can persist and contribute to children's difficulties with reaching academic standards in grade three (Calman & Crawford, 2013). Since Ontario's introduction of full-day kindergarten, there is preliminary evidence from the last two years that the program has had a favourable impact on four and five year olds (Ministry of Education, 2013), which may include benefits in terms of their mental health and well-being.

The prevalence of children with vulnerabilities and growing evidence that mental health problems in the early years can contribute to mental disorders later in life reinforces the importance for Ontario to shape our mental health strategy with a deliberate focus on infants and young children. EDI data, and the available prevalence data, demonstrate that there is a clear need for consistent, integrated and well-organized inter-ministerial services for infants and families in all Ontario communities. The stability of EDI data suggests that 30% of children present at school with risk factors and that an opportunity exists to address these through an appropriate mental health strategy that addresses and responds to these risks early on.

⁸ http://www.offordcentre.com/readiness/SRL_project.html



Risk factors and developmental trajectories

Developmental trajectory refers to how a person matures across the lifespan. Early childhood experiences can impact future development (Boivin & Hertzman, 2012). While a child may begin to follow a typical developmental trajectory, the children whose trajectories are thrown off course most often are those who have had exposure to various types of risk (as described in earlier sections). There are also children who develop mental health issues in the absence of these risks, and many children exposed to risk factors do not develop problems. In the absence of protective factors or opportunities to intervene to support a child through difficulties, longer term challenges may arise. Investing in infant and early childhood mental health is not simply about directing resources toward children ages 0-6; it requires seeing the important link between children, families and communities to support optimal early childhood development.

Normal development can be impacted by a range of factors, and can lead to the emergence of mental health difficulties. It is important to keep in mind, however, that this link is not deterministic. Social determinants such as education, poverty and family stability (or lack thereof) are factors that require consideration in our children's mental health trajectories. Risks in these areas can, and do, have exacerbating effects. If systems are structured to support early identification and intervention to address emerging issues, many factors and exacerbations can be mitigated. Equally important, there are families who are at risk in multiple life domains, and those risks do contribute to the development of mental health disorders in children.

Research shows that protective factors can mitigate the negative impact of early adversity and change a child's developmental trajectory (Schweinhart, 2003). For example, there is evidence from the Bucharest Adoption studies that children who had experienced early adversity had better outcomes following placement in nurturing family environments than those who remained in orphanages, and the earlier the children were placed in foster care the better (Nelson, Zeanah & Fox, 2014). It is important, then, to recognize that there is no single pathway from early adversity to either poor or better-than-expected outcomes, since early experiences are affected by many factors (Boivin & Hertzman, 2012). However, the potential link between early adversity and later difficulties provides a compelling rationale for proactive infant and early childhood policy.

Risk factors: Child, family and community levels

Because of the brain's malleability to the influence of the environment, infants and young children are more vulnerable to risks in their environments than older children, making investment and attention in the early years important for prevention (Boivin & Hertzman, 2012). Certain risk factors can be present from birth, or specific environmental conditions can make children more vulnerable to exhibiting emotional, social and behavioural problems (Henry, Caspi, Moffitt & Silva, 1996). Without intervention, these factors can contribute to the emergence of subsequent mental health disorders including depression, attachment disorders and traumatic stress disorders (Sroufe, 2005). Delays in intervention lead to increased costs, as more intensive and multi-location interventions become necessary.

There is a substantial and growing body of research that identifies many inter-related risk factors at the child, family and community levels. Risk factors at the level of the child include concerns such as premature birth, exposure to toxins in



utero, difficult temperament, developmental disabilities, separation after birth, exposure to high maternal stress during pregnancy, and trauma (Nosarti, 2012; Mesman & Koot, 2001, Fryers & Brugha, 2013). Family level risk factors include socio-economic status, racism, sexism, absence of social supports, parental mental illness and/or substance abuse, attachment, and exposure to trauma (Fryers & Brugha, 2013). Community factors that influence infant and early childhood mental health include food insecurity, social deprivation, the availability and use of early years and child care services, and poverty (Leventhal & Brooks-Gunn, 2000; Mujs, 1997; Schlee, Mullis & Shriner, 2009; Tremblay, 2004). Risk factors tend to be intertwined and difficult to separate, so a whole-family approach to support is essential and in the best interests of all.

Adversity in early childhood

In the absence of protective factors and/or successful intervention, very young children at risk can develop significant mental health problems, potentially leading to school failure, social problems, addictions and even criminality (Henry, Caspi, Moffitt & Silva, 1996). Specifically, young children with multiple adversities are three- to four-times more likely in adolescence to develop anxiety, depression, or exhibit suicidal behaviours and be admitted to hospital for a serious mental illness (Fryers & Brugha, 2013). Some research suggests that later mental health problems can be predicted as early as five months of age if infants are exposed to multiple risk factors (e.g. Tremblay et al., 2004).

The Adverse Childhood Experiences (ACE) study found that many mental health problems, including chronic depression, anxiety and substance abuse in adulthood, are related to early childhood toxic stress (Felitti et al., 1998). Vulnerability is cumulative and increases with the number of risk factors present and prolonged exposure to these (Felitti & Rutter 1978; Japel, 2008). The study found that adults who had experienced four or more childhood exposures⁹ to harm or disadvantage during childhood were four to 12 times more likely to experience alcoholism, drug abuse, depression and suicide attempts than those who experienced none (Felitti et al., 1998). The ACE study reinforces other research suggesting the potential long-term consequences of early adversity, but it is not necessarily representative of trajectories from infancy as study respondents were reporting on recollections of past experiences.

⁹ Exposure to psychological, physical, or sexual abuse; violence against mother; or living with household members who were substance abusers, mentally ill or suicidal, or ever imprisoned.



At-risk and isolated: Serving families in difficult-to-reach circumstances

In the Parry Sound area, HANDS the Family Help Network.ca offers an Infant and Child Development (ICD) program that provides a range of services catering to the developmental needs of infants and children ages 0-6 years. It is a rural service area and at-risk infants and young children can live with families where mental health concerns may be salient but, where services are difficult to access. This means that while these children and families may be at great risk, they are also the most difficult to reach. The program takes a whole-family approach rather than focusing exclusively on the infant or child, and services are provided with flexible hours in the home, office or other community setting such as an Early Years Centre.

An evaluation of this program found that over 10 years it consistently helped both low- and very high-risk families achieve good outcomes for babies, toddlers and preschoolers. 64% of clients were one year old or younger and started ICD services at an especially critical time point in their lives, before beginning to have consistent support in early years or day care settings. The evaluation reinforces that since the optimal age for intervening is before age two; the ICD program made a difference with families during this critical window of opportunity and played an important role in supporting community connections and facilitating necessary referrals.

The provincial landscape

The Early Years Study, Reversing the Real Brain Drain (McCain & Mustard, 1999) brought attention to the importance of infant and early childhood development to both policy makers and the general public. Subsequent reports and position papers developed in the province have raised direct awareness of infant and early childhood mental health. For example, in 2002, Children's Mental Health Ontario (CMHO) produced several documents including *Children's Mental Health Services for Children Zero to Six: Review of the Literature and Practice Guide*, as well as a training and reference guide. CMHO has defined early childhood mental health services as follows (pg. 2):

“Early childhood mental health services consist of multidisciplinary services provided to children from birth to six years of age to identify and treat existing or emerging mental health problems, enhance adaptive parenting and overall family functioning, strengthen competencies, minimize developmental delays, prevent functional deterioration, enhance the ability of other systems to address the needs of young children and their families, and promote child mental health and well-being.”

The Premier's report *With Our Best Future in Mind: Implementing Early Learning in Ontario* (Pascal, 2012) also highlighted these issues and laid the foundation for significant shifts which have yet to surface in the form of significant policy change as it relates to mental health in infancy and early childhood.



Recent policy development in Ontario

In the past five years, there has been an unprecedented focus on child and youth mental health in Ontario and across Canada. The Ministries of Children and Youth Services (MCYS); Education (EDU) and Health and Long-Term Care (MOHLTC) are working with shared accountability and responsibility to advance child and youth mental health policy. When *Open Minds, Healthy Minds: Ontario's 10-year Comprehensive Mental Health and Addictions Strategy* was announced in 2011, child and youth mental health was identified as the priority for the first three years of implementation. In 2012, MCYS announced *Moving on Mental Health: A system that makes sense for children and youth*, a transformative initiative intended to ensure the availability of essential child and youth mental health services in every community across the province, establish clear pathways to, through and out of care, and increase accountability and transparency under a new service model¹⁰.

Also as part of *Open Minds, Healthy Minds*, the Ministry of Education has implemented the *School-Based Mental Health ASSIST* initiative to support student mental health and well-being by providing resources, tools and implementation support to school boards (<http://smh-assist.ca/>). Each board now has a mental health lead who has the responsibilities of developing a board-wide mental health strategy, coordinating capacity building and supporting the implementation of appropriate evidence-informed strategies and programs. The release of *How does learning happen: Ontario's pedagogy for the early years* (Ministry of Education, 2014b) incorporates mental wellness and resilience and the importance of relationships for mental well-being, and the recent release of *Achieving Excellence: A renewed vision for education in Ontario* has incorporated the added goal of promoting well-being (Ministry of Education, 2014a).

In 2013, the Ministry of Health and Long-Term Care released *Make No Little Plans*, a plan that focuses on protecting and promoting the health of Ontarians through quality public health programs and services, partnerships and health equity. This guiding document has a specific call for the public health sector, as one of its strategic goals is to optimize healthy human development and early childhood development (including mental wellness and resiliency) (Ministry of Health and Long-Term Care, 2013, pg. 14).

These government investments in the early years, across a number of ministries, have likely contributed to excellent work taking place in communities. However, efforts to approach mental health from a life course perspective which includes attention to the specific needs and strengths of infants, young children, and their families are variable across regions. The province might improve supports for this group in particular by strengthening the coordination of relevant services and programs provided through different ministries, and making explicit mention of infants in policy related to documents (i.e. reflecting a life-course perspective). In addition, cost savings to other ministries are realized when investments are made early.

¹⁰ <http://www.children.gov.on.ca/htdocs/English/topics/specialneeds/mentalhealth/momh.aspx>



Scan of infant and early childhood mental health services in Ontario

Data for the environmental scan was gathered through key informant interviews and surveys with school boards and community agencies representing children's mental health, child welfare, public health, community health, childcare and special needs resourcing partners. This environmental scan is limited and reflects only the current status of mental health services in agencies and schools for infants and young children in Ontario. Ongoing consultations with families to ask them directly where they go for help would provide knowledge that is critical in shaping what the ideal infant mental health system would look like, since service users will likely have different ideas about what *really* works (and what doesn't) for families seeking to access services for their infants and small children.

