Infants and the Child Welfare System: An Exploration of Practice and Policy Responses in Ontario

by

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A thesis submitted in conformity with the requirements for the degree of Doctor of Philosophy
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University of Toronto

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Abstract

The overarching objectives of this three-paper dissertation are to: (1) build upon and extend the minimal knowledge base with respect to infants in a Canadian child welfare context; and, (2) identify opportunities and challenges for promoting the optimal development of infants through an exploration of child welfare practice and policy responses in Ontario. A developmentally-informed framework guided this research. The first two papers utilized data from the 2013 cycle of the Ontario Incidence Study of Reported Child Abuse and Neglect (OIS-2013) to create a clinical portrait of infants and families involved with the child welfare system. The first paper explored the most influential clinical factors associated with the decision to transfer a case to ongoing services (i.e., characteristics of the infant, primary caregiver, household, case and of the short term services provided). The second paper examined the clinical factors predictive of the decision to refer families to services and age-specific differences in the clinical portrait and types of services referred to. The third paper explored how the science of early childhood development could inform and enhance child welfare policies and practices with infants and their families.

The findings indicated that the most influential predictor of the provision of ongoing services was having a primary caregiver with few social supports; whereas, being a victim of intimate
violence (IPV) and younger caregiver age were the caregiver risk factors that were significantly associated with a referral. There were age-specific differences in both the clinical profiles and the services referred to, suggesting that infants are a distinctly vulnerable subpopulation of children. The findings converge on the importance of developing policies and practices that target the unique needs and experiences of infants and their families. Key findings, themes, implications for social work, and recommendations for future research, policy, practice and advocacy efforts are proposed.
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Chapter 1
Introduction

1 Introduction

There is growing evidence to suggest that infants (under age 1) are a distinct subset of children involved with the child welfare system (e.g., Fallon et al., 2015; Fast, Trocmé, Fallon, & Ma, 2014; Jones Harden, 2007; Trocmé et al., 2010; Wulczyn, Ernst and Fisher, 2011; Wulczyn, Hislop, & Jones Harden, 2002). When compared to other age groups of children, infants experience a higher risk of victimization (Trocmé et al., 2010); and, are the most likely recipients of child welfare services, including the provision of post-investigation services and placements out-of-home (Fast et al., 2014). Infants are also most likely to suffer injury and death as a consequence of maltreatment (Montgomery & Trocmé, 2004; Schnitzer, & Ewigman, 2005; Trocmé, MacMillan, Fallon, & De Marco, 2003). Moreover, maltreatment’s disproportionate impact on infant development is a consequence of many factors, including: infants’ physical vulnerability and total dependence upon caregivers for survival; the timing of maltreatment is during a period of rapid brain development; and, the potential for greater chronicity of maltreatment without the implementation of adequate intervention (Putnam-Hornstein, Simon, Eastment, & Magruder, 2015).

There have been longstanding concerns with the adequacy of the child welfare system’s response to the unique developmental needs of infants and young children. The literature has consistently indicated that the child welfare system is missing opportunities to ameliorate the developmental outcomes and trajectories of infants through early identification and intervention (e.g., Berrick, Needell, Barth, & Jonson-Reid, 1998; Horwitz et al., 2012; Jones Harden, 2007; Klein & Jones Harden, 2011; McCrae, Cahalane, & Fusco, 2011). Prominent child welfare scholars in the U.S. have called for more developmentally driven child welfare practice, policy and research to ensure that the needs of infants and young maltreated children are differentially addressed (e.g., Berrick et al., 1998; Jones Harden, 2007; Wulczyn, Barth, Ying-Ying, Jones Harden, & Landsverk, 2005). Early identification, referrals, and intervention during infancy are particularly critical because the brain is most receptive to the environment in the first years of life (Perry, 2009). Moreover, the minimal efficacy of targeted interventions in families where maltreatment has occurred may be
indicative of the challenge of altering child-parent interactions in later developmental stages (Boivin & Hertzman, 2012).

Traditional child welfare practices and policies focus on protection and physical safety, rather than assessing the quality of the infant-caregiver relationship and the developmental costs associated with maltreatment (Boivin & Hertzman, 2012; Trocmé et al., 2013). Yet, the notions of protection and well-being are central and equal considerations in Provincial and Territorial statutes across Canada (Trocmé, Kyte, Sinha & Fallon, 2014). Through a developmental lens, well-being can be viewed as an “overarching construct” with multiple dimensions embedded within it, including safety and permanency (Wulczyn, 2008, p.7). The construct of well-being, and essentially the mandate of child welfare services with respect to infants, requires greater refinement and clarity, particularly within a Canadian child welfare context. Jones Harden (2007) asserts that a ‘one-size-fits-all’ approach to service delivery is reflective of “…an antiquated conception of child welfare” (p.336). Child welfare service models in Canada are not yet aligned with emerging investigative trends that suggest greater focus on the long-term impact of family dysfunction than immediate safety concerns (Trocmé et al., 2014). Although the child welfare system in Ontario has shifted towards differential response options, wide-scale programs have yet to be implemented (Fallon, Ma, Allen, Trocmé, & Jud, 2013a; Nikolova, Fallon, Black & Allen, 2014).