Community agencies and infant and early childhood mental health

Data for this scan were collected by surveys (with 13 community agencies¹¹ and five school boards), conducting three key informant interviews with professionals with varying areas of expertise relevant to infant and early childhood mental health, and a focus group with 12 consolidated municipal service managers and their special needs resourcing partners. Information from the surveys and interviews provide a snapshot of school and community-level promotion, prevention and intervention efforts for the mental health of infants and young children, from the perspective of those responsible for providing relevant supports. Participants were asked whether the agency has a definition of infant and early childhood mental health, questions about the service user population and the types of services offered (and whether they focus on promotion, prevention or intervention), and whether a dedicated infant and early childhood mental health plan or strategy exists in their setting (which includes information about how risk is assessed, the degree of staff training in infant and early childhood mental health, access to infant and early childhood mental health specialists, wait times, and funding). Participants were also asked to provide their perspectives on what an ideal infant and early childhood mental health system would look like.

Overarching themes from respondents suggest:

- The type of early mental health care available to young children in direct service settings varies among agencies. The extent to which these services are accessible also varies.
- Agencies use a variety of screening and assessment instruments to understand family need and develop treatment plans.
- The level of training among staff delivering services varies, and there is an inconsistent understanding of what infant and early childhood mental health means.
- Agencies typically have, or are working on, referral arrangements with other agencies to provide complementary and mental health specialty services, with varying degrees of coordination between schools and community partners. Special Needs Resourcing funding appears to help facilitate internal agency referrals.
- Internal referrals appear to be relatively fast but average wait times for assessments and mental health services were reported at four to six months, with wait times ranging from 6 weeks to a year.

¹¹ 7 children's mental health agencies, 2 child welfare agencies, 2 community resource and health agencies and 2 public health agencies



Availability of programs and services

Community mental health agencies provide a variety of infant and early childhood mental health interventions that include some but not all of the following: home visits, trauma assessment and treatment, attachment therapy and programs to address developmental vulnerability. Some agencies have invested in evidence-informed programs such as Triple-P, the Incredible Years, Terrific Toddlers, Parenting for Life and the Community Parent Education Program. Community agencies report that having Special Needs Resourcing¹² funded services within their organization facilitates referrals and enhances education of staff and clients about where to go for further support for mental health problems.

Many of the responding community agencies offer both prevention and intervention programs, including provincially funded and mandated programs such as Healthy Babies, Healthy Children (which includes home visiting), infant and early childhood development programs, speech and language development support, and Ontario Early Years Programs, Parent and Family Literacy Centres where a wide variety of programs from parenting to literacy (e.g. Mother Goose) may be offered. There is great variability in the range of prevention and intervention services delivered in communities. The survey used for the environmental scan did not focus on the underlying reasons for how decisions about program provision affect variability and access, and further research should investigate whether these differences are due to provincial policy, provincial funding, absence of guidelines, community needs and preferences and/or the availability of community resources.

School board participants also reported wide variability in services provided, although the survey did not explore underlying reasons for this. Therefore, further research should be conducted to clarify why there are inconsistencies, and the resulting effect on families. Some schools have access to an extensive range of supports and consultants including specialized early years teams and educators, teachers with experience supporting children exhibiting mental health problems, social workers, special education, Applied Behavioural Analysis consultants, speech and language specialists, and consulting psychologists or other community resources and agencies. All of the school board participants reported having the option to refer the child and parent/caregiver to an outside resource such as a community clinic, or internally to a special education team. In-school support teams usually develop school-based interventions that bring together relevant school staff and, ideally, parents/caregivers to identify suitable interventions, accommodations or alternatives.

Perception of prevalence, and methods to assess children's needs

Focus group participants reported that generally, in their estimations, while less than 5% of the overall childcare population is affected by mental health challenges, 21-50% of children with special needs present with mental health challenges. Community agencies and school boards reported that aggression, anxiety, and attention-deficit disorder are the most common mental health problems for which children and families require support. Community agencies reported that they use various methods to determine if a child under six years old might be at risk. Two public health agencies use three or more validated instruments, five mental health agencies use the Ages and Stages Questionnaire, and several other agencies rely on staff expertise rather than validated instruments.

¹² <http://www.edu.gov.on.ca/childcare/specialneeds.html>



School board representatives were concerned about the potential risk of over-diagnosing children through the disjointed use of tools and the subjectivity in interpreting the data. However, they also reported a perceived increase in the prevalence of mental health problems among children under six, and respondents generally acknowledged that new mental health strategies are needed. Most indicate that their board-level mental health strategy will have a focus on the early years, but it's not clear when this will happen, and to what (if any) extent experts on early year's mental health will be involved in the process.

Community/school stakeholder perspectives on developing mental health capacity and support

Community agency and school board perspectives on infant and early childhood mental health care in Ontario illustrate that inconsistency is a common theme, and is a barrier to strengthening services for families. Some agencies use validated screening tools, but most do not. Service areas have a range of effective services for families to access for infant and early childhood mental health support, but most communities do not have the care pathways and transition points that families need to navigate the system for their children at all ages, let alone those between 0 and 6 years of age. As well, helping families navigate from one system to another is a need that has been identified but is not often available.

Service provider priorities

Through the environmental scan, school boards and community agencies provided their perspective on what steps should immediately be taken to improve infant and early childhood mental health care in Ontario. The participants in the scan are not representative of all relevant stakeholders, but the recommendations highlight areas that policy could help move practice forward in Ontario and contribute to improved child outcomes. Common themes in participant responses about recommendations were:

- Agree on a standard definition of infant and early childhood mental health.
- Implement strategies to reduce wait times for families to access infant mental health supports.
- Standardize which screening and assessment tools are used.
- Enhance collaboration among infant, child and family serving agencies, with clear transition points.
- Provide ongoing training for staff and an online community network to share knowledge.
- Increase access to free services for caregivers in the same agency settings where their children receive services.
- Strengthen collaborations between health-care providers and child care professionals.
- Enable a single point of access with one referral to all required services.

Stakeholders also recommended inclusion of infant and early childhood mental health as a core curriculum in colleges and university training, and that competencies be included in the licensing, registration and renewal processes within regulating bodies. At minimum, they recommended that those who work with children should:

- Have knowledge of healthy development.
- Have the ability and skills to identify when development goes off track.
- Know where community resources are and what they have to offer.
- Be able to facilitate appropriate and timely referrals.



While community, school and service provider perspectives are helpful in identifying potential areas to enhance/introduce supports, consultations with family members should focus on whether these are, in fact, priority changes from families' perspectives.

Sector/system challenges

While Ontario has many programs and services that address infant and early childhood mental health, the environmental scan showed inconsistencies in the way services are provided across the province. Research evidence along with practitioner expertise, and the views and preferences of families can, together, provide a strong foundation to guide policy development and decision-making. A number of system-level challenges are summarized in this section, and each of these provides a potential entry point to ensure the meaningful engagement of families together with service providers to help identify, prioritize and implement solutions.

Fragmented and siloed services

The responsibility for policy, programs and services related to infant and early childhood mental health spans multiple ministries in Ontario. While children and families can access this range of programs and supports simultaneously, services funded through the different ministries often exist in silos, which can be confusing for families (Ministry of Community and Social Services, 2004). The critical emphasis on infant and early childhood mental health across each of these sectors is often absent or less prominent than it could be to maximize impacts and optimize return on government investments (Centre for Addiction and Mental Health, Public Health Ontario & Toronto Public Health, 2013).

Similar to child and youth mental health services in the school age years, infant and early childhood mental health services lack consistency, continuity and alignment among research, policy, and practice in the areas of promotion, prevention, assessment, diagnosis and treatment in the various sectors intended to respond to health needs. For example, research demonstrates that blended or inter-generational programs are best practice (Shonkoff & Fisher, 2013), yet few programs that use this approach are evident in Ontario.

There are challenges identifying and adequately addressing infant and early childhood mental health problems in the current system because there is a mismatch between the holistic needs of families and the child/infant and the discrete services funded by specific ministries. For example, although successful infant and early childhood interventions are delivered within the context of the caregiver-child relationship (Zeanah, 2005), Ontario services are not set up to acknowledge the infant-caregiver dyad as the client; instead, each is seen as its own discrete entity and is serviced as such. For example, MCYS identifies eligible clients as children and youth from birth through 18 years and MoHLTC provides adult mental health and addictions treatment, but does not typically provide community-based children's mental health services. This structure requires that parents/caregivers navigate different service systems, one focused on adult health and the other on child and family services. Instead, effective infant and early childhood mental health policy should facilitate the treatment and/or support of both parents/caregivers and child in the same location, using a two-generation model for adults with mental health or addiction problems who are also caring for the needs of a child with behavioural problems (Niccols et al., 2012).



Reorganizing the way in which services are provided to align with the needs of families accessing services (rather than funding structures), and integrating infant and early childhood mental health across ministries would go a long way towards improving clinical outcomes and reducing costs. Although this is a model that is becoming increasingly common internationally (Statham, 2011), very few programs in Ontario offer integrated services. Two notable exceptions are *Breaking the Cycle* in Toronto and *New Choices* in Hamilton.

Breaking the Cycle: Mothercraft, partnership, and the continuum of care

Breaking the Cycle (BTC) is an early intervention program in Toronto that serves infants and young children who are at-risk for mental health problems due to maternal substance abuse and related problems (e.g. the presence of mental health issues in parents/caregivers; domestic violence). This program is delivered as a partnership between nine agencies that includes child welfare, children's mental health, substance use treatment, adult mental health and health services. The program promotes positive child outcomes in families where a parent/caregiver struggles with addiction issues. BTC is a single-access model and includes street outreach, community clinic bases, and home visitation. One of the BTC partners, Mothercraft, provides mental health services for infants and children under 6 years, and uses the *Zero to Three* definition of infant and early childhood mental health and provides programs that align with the continuum of needs as defined in *A Shared Responsibility – Ontario's Framework for Child and Youth Mental Health*.

Shortage of high quality, affordable childcare

Non-familial care providers play a critical role in infant and early childhood development. Almost 70% of Ontario's parents of children under 6 years are in the paid workforce, yet there are licensed childcare spots for only 20% of children (Employment and Social Development Canada, 2012). A key system challenge, then, is the insufficient number of quality childcare placements and the scarcity of skilled and trained workers to educate and care for Ontario's youngest children.

Although the province is working to address this, the shortage of placements and qualified workers introduces another level of complexity in the lives of parents/caregivers of children who have significant mental health problems. Service providers who participated in the environmental scan for this paper indicated that aggression, impulse control and anxiety were common among the children they see in their programs. Such children may have difficulty being accepted into childcare, and in some situations, are encouraged to remain in paid childcare placements rather than enter a publicly-funded full-day kindergarten program. The Ontario Ministry of Education now offers a full day of learning where all children from almost 4 years of age can attend full time, free of charge. A growing concern from the field is that there are very few centres that can continue to offer childcare for 4- and 5-year-olds when full-day kindergarten programs are offered. Children who do not attend school because of mental health difficulties will have even fewer childcare options available, creating further stress for families and limiting these children's opportunities for positive growth and



development. There are effective, evidence based models of mental health consultations to child care that have been shown to have not only positive effects for the children, staff and parents, but also to be of significant cost benefit (Duran et al., 2009).

Limited access to workforce development opportunities

It is critical that everyone working with Ontario's infants and children is equipped with a strong foundation of knowledge in child development and mental health literacy. Despite the existence of Special Needs Resourcing and skilled resource teachers tasked with providing ongoing support to infants and children requiring special supports, access to this type of specialized mental health support is variable and wait times are reported to be lengthy (sometimes, over a year). Early identification of mental health problems in infants and young children must occur across settings (including educational, childcare and in-home care environments), and must involve both formal care providers and professionals working in children's treatment centres, infant/child development programs, community-based mental health, childcare and Special Needs Resourcing, full day kindergarten, primary care and community programs.

Limited monitoring and measurement

An effective monitoring system is needed to assess whether services and investments are actually changing mental health outcomes for children (Boivin & Hertzman, 2012). A sound evaluation of policy and practice efforts requires both monitoring (information on how a particular population of children is doing over time) and measurement (assessments of individual children at a number of points in time). Mental health and illness are difficult to measure generally due to the complexity of contextual influences (Call et al., 2013) and there is need to develop validated and reliable screening tools for infant and early childhood mental health that provide a complete picture and that can contribute to ongoing monitoring.

At the population level, the Early Development Instrument (EDI) measures each child's developmental status in five domains of development prior to entering grade one (Janus & Offord, 2007). The data is then aggregated to provide a provincial picture of development in the early years. The uptake and use of aggregated EDI data at various levels (such as school, school board, city or community) indicates that there is readiness and appetite for monitoring child development for populations of children over time. Since the EDI is the only population measure of child development in Ontario (other data at a similar level are academic, such as Grade 3 and 6 achievement), it provides a limited snapshot of the developmental health of Ontario's children. Other data is available for children who receive intervention, but that data is not linked with other information. As well, since not all children who need services receive them, this source of information does not provide a full picture of what the system needs truly are.

There are very few mechanisms to share data and communicate research findings across ministries. Further, processes by which researchers can access this data are not well defined. Though there are many existing data systems (e.g. Better Outcomes and Registry Network data, Healthy Babies Healthy Children screening), they are not linked together, so the relative effectiveness of any intervention is difficult to determine. These existing monitoring and evaluation tools could



be used to inform policy if there were a way to roll-up data provincially, and use it for regular community-level reporting.

National/international context

We conducted a scan of infant and early childhood mental health policies to identify what other provinces and countries are mandating to support infant and early childhood mental health. Australia, England, Scotland, the United States, Michigan, Arizona and New Zealand were chosen from a sample of Organization for Economic Co-operation and Development (OECD) countries and their states. These jurisdictions are not necessarily leaders in the field and do not represent a random sample of settings comparable to the Ontario context. However, they do have publicly available policy documents in English that pertain to infant and early childhood mental health. We also considered the federal Canadian government and other provincial government policy. The information was gathered from websites of national, state or provincial health ministries. See Appendix 4 for a summary of policy directives elsewhere and links to relevant documents.

In our selected search of jurisdictions outside of Canada, we found:

- The degree of policy development specific to infant and early childhood mental health support varies. Some countries have recently developed national mental health plans that include infant and early childhood mental health, New Zealand in particular. Others have isolated pockets of policy that is not integrated with policy development across sectors.
- England, Scotland and New Zealand are setting strong direction for services.
- The most thoroughly developed policy includes attention to promotion, prevention and intervention, and these are tied to mechanisms to support monitoring and evaluation.
- The more developed policies, in particular those that bring various ministries together, reflect a population health approach.
- New Zealand represents a model of integrated care that is centrally mandated (Ministry of Health, 2012).

New Zealand's national promotion program "SKIP - Strategies with Kids, Information for Parents" shows great promise (<http://www.skip.org.nz/>). SKIP is based on sound research about effective parenting, and targets infant and early childhood development by increasing community capacity to support parents. A program evaluation using mixed methods identified critical success factors at levels of family, community and program (Clements, 2009).

Within Canada, other provinces and communities show evidence of effective infant and early childhood mental health programs (see, for example, St-Andre, Reebye & Wittenberg, 2010), but there is a lack of well-organized, policy-driven, integrated provincial or national-level efforts. Only four provinces have a provincial strategy for child and youth mental health and none focus on the specific needs of infants and young children aged 0-6 years (Kutcher, Hampton, & Wilson, 2010).



Ontario ministries are already working hard to improve the mental health system, but they should ensure deliberate policy development specific to infant and early childhood mental health that encompasses infant and early childhood mental health promotion, prevention and intervention. We are well poised in our province to build on the success of both national and international policy models, especially since we are in year four of the 10-year Mental Health and Addictions Strategy, and are currently in the midst of a major system transition.

An ideal framework: Promotion, prevention and early intervention

“An effective approach to promoting healthy social and emotional development must include equal attention to the full continuum of mental health services—promotion, prevention, and treatment—and to improving the capacity of the system to deliver these services.”
Zero to Three, 2007, pg. 1.

Best practices for policy development

The WHO (2004) and the Institute of Medicine (2000) assert that promoting positive mental health and preventing mental health problems are critical components of a system of care. Effective international infant and early childhood mental health policy encompasses a full continuum of promotion, prevention and early intervention strategies, targeted appropriately to the specific needs of families, schools and neighborhoods (Braddick, Carral, Jenkins & Jané-Llopis, 2009).

The environmental scan demonstrated that while infant and early childhood mental health is vitally important, the current system is hampered by:

- inconsistencies in screening and assessment
- fragmentation of services across ministries without appropriate coordination
- a lack of focus on the infant-caregiver dyad as the client
- shortage of high-quality accessible child care
- limited early years workforce development
- limited community and provincial-level monitoring and measurement

These are complex and difficult problems, but the literature and effective practices in the field can guide improvements that can ameliorate how the system supports families. This section provides overarching policy development best practices and a conceptual framework to organize services that promote mental wellness, prevent emerging mental health problems and provide interventions that meet family needs.



The work of Waddell (2007), Knitzer (2000) and Northern Ireland (HSC Public Health Agency, 2013) indicate the following set of strategies as foundational for effective infant and early childhood mental health policy:

- Promote the emotional and behavioural well-being of all young children.
- Prevent mental health disorders by strengthening the emotional and behavioural well-being of children whose development has been threatened by environmental or biological risk(s).
- Support parents/caregivers and families of young children with accessible and coordinated services and resources to nurture the mental health of all.
- Expand the competencies of familial and non-familial caregivers, health professionals and allied social services to promote the well-being of young children and families.
- Increase resources for early identification and intervention of infant and early childhood mental health disorders to reduce distress and impairment.
- Monitor outcomes to ensure effective and efficient use of public resources.

The most successful infant and early childhood mental health services focus on the parent/caregiver-child relationship as a key platform for change, and works from a strengths-based approach that supports and builds capacity in parents/caregivers (Zeanah, 2009). They also provide early intervention at an appropriate intensity based upon the unique needs of each child, family, classroom, centre or community (Miles et al., 2010).

In the UK, this last point is implemented as a stepped-care approach, such as is being developed in Northern Ireland, or a “tiered approach” (Leadsom, Field, Burstow & Lucas, 2013). In a tiered model, service delivery is aimed at developing integrated care pathways with a focus on building the capacity and skills of parent/caregivers, as well as the workforce. The tiers are not categorical cutoffs, but fluid, with movement between each tier as programs and services respond to the changing needs of the infant/young child and parent/caregiver, and some programs address the need of multiple tiers. The tiers provide a frame of reference by which to organize policy efforts, programs and services around the needs of infants and young children aged 0-6 years, and their families.

In a tiered approach, infants and children are provided the appropriate level of care at the earliest point to meet their assessed need, with the flexibility for families to move up or down the tiers as their need changes (Northern Ireland Evidence Paper, 2013)

To develop into an ideal system, essential elements need to be addressed in Ontario, including:

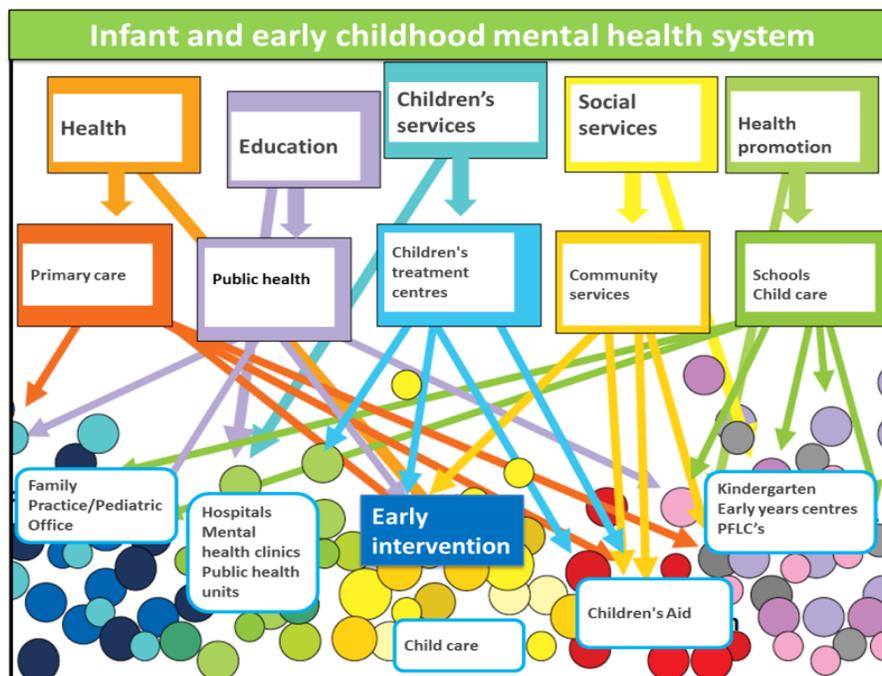
- Consistent with the MCYS’s common service framework, families should be able to access family-centered infant and early childhood mental health support regardless of geography or socio-economic circumstance.
- Following the “every door is the right door” principle, there should be formal community-level service integration so there is a seamless approach for families.

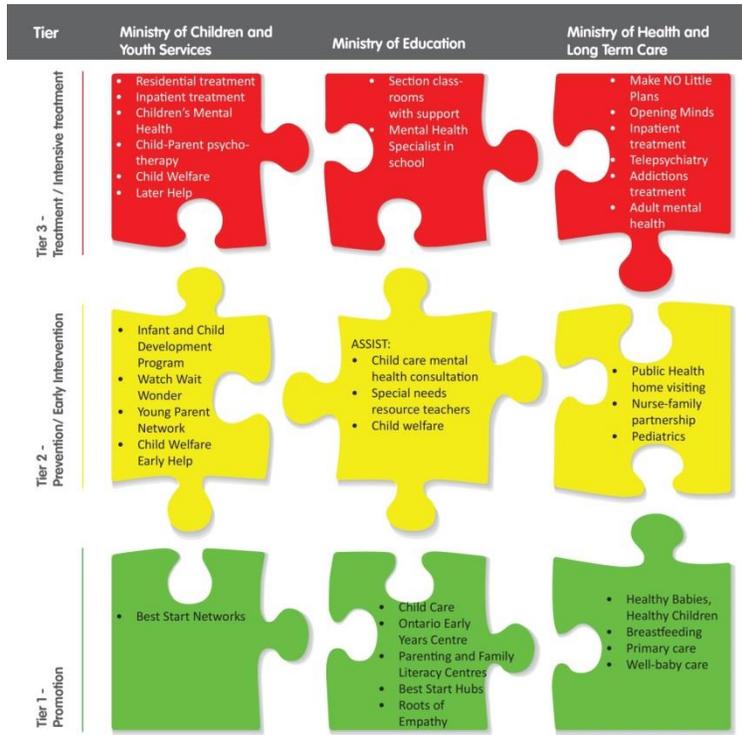


- Given the importance of the parent/caregiver and child relationship, there needs to be joint planning across sectors at the child, family and system level to ensure that the family is considered as the unit of care.
- Service providers at each tier level (i.e., promotion, prevention/early intervention, treatment/intensive treatment) should have adequate training and knowledge in infant and early childhood mental health.