The minimal, yet evolving Canadian child welfare literature suggests that infants and families served by the child welfare system are burdened with many challenges that require the support of numerous sectors. To date, there are only four studies published in peer-reviewed journals that have examined the characteristics of infants and the response of Canadian child welfare system (Fallon et al., 2013a; Fallon, Ma, Allen, Trocmé, & Jud, 2013b; Tonmyr, Williams, Jack, & MacMillan, 2011; Williams, Tonmyr, Jack, Fallon, & MacMillan, 2011). Enhancing our understanding of infants and their families is critical to improving the child welfare system’s response, aligning it with its mandate, and necessarily working with other sectors to fulfill it. Undoubtedly, addressing well-being within the traditional boundaries of child welfare system through changes in practices and policies is an immense challenge (Wulczyn, 2008). Funding and fiscal constraints of the sector and those of its partners inevitably influence child welfare’s ability and capacity to focus on, adequately address, and monitor infant development and well-being.
There is growing momentum for re-thinking child welfare practice and policy with respect to infants and their families. The need for a policy framework that formally prioritizes mental health in infancy and the importance of providing targeted supports for at-risk populations has been identified in Ontario, Canada’s largest province (Clinton et al., 2014). Notably, there is no provincial-level child and youth mental health strategy in Canada that specifically and explicitly focuses on the unique needs of infants and young children aged 0 to 6 years (Clinton et al., 2014). The Canadian Pediatric Society’s Early Years Task Force has urged health care providers and policy makers to take urgent action to prioritize and promote developmental health in early childhood, in collaboration with other sectors, including child welfare (Williams et al., 2012). Moreover, the promise of potentially utilizing new scientific insights informing child welfare and broader environmental policy is highlighted by World Health Organization (WHO) recommendations that, “Local, regional and national governments should incorporate the ‘science of early childhood development’ into policy” to help generate a multi-level commitment to development in the early years (Irwin, Siddiqi, & Hertzman, 2007, p.155).

There have also been assertions that the science of early childhood development can potentially inform and transform child welfare practices and policies for infants and young children (Center on the Developing Child at Harvard University, 2010). Yet, despite significant changes to child welfare policies in Ontario over the last decade, these changes have not evolved with the vast knowledge base relating to the science of early childhood development. The child welfare system has a crucial role to play in averting and/or mitigating the indisputably negative consequence of maltreatment on development (Ellenbogen, Klein, & Wekerle, 2014). Both independently and collectively, the three papers that comprise this dissertation highlight emerging trends in child welfare practice, policy and research in Ontario that converge on the importance of focusing on infants’ well-being. These trends, in conjunction with the vast and ever-evolving knowledge base emerging from the science of early childhood development should give us pause and cause for taking action. Jones Harden (2007) poignantly asserted that the child welfare system should ensure that children receive the services needed to promote their development and ignoring infants’ well-being is “tantamount to causing harm, which is in direct conflict with child welfare’s goal of promoting children’s safety” (p.262). It is an opportune time to squarely focus attention to the needs of infants and the child welfare system’s response within an Ontario child welfare
context. It is critical to identify and seize opportunities that can help the child welfare sector, in concert with others, address the development and well-being of infants.

1.1 Objectives and organization of the dissertation

The two main objectives of dissertation are to: (1) build upon and extend the knowledge base with respect to infants in a Canadian provincial child welfare context, and (2) identify opportunities and challenges for promoting the development and well-being of infants through the exploration of the Ontario child welfare practice and policy contexts. Despite the implications associated with child welfare practice and policies for infants and their families, there is a dearth of research and minimal understanding about their experiences and outcomes in a Canadian child welfare context. The research pertaining to infants and the child welfare system predominantly originates from the United States; therefore, the applicability and generalizability of this research to a Canadian context is problematic. A greater understanding of infants’ characteristics, needs, the child welfare system’s response, and subsequent outcomes can lead to more strategic, targeted and effective policies and practices.