Towards a more integrated system of care and intervention

There are currently a variety of provincial programs that support infant and early childhood mental health promotion, prevention and intervention, but as yet there is no system of care or communication between and among the services. The following summaries explain the fundamental goals of each of the three tiers and considerations in buttressing the promotion, prevention and intervention work already taking place in Ontario.





Tier 1: Promotion (universal support)

The goal of infant and early childhood mental health promotion is to create environments that support optimal development, mental health and resilience. From a public health perspective, mental health promotion encompasses mental wellness and resiliency, promoting protective factors and mitigating risk factors (Ministry of Health and Long-Term Care, 2013). Mental health promotion is about positive mental health, mental wellness and resiliency for the whole population including infants and young children. Effective mental health promotion requires that communities proactively promote well-being and address risk factors, rather than only reactively treating disorders (Field, 2010; Ministry of Health and Long-Term Care, 2013).

Promotion strategies are universal, and include the provision of resources, information and support to parents/caregivers and care providers at a population level. This can involve evidence-informed, population-based parenting programs, a clear information strategy to provide parents and caregivers and the broader public with knowledge and resources on child development, and activities that promote healthy social and emotional development (Pordes Bowers, Strelitz, Allen & Donkin, 2012).

Promotion efforts also ensure a basic level of infant and early childhood mental health literacy so all those working with children have the key competencies, skills and knowledge required to promote mental health and social and emotional development in our children. Communities with effective promotion approaches have strategies and systems in place to ensure access to knowledge and skill development for all parents/caregivers and childcare providers, and make use of



natural, community resources with universal access for all families (e.g. libraries, community centres and drop-in programs). System-level promotion strategies include ensuring access to high-quality childcare that is affordable and culturally responsive. Promotion efforts are proactive in reaching caregivers and do not depend on the caregiver reaching out first. In Ontario, ensuring these resources are available to all families requires that multiple ministries across health, education and child and youth services work together (Make No Little Plans, 2013).

Communities in Ontario have implemented various strategies to give families access to information, and regional initiatives such as Halton's *Our Kids Network*, which has adopted collaborative community approaches to promotion efforts. Public health departments in Ontario communities are connected with local service providers and actively promote key messages related to infant and early childhood mental health. Public health can play an important role to ensure common approaches to messaging around infant mental health and can be an important voice in driving consistent good practice across Ontario.

Tier 2: Prevention/early intervention

The goal of prevention and early intervention is to prevent problems or disorders in at-risk groups, promote protective factors, minimize the impact of mental health problems, and prevent symptoms from worsening. Prevention and early intervention can be more effective and less expensive than addressing infant and early childhood mental health issues after they become more serious (Field, 2011).

This tier encompasses both primary and secondary prevention, which are distinguished as follows:

- *Primary prevention* is intended for groups of children and parents who are considered to be at-risk due to the presence of risk factors at the child, family or community level, and occurs before any symptoms in the child or the child-parent/caregiver relationship are identified (Miles et al., 2010). Primary prevention programs are population-based and intended for recipients who have more challenges to contend with, and/or who are more at-risk than others for poor outcomes (Leadsom, Field, Burstow, & Lucas, 2013).
- *Secondary prevention* is intended for infants and young children exhibiting symptoms of mental health problems, and also within the context of observed difficulties in relationships with caring adults. Secondary prevention intervenes as soon as symptoms are observed in order to prevent symptoms from worsening or developing into a mental health disorder (Miles et al., 2010)

In an ideal system, prevention programs and services are designed and delivered in response to a thorough understanding of risk factors that are present at the child, family or community level. They are organized with the REAL-LIFE needs of families in mind, and seek to understand and address the barriers families have in accessing universal programs and services, including language, cultural preferences and transportation (Barnet & Haskins, 2010). Ideally, prevention and early intervention is provided in the setting where the child spends the most time and has the most significant relationships, such as in the home or daycare (Zeanah, 2009).

A number of evidence-informed programs are being implemented in Ontario (such as Incredible Years, Circle of Security, Watch Wait and Wonder and Triple-P) but these have not been implemented uniformly across settings. Home visitation



is an evidence-informed primary prevention strategy provided to prevent disorders and promote protective factors (Peacock, 2013). It is available for families with general risk factors, such as young families living in poverty. In Ontario, families who screen high on the Healthy Babies Healthy Children screening tool and an individual assessment are considered eligible for home visitation support services.

The Nurse-Family Partnership is another evidence-informed, cost-effective program which has a proven track record of prevention of child maltreatment (Eckenrode et al., 2010; Olds et al., 2013). Evidence-informed programs like home visitation and the Nurse-Family Partnership, which is available in Hamilton, have evidence of improved outcomes for the families, but such programs are not available in all of the communities that might identify them as useful approaches to use in their infant mental health system.

Tier 3: Treatment/intensive treatment

The goal of infant and early childhood mental health treatment and intensive intervention is to reduce the severity of disorders, improve functioning and prevent the development of further mental health conditions. Treatment is meant for infants and young children, as well as their primary caregivers, who meet diagnostic criteria for mental health disorders and/or who exhibit significant symptoms or disturbances without having a formal diagnosis. The infant-parent/caregiver relationship is a primary focus of treatment and intensive treatment for very young children; even when the infant-parent/caregiver relationship is not a source of difficulty, this dyad is often the intervention platform (e.g., when treating anxiety, autism etc.). Improved functioning and preventing further problems from developing is the central goal of treatment.

Infants and young children who exhibit significant behavioural problems require treatment that is developmentally informed, culturally appropriate and evidence-informed (Cohen, Oser & Quigley, 2012). Treatment within an ideal system is provided by highly-trained personnel with infant and early childhood mental health specialization. Services are organized around the needs of families using an integrated and coordinated approach, bringing services to the child and family where they are (Zeanah, 2005). Treatment efforts should focus both on symptom reduction and the development of skills and coping strategies.

Interventions often require more than the support of a single provider (Poulin, 2010). Children living in conditions with multiple and cumulative risks (e.g. poverty, child welfare involvement, single parent homes, caregivers with addictions, subsidized housing) require complex, collaborative supports from multiple systems including child mental health, child welfare, early education and adult mental health and addictions (VanDenBerg, 2008). Comprehensive interventions can require a combination of centre-based care (e.g. a high-quality day care), home visitation and participation in effective parenting groups (Schrader-McMillan, Barnes & Barlow, 2012). Specific attention should be given to connecting to adult services when those services are key to child well-being, for instance mental health services, employment, housing, addictions and primary care.



The MCYS system transition is helping lay the groundwork for the availability of consistent services and common processes in Ontario service areas among child and youth mental health service agencies, which should include care pathways. This is a potential building opportunity to bridge pathways to other critical sectors with a direct stake in infant mental health and early childhood development. *New Choices* in Hamilton, Ontario is a centralized “one-stop shop” single access and integrated model of service delivery that provides multiple services in a supportive environment for substance-using women and their young children. A pilot evaluation of the model indicated that it contributed to decreased use of substances, improved maternal health and nutrition, enhanced opportunity for employment, increased awareness of and access to other resources, enhanced parenting skills, and improved child behaviour and development (Sword, Niccols, & Fan, 2004).

Behavioural support: a community approach

The Region of Thames Valley has developed a strong network of partnerships between Special Needs Resourcing and other infant and early year’s supports and services, including mental health and wellness. The region has developed a service guide to coordinate services for families with children ages 0-6 years, with inter-agency protocols. The protocol and guide are comprehensive, and put the family at the centre of decision making (including determining who will act as the Family Team Coordinator). A High-Risk Community Plan Process is put in place for children under 24 months of age who have been identified as living in a high-risk environment. The service coordination guide provides concrete, step-by-step instructions for direct service providers. The protocol states a commonly shared vision of service coordination for the three counties in the Thames Valley Region, with a common mission, guiding principles, roles and responsibilities, and service coordination processes.

Building on Ontario’s strengths

The three-tier model of promotion, prevention and intervention is well-established in various health fields. It helps organize the many existing programs and practices already available in Ontario. However, it also illustrates that the various shortcomings of current infant and early childhood mental health services are partially a result of cross-Ministerial fragmentation and a lack of a coordinated government-wide mental health policy that explicitly addresses infant and early childhood mental health through a shared definition and commitment to serving the child-caregiver dyad. The following recommendations identify a number of opportunities for policy makers to take discrete, achievable steps that will lead Ontario to a stronger and more effective mental health system that meets families where they are.



A community model of care

The Halton community has integrated early year's mental health services using guidelines from the Infant Mental Health Promotion Project, the *Zero to Three* definition of infant mental health and existing MCYS policy. The community brought together agencies that work with infants and families to develop guidelines for early years services, including roles, responsibilities, and service pathways. The guidelines help service providers in various service settings:

- determine the type and level of intervention required for a family
- know the continuum of available early years mental health programs and services
- understand roles and boundaries within the continuum of services
- work collaboratively with early years clients
- provide timely and effective service for infants, young children and families

Halton's community model works to ensure a coordinated, collaborative and integrated system of early years mental health services and supports that address mental health services for infants and young children.



Conclusion and recommendations

There are clear steps Ontario can take to make infant and early childhood mental health a formal priority in communities across our province. Infant and early childhood mental health and wellness is not the purview of one ministry or group of specialists. It is the business of all Ontarians, and improving services and outcomes requires genuine collaboration involving families, service providers and policy makers. The following recommendations are informed by infant and early childhood mental health stakeholders in Ontario, the research literature and the experience of the authors. While input from individual family members was sought at various points throughout this process, the voice of families has not been prominent throughout the writing of this document. A group of family members (n=6) has, however, provided their feedback and suggestions as they relate to the draft content and recommendations and their input has been incorporated into the final version of this paper. While these recommendations offer early steps we can take to build a more integrated system of supports to enhance infant and early childhood mental health, their implementation will need to be informed more directly by meaningful, ongoing and committed engagement with parents/caregivers.

Leveraging current policy

Current mental health strategies within and across ministries provide an excellent context within which to integrate a life course approach to mental health and well-being for infants, young children and their families. For example, MCYS's *Moving on Mental Health (MoMH)* can specify the unique considerations for 0-6 programs and services within the description of core services within their accountability documents. Further, MoMH can reinforce the responsibility of lead agencies to ensure an adequate focus on infants and young children by embedding specific elements into accountability agreements and requiring the engagement of 0-6 providers and families in clarifying and improving pathways to care.

Similarly, the Ministry of Education's School Mental Health ASSIST's activities can include the needs of children under age 6 years in board- wide mental health strategy development, develop 0-6 professional learning modules within mental health literacy initiatives such as *Supporting Minds: an educators guide to promoting students mental health and well-being*, and include 0-6 resources in the mapping of pathways.

Rather than require new resources, infant and early childhood mental health outcomes can be reinforced through existing MOHLTC initiatives such as Healthy Kids, Smoke Free Ontario, screening for postpartum depression and breastfeeding support. As the leadership for Ontario's *10-Year Comprehensive Mental Health and Addictions Strategy* transitions to MOHLTC for years 4-10, there is an opportunity to expand the strategy beyond a focus on mental illness and include the full continuum of promotion, prevention, early identification and treatment. By adopting a life course approach to mental health, the strategy would be well-positioned to address the parent/caregiver-child relationship and ensure an intentional focus on the mental health and well-being of parents and caregivers themselves (including pregnant mothers). Expanding the focus in this way would help take advantage of opportunities to stitch existing programs into a more consistent whole.



Recommendations

Spanning across government ministries, the following recommendations provide opportunities for immediate policy development while establishing the foundation for longer-term broader system change. They have been crafted to build on existing government investments and leverage mental health policies and strategies currently underway.

- 1) **Engage families and caregivers along with service providers in:**
 - a. the development and implementation of infant and early childhood mental health policy development and system planning.
 - b. the expansion, development and implementation of information and resource systems that contribute to infant and early childhood mental health promotion.
 - c. developing care pathways among infant and early childhood mental health supports that can help families navigate resources and supports.
 - d. the development and provision of education and training on infant and early childhood mental health for service providers.

- 2) **Adopt and promote a common definition of *infant and early childhood mental health* across all sectors including child health, mental health, child development, education, youth justice and child welfare.**

Respectfully, the authors propose the *Zero to Three* definition presented in this paper:

Infant and early childhood mental health, sometimes referred to as social and emotional development, is the developing capacity of the child from birth to five years of age to form close and secure adult and peer relationships, experience, manage and express a full range of emotions, and explore the environment and learn – all in the context of family, community, and culture (Zero to Three: Making it Happen, 2012).

- 3) **Develop infant and early childhood mental health care systems that include promotion, prevention and intervention in all service areas.** The system of care should:
 - a. ensure families have easy access to the information and resources required to support the mental health, wellness, resiliency and healthy development of their infants and young children.
 - b. enhance prevention for all children and families, making use of existing community resources and natural infrastructure.
 - c. leverage natural connections between parent/child and community/system to address infant and early childhood mental health needs all in one place.
 - d. ensure the provision of targeted supports and services for high-risk groups.
 - e. ensure the provision of evidence-informed interventions for infants and their families, bringing services to where they are (home, child care, etc.).
 - f. support infant-caregiver interventions and inter-generational treatment models in order to provide effective intervention for parents/caregivers struggling with mental health and addictions issues.
 - g. realign resources and target funds towards evidence-informed interventions and treatment.



- 4) **Train the infant and early childhood mental health workforce, recognizing the many roles and sectors with a direct stake in infant and early childhood mental health.** This can be accomplished through building on existing in-service training support provided in the province to develop coordinated workforce training strategies, including:
 - a. Use standards and guidelines to ensure that all those working with infants and young children develop the skills and competencies that promote mental health in all children, at the level of specialty required for their role (awareness for all; literacy for some; expertise for a few).
 - b. Invest in the development of infant and early childhood mental health professionals.
 - c. Ensure all those who work with infants are able to recognize risk factors and refer families to appropriate supports.
 - d. Establish infant and early childhood mental health communities of practice, practice leads and on-site coaches to work at a local level.
 - e. Include infant and early childhood mental health as core curriculum in college and university training across all professions for those who will work with infants, children and young families. Develop a mechanism to ensure that curriculum is continuously updated with the latest knowledge on factors that influence development relevant to the different disciplines.
 - f. Integrate infant and early childhood mental health competencies within the licensing, registration and renewal processes with regulating bodies and colleges.

- 5) Service areas would benefit from using locally generated data to inform decision making to strengthen services. Therefore, there should be efforts to **strengthen infant and early childhood mental health data collection, monitoring and research.** Specifically:
 - a. Enhance infant and early childhood mental health data sharing and communication among ministries.
 - b. Support a dedicated provincial initiative for researchers to investigate infant and early childhood mental health in a policy-oriented context with linkage, sharing and expansion of other data sets and surveillance systems.
 - c. Support the development of early identification systems for infants using evidence-informed tools and build into these systems data collection and reporting processes that can be used to monitor and evaluate services and interventions at a health systems and population level.
 - d. Maximize the impact of existing infant and early childhood mental health monitoring and evaluation tools to inform policy, including provincial roll-up of data and regular community-level reporting. Support the development of new tools where needed.
 - e. Evaluate government's role in developing effective infant and early childhood mental health policy.

- 6) **Adopt a government-wide approach to infant and early childhood mental health and designate a ministry to coordinate efforts.**
 - a. Establish a provincial, multi-sector, multi-disciplinary advisory group that includes meaningful family engagement to advise and track progress on infant and early childhood mental health policy



development and implementation.

- b. Embed infant and early childhood mental health principles within a decision support/policy assessment tool (similar to the Health Equity Impact Assessment Tool), for use within government to ensure that the specific needs related to maternal health, children and families are considered and addressed within all policies and programs.
- c. Identify clear roles and responsibilities required within the system, within and across ministries.

The way forward

Significant changes can happen in Ontario's current system without incurring substantial new costs. Such changes can move us towards a life-course approach and committing to a government-wide agreement on infant and early childhood mental health and wellness. Building on the proposed ideal framework, it is essential to develop partnerships between systems and shift resources to evidence-informed interventions. There are opportunities to leverage existing strategies by scaling up, building on or integrating and bringing interventions to the natural setting where children spend the most time and have the most significant relationships (Zeanah, 2009). By promoting and encouraging local development of integrated care systems within service areas and across ministries, existing public investment can be better used with more collaboration and less duplication.

In an ideal system, comprehensive infant and early childhood mental health policy creates universal access to conditions that support early child development, and works at all levels – for families, providers, community and province (Boivin & Hertzman, 2012). Instead of relying on reactive interventions, effective policy creates structures that facilitate universal access to promotion, prevention and early intervention strategies, provides evidence-informed treatment, and embraces a life-course approach to mental health for all children, including those 0-6 years of age. A prosperous and vibrant Ontario depends on the health and well-being of its youngest members and their families.

“A system informed by the science of infant and early childhood mental health would invest much earlier in the prevention of adverse childhood experiences by meeting basic health needs and offering high-quality early care and education programs. Such a system would actively promote infant and early childhood mental health through practices such as routine social-emotional development screening for infants, depression screening for pregnant women and new parents, and home visiting for families of infants and young children. And the infant and early childhood mental health informed system would use all available resources (and increase funding where necessary) to train an infant and early childhood mental health workforce and assure access to infant and early childhood mental health services.”



References

- Barlow, J., Smailagic, N., Huband, N., Roloff, V., Bennett, C. (2012). Group-based parent training programmes for improving parental psychosocial health. *Campbell Systematic Reviews*, 15. DOI: 10.4073/csr.2012.15
- Barnett, W. S., & Haskins, R. (2010). Investing in young children: New directions in federal preschool and early childhood policy. *Washington, DC: The Brookings Institute*, 1, 10.
- Braddick, F., Carral, V., Jenkins, R., & Jané-Llopis, E. (2009). *Child and Adolescent Mental Health in Europe: Infrastructures, Policy and Programmes*. Luxembourg: European Communities.
- Boivin, M., Hertzman, C. (Eds.). (2012). *Early Childhood Development: adverse experiences and developmental health*. Royal Society of Canada - Canadian Academy of Health Sciences Expert Panel (with Ronald Barr, Thomas Boyce, Alison Fleming, Harriet MacMillan, Candice Odgers, Marla Sokolowski, & Nico Trocme). Ottawa, ON: Royal Society of Canada.
Available from: https://rsc-src.ca/sites/default/files/pdf/ECD%20Report_0.pdf
- Boyce, W. T. (2007). A biology of misfortune: Stress reactivity, social context, and the ontogeny of psychopathology in early life. *Multilevel dynamics in developmental psychopathology: Pathways to the future*, 45-82.
- Braddick, F., Carral, V., Jenkins, R., & Jané-Llopis, E. (2009). *Child and Adolescent Mental Health in Europe: Infrastructures, Policy and Programmes*. Luxembourg: European Communities.
- Breslau, N., Koenen, K. C., Luo, Z., Agnew-Blais, J., Swanson, S., Houts, R. M., ... & Moffitt, T. E. (2014). Childhood maltreatment, juvenile disorders and adult post-traumatic stress disorder: a prospective investigation. *Psychological medicine*, 44(09), 1937-1945.
- Bufferd, S. J., Dougherty, L. R., Carlson, G. A., Rose, S., & Klein, D. N. (2012). Psychiatric disorders in preschoolers: continuity from ages 3 to 6. *American Journal of Psychiatry*, 169(11), 1157-1164.
- Calman, R.C., Crawford, P.J. (2013). *Starting Early: Teaching, Learning and Assessment Linking early-childhood development with academic outcomes—a detailed look*. Education Quality and Accountability Office.
- CAMH (Centre for Addiction and Mental Health); Ontario Agency for Health Protection and Promotion (Public Health Ontario); Toronto Public Health. (2013). *Connecting the dots: how Ontario public health units are addressing child and youth mental health*. Toronto, ON: Centre for Addiction and Mental Health.



- Clements, E. (2009). SKIP: What it is and why it works. Ministry of Social Development. Government of New Zealand. Available at <http://www.skip.org.nz/documents/resources/research-and-training/skip-what-it-is-and-why-it-works.pdf>
- Children's Mental Health Ontario. (2002). Early Childhood Mental Health Treatment Training Reference Guide. Available at http://www.kidsmentalhealth.ca/documents/PR_Early_childhood_mental_health_treatment_training_and_reference_guide.pdf
- Cohen, J., Oser, C., & Quigley, K. (2012). Making it happen: Overcoming barriers to providing infant-early childhood mental health. *Zero To Three*. Available at <http://www.zerotothree.org/public-policy/federal-policy/early-child-mental-health-final-singles.pdf>
- Dennis, C. L. (2014). The process of developing and implementing a telephone-based peer support program for postpartum depression: evidence from two randomized controlled trials. *Trials*, 15(1), 131.
- Dennis, C. L., & Chung-Lee, L. (2006). Postpartum Depression Help-Seeking Barriers and Maternal Treatment Preferences: A Qualitative Systematic Review. *Birth*, 33(4), 323-331.
- Duran, F., Hepburn, K., Irvine, M., Kaufman, R., Anothony, B., Horen, N. & Perry, D. (2009). What Works?: A Study of Effective Early Childhood Mental Health Consultation Programs. Washington, DC: Georgetown University Center for Child and Human Development.
- Eckenrode, J., Campa, M., Luckey, D.W., Henderson, C. R. Jr., Cole, R., Kitzman, H., Anson, E., Sidora-Arcoleo, K., Powers, J., & Powers, D. (2010). Long-term effects of prenatal and infancy nurse Home visitation on the life course of youths: 19-yearfollow-up of a randomized trial. *Archives of Pediatrics and Adolescent Medicine*, 164(NO. 1), 9-15.
- Egger, H. L. & Angold, A. (2006). The Preschool Age Psychiatric Assessment (PAPA): A structured parent interview for diagnosing psychiatric disorders in preschool children. In R. Delcarmen-Wiggens and A Carter (Eds.). *A Handbook of Infant and Toddler Mental Health Assessment*. New York, NY: Oxford University Press
- Employment and Social Development Canada. (2012). Public Investments in Early Childhood Education and Care in Canada 2012. Her Majesty the Queen in Right of Canada. Available at http://www.esdc.gc.ca/eng/child_family/childhood/index.shtml



- Essex, M. J., Kraemer, H. C., Armstrong, J. M., Boyce, W. T., Goldsmith, H. H., Klein, M. H. & Kupfer, D. J. (2006). Exploring risk factors for the emergence of children's mental health problems. *Archives of general psychiatry*, 63(11), 1246-1256.
- Felitti, M. D., Vincent, J., Anda, M. D., Robert, F., Nordenberg, M. D., Williamson, M. S. & James, S. (1998). Relationship of childhood abuse and household dysfunction to many of the leading causes of death in adults: The Adverse Childhood Experiences (ACE) Study. *American journal of preventive medicine*, 14(4), 245-258.
- Fernald, A., Marchman, V. A., & Weisleder, A. (2013). SES differences in language processing skill and vocabulary are evident at 18 months. *Developmental Science*, 16(2), 234-248.
- Field, F. (2010). *The Foundation Years: preventing poor children becoming poor adults, The report of the Independent Review on Poverty and Life Chances*. The Stationery Office.
- Field, T. (2010). Postpartum depression effects on early interactions, parenting, and safety practices: A review. *Infant Behavior and Development*, 33(1), 1-6.
- Fontaine, N. M., McCrory, E. J., Boivin, M., Moffitt, T. E., & Viding, E. (2011). Predictors and outcomes of joint trajectories of callous–unemotional traits and conduct problems in childhood. *Journal of abnormal psychology*, 120(3), 730.
- Fryers, T., & Brugha, T. (2013). Childhood determinants of adult psychiatric disorder. *Clinical practice and epidemiology in mental health: CP & EMH*, 9, 1.
- Furniss, T., Beyer, T., & Guggenmos, J. (2006). Prevalence of behavioural and emotional problems among six-years-old preschool children. *Social Psychiatry and Psychiatric Epidemiology*, 41(5), 394-399.
- Garfield, C. F., Duncan, G., Rutsohn, J., McDade, T. W., Adam, E. K., Coley, R. L., & Chase-Lansdale, P. L. (2014). A longitudinal study of paternal mental health during transition to fatherhood as young adults. *Pediatrics*, 133(5), 836-843.
- Greenspan, S. I., & Shanker, S. (2006). *The first idea: How symbols, language, and intelligence evolved from our primate ancestors to modern humans*. Da Capo Press.
- Grigoriadis, S., Vonderporten, E. H., Mamisashvili, L., Tomlinson, G., Dennis, C. L., Koren, G. & Ross, L. E. (2013). The impact of maternal depression during pregnancy on perinatal outcomes: a systematic review and meta-analysis. *The Journal of clinical psychiatry*, 74(4), e321-41.



- Hart, B., & Risley, T. R. (1995). *Meaningful differences in the everyday experience of young American children*. Paul H Brookes Publishing.
- Hart, B., & Risley, T. (2003). The early catastrophe. *American Educator*, 27(4), 6-9.
- Heckman, J. (2006). The economics of investing in children. *Policy Briefing*, (1).
- Heckman, J. J., & Kautz, T. (2012). Hard evidence on soft skills. *Labour economics*, 19(4), 451-464.
- Henry, B., Caspi, A., Moffitt, T. E., & Silva, P. A. (1996). Temperamental and familial predictors of violent and nonviolent criminal convictions: Age 3 to age 18. *Developmental Psychology*, 32(4), 614.
- Herrman, H., Saxena, S., & Moodie, R. (2005). *Promoting mental health: concepts, emerging evidence, practice: a report of the World Health Organization, Department of Mental Health and Substance Abuse in collaboration with the Victorian Health Promotion Foundation and the University of Melbourne*. World Health Organization.
- Hertzman, C. (2013). Commentary on the Symposium: Biological Embedding, Life Course Development, and the Emergence of a New Science. *Annual Review of Public Health*, 34, 1-5. Doi 10.1146/annurev-publhealth-031912-114500
- HSC Public Health Agency. (2013). Promoting positive social and emotional development from pre-birth to 3 years. Evidence Paper to inform the Infant Mental Health Action Plan 2013-2016.
- Janus, M., & Offord, D. R. (2007). Development and psychometric properties of the Early Development Instrument (EDI): A measure of children's school readiness. *Canadian Journal of Behavioural Science/Revue canadienne des sciences du comportement*, 39(1), 1.
- Japel, C. (2008). *Factors of risk, vulnerability and school readiness among preschoolers: evidence from Quebec*. Institute for Research on Public Policy.
- Knitzer, J. (2000). Promoting Resilience: Helping Young Children and Parents Affected by Substance Abuse, Domestic Violence, and Depression in the Context of Welfare Reform. Children and Welfare Reform Issue Brief 8.
- Koren, G. I., Sadowski, A., & Scolnik, T. (2013). Ontario Educators and Fetal Alcohol Spectrum Disorders: A Training, Resource, and Evaluation Project. *Journal on Developmental Disabilities*, 19(3).



- Kutcher, S., Hampton, M.J., & Wilson, J. (2010). Child and adolescent mental health policy and plans in Canada: an analytical review. *Canadian Journal of Psychiatry*, 55 (2), 100-107.
- Lazinski, M.J., Shea, A.K., Steiner, M. (2008). Effects of maternal prenatal stress on offspring development: a commentary. *Archives of Women's Mental Health*, 11, 363–375.
- Leadsom, A., Field, F., Burstow, P., & Lucas, C. (2013). The 1001 Critical Days: The Importance of the Conception to Age Two Period.
- Lieberman, A. F., & Osofsky, J. D. (2009). Poverty, Trauma, and Infant Mental Health. *Zero to Three (J)*, 30(2), 54-58.
- McGoron, L., Gleason, M.M., Smyke, A.T., Drury, S.D., Nelson, C.A., Gregas, M. C., Fox., N.A., & Zeanah, C.H. (2012). Recovering from early deprivation: Attachment mediates effects of caregiving on psychopathology. *Journal of the American Academy of Child and Adolescent Psychiatry*, 51(7), 683-693. PMID: 22721591
- Miles, J., Espiritu, R.C., Horen, N., Sebian, J., & Waetzig, E. (2010). A Public Health Approach to Children's Mental Health: A Conceptual Framework. Washington, DC: Georgetown University Center for Child and Human Development, National Technical Assistance Center for Children's Mental Health.
- Ministry of Children and Youth Services. (2007). Early Learning for Every Child Today: A Framework for Early Childhood Settings. Best Start Expert Panel on Early Learning. Available at http://www.children.gov.on.ca/htdocs/English/topics/earlychildhood/early_learning_for_every_child_today.aspx
- Ministry of Education. (2013). How Does Learning Happen? Ontario's Pedagogy for Early Years. Government of Ontario. Available at <http://www.edu.gov.on.ca/childcare/HowLearningHappens.pdf>
- Ministry of Education. (2013). Think, Feel, Act: Lessons From Research About Young Children. Government of Ontario. Available at <http://www.edu.gov.on.ca/childcare/research.html>
- Ministry of Education. (2013). A Meta-Perspective on the Evaluation of Full-Day Kindergarten during the First Two Years of Implementation. Government of Ontario. Available at <http://www.edu.gov.on.ca/childcare/evaluation/FDKReport2013.pdf>
- Ministry of Education. (2014). Achieving Excellence: A Renewed Vision for Education in Ontario. Government of Ontario. Available at <http://www.edu.gov.on.ca/eng/about/excellent.html>



- Ministry of Health. (2012). *Rising to the Challenge: The Mental Health and Addiction Service Development Plan 2012–2017*. Wellington: Ministry of Health. Available at: <http://www.health.govt.nz/publication/rising-challenge-mental-health-and-addiction-service-development-plan-2012-2017>
- Ministry of Health and Long-Term Care. (2013). *Make no little plans*. Ontario's Public Health Sector Strategic Plan. Government of Ontario. Available at http://www.health.gov.on.ca/en/common/ministry/publications/reports/make_no_little_plans/
- Ministry of Health and Long-Term Care. (2011). *Open Minds, Healthy Minds Ontario's Comprehensive Mental Health and Addictions Strategy*. Government of Ontario. Available at http://www.health.gov.on.ca/en/common/ministry/publications/reports/mental_health2011/mentalhealth.aspx
- National Institute for Health and Clinical Excellence. (2012). *Social and emotional wellbeing: early years*. Social and emotional wellbeing: early years. NICE public health guidance 40. Available at <http://www.nice.org.uk/Guidance/ph40>
- National Scientific Council on the Developing Child. (2004). *Young children develop in an environment of relationships*. Working Paper No. 1. Available at <http://www.developingchild.net>
- National Scientific Council on the Developing Child. (2005/2014). *Excessive Stress Disrupts the Architecture of the Developing Brain: Working Paper 3*. Updated Edition. Available at <http://www.developingchild.harvard.edu>
- Center on the Developing Child at Harvard University (2010). *The Foundations of Lifelong Health Are Built in Early Childhood*. Available at <http://www.developingchild.harvard.edu>
- National Scientific Council on the Developing Child. (2008/2012). *Establishing a Level Foundation for Life: Mental Health Begins in Early Childhood: Working Paper 6*. Updated Edition. Available at <http://www.developingchild.harvard.edu>
- Nelson, C. A., Fox, N. A., & Zeanah, C. H. (2014). *Romania's Abandoned Children*. Harvard University Press.
- Niccols, A., Milligan, K., Sword, W., Thabane, L., Henderson, J., & Smith, A. (2012). Integrated programs for mothers with substance abuse issues: A systematic review of studies reporting on parenting outcomes. *Harm reduction journal*, 9(14), 1-11.
- Olds, D. L. (2006). The nurse–family partnership: An evidence-based preventive intervention. *Infant Mental Health Journal*, 27(1), 5-25.



- Olson, S. (2012). *From Neurons to Neighborhoods: An Update: Workshop Summary*. National Academies Press.
- Ontario. Early Years Study (Reference group), McCain, M. N., & Mustard, J. F. (1999). *Early years study: Final report: Reversing the real brain drain*. Canadian Institute for Advanced Research.
- Pascal, C.E., (2012). *With our Best Future in Mind: Implementing Early Learning in Ontario*. Report to the Premier by the Special Advisor on Early Learning. Available at <https://www.ontario.ca/education-and-training/early-learning-report>
- Paulson, J. F., & Bazemore, S. D. (2010). Prenatal and postpartum depression in fathers and its association with maternal depression: a meta-analysis. *Journal of the American Medical Association*, 303 (19), 1961-1969.
- Peacock, S., Konrad, S., Watson, E., Nickel, D., & Muhajarine, N. (2013). Effectiveness of home visiting programs on child outcomes: a systematic review. *BMC public health*, 13(1), 17.
- Peters, J. Silvestri, F. (2013). *Best Practice in Infant Mental Health*. The International Initiative for Mental Health.
- Pordes Bowers, A., Strelitz, J., Allen, J., Donkin, A. (2012). *An Equal Start: Improving outcomes in Children's Centres*. UCL Institute of Health Equity.
- Reinherz, H. Z., Paradis, A. D., Giaconia, R. M., Stashwick, C. K., & Fitzmaurice, G. (2003). Childhood and adolescent predictors of major depression in the transition to adulthood. *American Journal of Psychiatry*, 160(12), 2141-2147.
- Rutter, M. (1988). Longitudinal data in the study of causal processes: some uses and some pitfalls.
- Sarkadi, A., Kristiansson, R., Oberklaid, F., & Bremberg, S. (2008). Fathers' involvement and children's developmental outcomes: a systematic review of longitudinal studies. *Acta Paediatrica*, 97(2), 153-158.
- Schore, J. R., & Schore, A. N. (2008). Modern attachment theory: The central role of affect regulation in development and treatment. *Clinical Social Work Journal*, 36(1), 9-20.
- Schrader McMillan, A., Barnes, J., & Barlow, J. (2012). Primary study evidence on effectiveness of interventions (home, early education, child care) in promoting social and emotional wellbeing of vulnerable children under 5.



- Schweinhart, L. J. (2003). Benefits, Costs, and Explanation of the High/Scope Perry Preschool Program.
- Shonkoff, J. P., & Fisher, P. A. (2013). Rethinking evidence-based practice and two-generation programs to create the future of early childhood policy. *Development and psychopathology*, 25(4pt2), 1635-1653.
- Shonkoff, J. P., Garner, A. S., Siegel, B. S., Dobbins, M. I., Earls, M. F., McGuinn, L., ... & Wood, D. L. (2012). The lifelong effects of early childhood adversity and toxic stress. *Pediatrics*, 129(1), e232-e246.
- Skovgaard, A. M. (2010). Mental health problems and psychopathology in infancy and early childhood. *Danish medical bulletin*, 57(10), B4193.
- Slade, A. (2002). Keeping the baby in mind: A critical factor in perinatal mental health. *Zero to Three*, June/July, 10-16.
- Sroufe, L. A. (2005). Attachment and development: A prospective, longitudinal study from birth to adulthood. *Attachment & human development*, 7(4), 349-367.
- St-André, M., Reebye, P. N., & Wittenberg, J. V. P. (2010). Infant Mental Health in Canada: Initiatives from British Columbia, Québec and Ontario. *Journal of the Canadian Academy of Child and Adolescent Psychiatry*, 19(2), 116.
- Statham, J. P. (2011). A review of international evidence on interagency working, to inform the development of Children's Services Committees in Ireland.
- Stewart, D. E., Robertson, E., Dennis, C. L., Grace, S. L., & Wallington, T. (2003). Postpartum depression: literature review of risk factors and interventions. *Toronto: University Health Network Women's Health Program for Toronto Public Health*.
- Suchman, N. E., & Luthar, S. S. (2000). Maternal addiction, child maladjustment and socio-demographic risks: implications for parenting behaviors. *Addiction*, 95(9), 1417-1428.
- Sword, W., Niccols, A., & Fan, A. (2004). "New Choices" for women with addictions: perceptions of program participants. *BMC public health*, 4(10).
- Tremblay, R. E. (2006). Prevention of youth violence: Why not start at the beginning? *Journal of abnormal child psychology*, 34(4), 480-486.



- Tremblay, R. E., Nagin, D. S., Séguin, J. R., Zoccolillo, M., Zelazo, P. D., Boivin, M., ... & Japel, C. (2004). Physical aggression during early childhood: Trajectories and predictors. *Pediatrics*, *114*(1), e43-e50.
- VanDenBerg, J. E. (2008). Reflecting on wraparound: Inspirations, innovations, and future directions. *The resource guide to wraparound*. Portland, OR: National Wraparound Initiative, Research and Training Center for Family Support and Children's Mental Health.
- Wadell, C. (2007). *Improving the mental health of young children*. A Discussion Paper Prepared for the British Columbia Healthy Child Development Alliance.
- Wichstrøm, L., Berg-Nielsen, T. S., Angold, A., Egger, H. L., Solheim, E., & Sveen, T. H. (2012). Prevalence of psychiatric disorders in preschoolers. *Journal of Child Psychology and Psychiatry*, *53*(6), 695-705.
- White, J. L., Moffitt, T. E., Earls, F., Robins, L., & Silva, P. A. (1990). HOW EARLY CAN WE TELL?: PREDICTORS OF CHILDHOOD CONDUCT DISORDER AND ADOLESCENT DELINQUENCY*. *Criminology*, *28*(4), 507-535.
- World Health Organization. (2007). Everybody's business--strengthening health systems to improve health outcomes: WHO's framework for action.
- Zeanah, C. H. (Ed.). (2009). *Handbook of infant mental health*. Guilford Press.
- Zeanah, C. H., Berlin, L. J., & Boris, N. W. (2011). Practitioner Review: Clinical applications of attachment theory and research for infants and young children. *Journal of Child Psychology and Psychiatry*, *52*(8), 819-833.
- Zeanah, P.D., Gleason, M. M., & Zeanah, C. H. (2008). Infant mental health. In M. M. Haith & J. B. Benson (Eds.), *Encyclopedia of infant and early childhood development* (pp. 301–311). New York: Elsevier.
- Zero-to-Three. (2005). *Zero to Three DC: 0–3R diagnostic classification of mental health and developmental disorders of infancy and early childhood*, Revised Edition. Zero to Three Press, Washington DC.
- Zero to Three (2007). *Building a Comprehensive System to Address Infant and Early Childhood Mental Health Disorders*. Zero to Three Policy Centre. Available at http://main.zerotothree.org/site/DocServer/Jan_07_SAMHSA_Policy_Brief.pdf?docID=2761



Appendix I

Policy makers engaged as informants for this paper:

Ministry of Children and Youth Services	Cynthia Abel	Lead, System Transition
	Barney Savage	Policy advisor, System Transition
	Ingrid McKhool	Senior policy analyst, Child Dev. Unit
	Carrie Seward	Senior research analyst, Strategic Policy and Planning
Ministry of Education	Myra Stephen	Education officer
	Laurie McNelles	Manager, early learning and childcare program
	Ashley Burger	Education officer
	Jill Snyder	Education officer
Ministry of Health and Long-term Care	Anne Bowlby	Manager, mental health and addictions unit in the community and pop health branch.
	Bobbi Clifton	Senior policy analyst
	Sheree Davis	Director, Community and population health



Appendix II: Environmental scan participants

Agency

Aisling Discoveries Child and Family Centre
Algoma Family Services, Children's Mental Health Centre for the
District of Algoma
Children First Essex County
Dilico Anishinabik Family Care
London Children's Aid Society
Mothercraft
Niagara Public Health
Phoenix Children's Mental Centre
Ready, Set, Go Windsor
Regent Park Parents for Better Beginnings
Toronto Children's Aid Society
Toronto Public Health
York Children's Aid Society

Agency type

Children's Mental Health Centre

Children's Mental Health Centre
Children's Mental Health Services
Children's Mental Health Centre
Children's Mental Health Centre
Children's Mental Health Centre
Public Health
Children's Mental Health Centre
Community Resource Program
Community Health
Child Welfare
Public Health
Child Welfare

School boards

Hamilton District School Board
Hastings and Prince Edward District School Board
Keewatin-Patricia District School Board
Peel District School Board
Toronto Catholic District School Board



Appendix III: Environmental scan questionnaires

Agency questionnaire

1. What age group does your agency/institution provide early mental health services to? Are these preventive or intervention services? Can you provide a list of the services available?
2. Does your agency have a definition of early mental health that applies to children birth to 6?
3. Does your agency have a dedicated plan or strategy to promote early mental health (for children birth to six) and provide intervention for those at risk of poor mental health? What does your strategy include and what informed the development of this strategy?
4. If you don't have dedicated services for prevention and early intervention in the early mental health area, do you have established relationships with the agencies that provide early mental health services in the community? What types of services are available and can you describe the following:
 - What types of services are available?
 - How accessible are services?
 - Are these services delivered by experts in early mental health
 - How long are the waiting lists for these services?
5. If you do have your own services, do you have a dedicated staff person or team with training in early mental health birth to three? Can you describe:
 - a. The waiting list for services
 - b. The referral process
 - c. The waiting period
 - d. The types of programs provided
 - e. The training of those delivering these services
6. Does your agency have a dedicated plan or strategy to screen or identify early mental health vulnerability or risk? If so what processes or tools are included?
7. Does your staff receive training in early mental health? If yes, from where/who and how often?
8. If you were designing a system for early mental health what would the key elements include?



School board questionnaire

1. Mental health problems in young children can appear as “behavioural problems”. Please identify which three issues in the list below are the most frequently occurring behavioural or mental health issues within your school board for children under the age of 6 years.
 - Bullying/harassment (verbal, physical, social or cyber bullying)
 - Aggression/violent behaviour (anger, physical fighting, violent behaviour)
 - Attention and hyperactivity/impulsivity
 - Self-harming behaviour (non-suicidal)
 - Self-destructive behaviour
 - Depression
 - Anxiety (phobias, social anxiety, obsessive-compulsive disorder, post-traumatic stress disorder)
 - Separation issues (difficulty separating from caregivers – beyond what may be normal)
 - Eating or weight related problems
 - Abuse
 - Other problems not listed above

2. What percentage of the children under the age of 6 in your school board have behavioural or mental health issues:
 - less than 5%
 - 6% – 20%
 - 21% – 50%
 - Above 50%
 - This data is not available

3. Has your Board begun to develop a mental health strategy?
Yes No

4. If yes,
 - Is there a focus on early years (under the age of 6)?
 - Does the strategy include having an expert within the board with expertise in early childhood development and early mental health from birth to six?

5. Can you estimate what percentage of those working directly with children in the classroom (teachers, educational assistants, Early Childhood Educators) have received specific knowledge and skills training to recognize mental health concerns in children 6 years and under?
 - Less than 10%
 - 11 – 25%
 - 26% - 50%
 - Over 50%



6. What professional development, focusing on early mental health (for children under 6), does your board provide to teachers, educational assistants, Early Childhood Educators?
7. When the behaviour or mental health of a child 6 or under is raised as a concern, what internal resources are accessed (children's mental health treatment centre, psychologist, social worker etc.)?
8. Describe the process schools take to address concerns about behaviour or mental health issues for children under the age of 6?
9. When a concern about behaviour or mental health issues is flagged for a new student, is there a process for school staff to connect with the agencies that may have served that child prior to school entry (such as child care, OEYC, Family Literacy Centres, Child Welfare)? If yes, please describe the process.
10. What data does your board have for children under 6 in the following areas (put NA where data are not available):
 - Rates of absenteeism: data available
 - Percentage of children asked to attend part time instead of full time due to behaviour concerns: data available
 - Number of children 6 and under with a diagnosis of a behavioural or mental health condition (provide breakdown if possible): data available
 - Rate of expulsion for children 6 and under: data available
 - Rate of suspension for children 6 and under: data available
 - Rate of alternative arrangements (i.e. therapeutic stay at home, home study) _____
 - This type of data is collected but board results are not able to be shared
 - Such data is not collected
11. On a typical school day, how much time would you estimate a teacher of children 6 and under spends dealing with behavioural or mental health issues of students beyond typical classroom management?
 - Less than ¼ of day
 - 1/4 of day
 - ½ of day
 - ¾ of day
 - Throughout the day – and depends on the particular educator teams
12. As part of the registration process, do parents complete a standardized developmental questionnaire that includes questions about early mental health or behaviour?
 - If yes, what questionnaire(s) is used?



Appendix IV: Jurisdictional scan policy examples and references

Jurisdiction Infant mental health policies and resources

Australia

<http://www.health.gov.au/internet/main/publishing.nsf/Content/mental-roadmap>

<http://www.health.gov.au/internet/main/publishing.nsf/Content/mental-pubs-f-plan09>

Australia's 10 year roadmap for mental health reform commits the federal government, states and territories to work together to improve the lives of people with mental illness, their families, caregivers and communities. The roadmap is intended to develop better mental health services and support across all relevant government portfolios, including mental health, health, education, early childhood, child protection, youth, employment, housing, police and the justice system.

The vision of the Australian government includes principles that implicate infant mental health, including (Council of Australian Governments, 2012):

- “a commitment to quality parenting and attachment during children’s early years” (pg. 6)
- a workforce with “childcare, social work and health care professionals, teachers, frontline mental health professionals and members of the public who are equipped to identify risk factors for poor social and emotional development in children...” (pg. 6)
- “availability of coordinated and integrated supports for children, young people and their families” (pg. 7)

Among the strategies noted in the roadmap are the intention to:

- “Enhance and implement mental health and social and emotional well-being programs in parenting, perinatal care, early childhood development, pre-school and school communities” (pg. 18).
- “Equip early childhood and education workers and institutions to support and assist children and young people who may be at risk of developing mental illness, and their families” (pg. 21).

In addition to the roadmap to improve services, Australia has an existing national mental health strategy, including a national mental health plan for 2009-2014. An objective within the prevention and early intervention priority is to “implement targeted prevention and early intervention programs for children and their families through partnerships between mental health, maternal and child health services, schools and other related



organisations” (Commonwealth of Australia, 2009).

The plan includes cross-portfolio implications and indicators for measurement.

Spotlight: Queensland

http://www.health.qld.gov.au/mentalhealth/abt_us/qpfmh/default.asp

The states and territories of Australia have the primary responsibility for planning and delivery of early childhood, education, public health and hospital, police, and justice services.

In parallel to the national policy directives, Queensland has a plan for mental health for 2007-2017 (Queensland Health, 2008). The first of five priority areas is mental health promotion, prevention and early intervention. Perinatal and infant mental health are a key investment in this priority area. Queensland is particularly unique as the state government funds the Queensland Centre for Perinatal and Infant Mental Health (QCPIMH) to be a statewide hub of expertise in perinatal and infant mental health, using cross-sectoral and whole-government clinical and community partnerships and networks.

In addition to funding the development of a dedicated infant mental health support network and hub, the government of Queensland committed funds to support the implementation of the National Perinatal Depression Initiative Framework (see <http://www.health.gov.au/internet/main/publishing.nsf/Content/mental-perinat>).

England

<https://www.gov.uk/government/publications/the-mental-health-strategy-for-england>

England launched a national mental health strategy in 2011, “*No Health Without Mental Health*,” that sets shared objectives to improve mental health and well-being and to improve services for people with mental health problems (HMG/DH, 2011). The early years, children, youth and families are one of nine priority areas. Among strategies, the plan intends to increase the number of health visitor workers to support families when they become parents. Health visitors also lead and deliver a healthy child program, link with maternity services and general practice, with Sure Start centres, and with the evidence-based Family Nurse Partnership program.

An earlier policy document from the Department of Treasury laid out a 10 year strategy for childcare and early years education. “Choice for parents: the best start for children” set out plans to increase support for parental support, childcare, and early years workers. After public consultation it led to the 2006 Childcare Act, which is public policy on the provision of early years and childcare services. A relevant policy document is the 2012



statutory framework for early year's providers, which sets the standards that all early years providers must meet

(<http://webarhive.nationalarchives.gov.uk/20130401151715/https://www.education.gov.uk/publications/standard/publicationDetail/Page1/DFE-00023-2012>).

England's Department of Health has a 2013 policy priority to make mental health services more effective and accessible (<https://www.gov.uk/government/policies/making-mental-health-services-more-effective-and-accessible--2>). An aspect of this policy that pertains to children is to review "health visiting and school nursing services, to check that staff have the right training to identify and help parents, children and young people with mental health problems; and by 2014, develop a new online service to provide guidance and training on child mental health for teachers, police, health professionals and other people working with children."

A similar Department of Health policy is specific to infants and early year's children.

"Giving all children a healthy start in life" includes actions to:

- Help families have the best start in life.
- Use the Healthy Child Programme to, for example, help parents develop a strong bond with their children, and identify early problems and risks.
- Expand and strengthen the home visiting service.
- Support mothers and children with mental health problems.

Scotland

<http://www.scotland.gov.uk/Publications/2012/08/9714/downloads>

Infant mental health is firmly embedded in Scottish public policy (Galloway, 2012).

Although Scotland is part of the United Kingdom, with devolution England, Scotland, Wales and Northern Ireland develop much of their own health policy.

The mental health strategy for Scotland 2012-2015 sets out key commitments (Scottish Government, 2012). The first key change area in the strategy is child and youth mental health and sees the period between birth and age three as a critical period to intervene to break cycles of poor outcomes.

Specific to infant and youth children's mental health, Scotland commits to:

- Make basic infant mental health training more widely available to professionals in the children's services workforce.
- Provide a parenting strategy to provide supports for parents and increase their confidence and competence to build strong attachments with babies and young children.



- Expand the Family Nurse Partnership model, working through an existing Early Years Taskforce to prioritise and invest in evidence-based interventions.

Scotland recognizes the importance of attachment and of evidence-based decision making. The mental health strategy states the intent to examine the range of infant mental health services and models of delivery currently operating in Scotland and elsewhere and to learn from the best available evidence about what systems are effective.

New Zealand

<http://www.health.govt.nz/publication/rising-challenge-mental-health-and-addiction-service-development-plan-2012-2017>

New Zealand's mental health plan for 2012-2017 focuses on four key areas: making better use of resources, improving primary and secondary service integration, building on gains for people with high needs, and increasing access with a focus on infant, children and youth (Ministry of Health, 2012).

The plan includes actions with the accountable ministry, such as:

- Support health promotion activities to raise awareness of the importance of healthy social and emotional development for infants and toddlers – Ministry of Health
- Enhance the delivery and integration of specialist mental health services within primary care, schools and other child health services – District Health Boards and NGO providers

The Ministry of Health and District Health Boards also intend to use reprioritized or already existing funding to, for instance to use mental health promotion programmes to focus on how families can support infant social and emotional development.

New Zealand also provides guidance for district health boards, other health planners and funders and providers of perinatal and infant mental health services on ways to address the mental health and other needs of mothers, infants and families. The intention of "Healthy Beginnings: Developing perinatal and infant mental health services in New Zealand" is to improve the range, quality and national consistency of perinatal and infant mental health services and their integration with primary care, maternity, child health and other social services <http://www.health.govt.nz/publication/healthy-beginnings-developing-perinatal-and-infant-mental-health-services-new-zealand>)

Beyond specific infant mental health service provision, New Zealand also has integrated early year's childhood education and care services.



United States

The United States lacks federal public policy that is grounded in the best available evidence for mental health, early education, child welfare, health care, and related fields that contribute to infant and early childhood mental health (Cohen, Oser & Quigley, 2012). Some national legislation impacts certain areas of early years development and health. For example, existing federal policy mandates intervention for children from birth to age three to address emotional and social difficulties, as well as problems in cognition, language, and motor development. However, this policy has not been thoroughly implemented in practice (Center on the Developing Child, 2007)

The Substance Abuse and Mental Health Services Administration (SAMHSA) is the federal agency, within the Department of Health and Human Services, that funds and oversees national level mental health initiatives. The agency does not appear to have a deliberate policy specific to infant mental health. It has created policy and guideline documents in support of infant mental health, such as a community action guide on supporting infants and toddlers of families affected by mental illness.

Project Launch is a Substance Abuse and Mental Health Services Administration (SAMHSA) funded special initiative to promote young child wellness, targeting children from birth to age 8. A key goal of the program is to support local communities in enhancing partnerships between existing services to better meet the complete development needs of young children. <http://projectlaunch.promoteprevent.org/about-project-launch>

Spotlight: Michigan

Michigan has provided mental health services for infants, toddlers and families for over 30 years. Prevention, intervention and treatment strategies are intended to enhance infant mental health and are delivered by mental health therapists, typically in the home (Peters & Silvestri, 2013). Michigan is unique in providing dedicated infant mental health services statewide, and in having an active statewide association. The Michigan Association for Infant Mental Health (MI-AIMH) provides training and also owns the *Infant Mental Health Journal*, the official publication of the World Association for Infant Mental Health. MI-AIMH has developed an accreditation process for infant mental health staff and programs that has been used by agencies in other states.

Michigan's infant mental health programs have been evaluated for cost, process and outcomes.



Commonwealth of Australia. (2009) Fourth National Mental Health Plan - An agenda for collaborative government action in mental health 2009–2014. Available at <http://www.health.gov.au/internet/main/publishing.nsf/Content/mental-pubs-f-plan09>

Council of Australian Governments. (2012). *The Roadmap for National Mental Health Reform 2012-2022*. Available at <http://www.health.gov.au/internet/main/publishing.nsf/Content/mental-roadmap>

Galloway, S. (2012). *Infant Mental Health: The Scottish Context*. NSPCC Scotland Policy, Practice and Research Series.

HMG/DH. (2011). *No Health Without Mental Health: a cross-government mental health outcomes strategy for people of all ages*. Department of Health. Available at : <https://www.gov.uk/government/publications/the-mental-health-strategy-for-england>

Peters, J., Silvestri, F. (2013). *Best Practice in Infant Mental Health*. The International Initiative for Infant Mental Health.

Queensland Health, Mental Health Branch. (2008). *Queensland Plan for Mental Health 2007-2017*. Queensland Government. Available at http://www.health.qld.gov.au/mentalhealth/abt_us/qpfmh/default.asp

Scottish Government. (2012). *Mental Health Strategy for Scotland: 2012-2015*. Available at: <http://www.scotland.gov.uk/Publications/2012/08/9714/downloads>

St-Andre, M., Reebye, P.N., Wittenberg, J.V. (2010). *Infant mental health in Canada: initiatives from British Columbia, Quebec and Ontario*. *Journal of the Canadian Academy of Child and Adolescent Psychiatry*, 19, 2, 116-123.