This dissertation is comprised of five chapters. Chapter One consists of this introduction to the dissertation topic. Within this introductory chapter, a developmentally-informed framework for promoting the development and well-being of infants involved with the child welfare system is proposed. This framework guides each of the three papers within this dissertation. This is followed by an overview of the theoretical and empirical literature. The introduction then presents an outline of each of the three-papers and respective research questions, an overview of key themes and concluding remarks. Chapter Two and Chapter Three are comprised of the first and second papers that utilize data from the 2013 cycle of the Ontario Incidence Study of Reported Abuse and Neglect (OIS-2013) (Fallon et al., 2015), to explore two key service provision decisions. More specifically, Chapter Two explores the decision to provide ongoing child welfare services; whereas, Chapter Three explores the decision to provide a referral for services for any family member internal or external to the child welfare organization. Chapter Four, the third and final paper of the dissertation examines the Ontario child welfare policy context and its disconnect from the science of early childhood development. Key considerations for child welfare policy and practice are offered, with the goal of fostering discussion within the child welfare sector and across sectors for collective action. Lastly, the dissertation concludes
1.2 An enhanced framework for promoting the development of child welfare-involved infants

Figure 1 presents the proposed conceptual framework, which emerged as a result of a synthesis of the theoretical and empirical literature relevant to child welfare, infant maltreatment, and early childhood development. The main objectives of this framework are to offer a developmentally-informed frame of reference from which to: (1) understand and examine the impact of maltreatment and other adversities upon infant development; (2) explore how the development of infants can be enhanced or hindered by child welfare service provision decisions; and, (3) identify opportunities and challenges within and beyond the child welfare sector to promote optimal infant developmental well-being. A key premise of this proposed framework is that in order to promote the optimal development and well-being of infants involved with the child welfare system, practices and policies require a sound understanding of the distinct characteristics of infants and their families; their unique developmental needs, and the risks and protective factors found within multiple ecologies or domains.

As Figure 1 illustrates, child welfare service decisions (represented by a rectangle) are an opportunity to alter infants’ inter-related child welfare outcomes and trajectories (represented by three concentric circles). This is in keeping with the recognition that child welfare services are part of the ecological context that can positively or negatively impact infants’ emerging developmental outcomes and trajectories (Wulczyn et al., 2005). Moreover, this framework underscores that child welfare service provision must be informed by an understanding of the unique developmental risk and protective factors in each of the three key domains: (1) clinical and case (i.e., child, family, household dimensions); (2) child welfare system (i.e., child welfare worker and organizational dimensions), and (3) broader environmental (i.e., exo- and macro-level dimensions) represented by ovals. An understanding of infants’ unique developmental risks and protective factors within multiple ecologies is critical to understanding their needs, informing service decisions and implementing appropriate supports. In the absence of adequate protective
factors, risk factors can impair the accomplishment of salient developmental tasks and possibly developmental functioning in the short- and long-term.

Each of these domains can interact with each other and act to inform and influence what happens to an infant within the context of the child welfare system, and beyond it. For instance, the clinical and case domain and its subsequent dimensions highlight key factors for consideration in child welfare assessment and interventions with respect to infants. For instance, caregiver mental illness, such as chronic maternal depression can adversely impact the quality of the infant-caregiver relationship, thereby, negatively impacting infant development. Moreover, the type of maltreatment may inform the child welfare assessment with respect to developmental impact and needed intervention and supports. The dimensions outlined for each domain are not an exhaustive list, but a snapshot of important factors to consider within the context of child welfare service provision from a developmentally informed perspective. These concentric circles reinforce the notion that developmental outcomes and trajectories are intrinsically linked to child welfare service and maltreatment outcomes and trajectories – ultimately contributing to infants’ wellbeing.

**Figure 1.1** A conceptual framework for understanding and examining infants’ child welfare experiences, the child welfare response, and its impact on infants’ developmental well-being.

Adapted from Baumann, Dalgleish, Fluke, & Kern (2011).
1.3 Making the case for a developmental approach for child welfare-involved infants: A theoretical and empirical synthesis

While it is acknowledged that there are multiple frameworks and approaches to understanding infant development and well-being within a child welfare context, the four underpinning theoretical perspectives (i.e., bioecological, resilience, attachment, and life course perspectives) offer useful guidance and support to the field for a developmental approach. Each of these frameworks helps to organize and provide coherence to the vast theoretical and empirical evidence.

1.3.1 A bioecological approach: A multilevel, science-informed view of development

The bioecological theory of child development is a multilevel framework that can enhance our understanding of the interrelated factors and ecologies that can influence the development of infants involved with the child welfare system (Bronfenbrenner & Ceci, 1994; Bronfenbrenner & Morris, 2006; Jones Harden, 2007). Infant development is viewed and understood within the context of relationships between and within the multiple ecologies (Fogel, 2015). The primacy of proximal relationships and the reciprocity of infant and environmental influences on development are among the key tenets of bioecological theory (Jones Harden, 2007). From a bioecological perspective, well-being is viewed as a developmental process in which complex interactions between the infant and their environment are acknowledged, including the possible influences of the infant’s genetic, prenatal, familial, social, cultural and political contexts (Jones Harden, 2007; Wulzcyn et al., 2008). Thus, bioecological theory allows for the consideration of the rapidly proliferating evidence from the biological sciences, including neuroscience, neurobiology, epigenetics, and genetics that have helped to highlight the importance of the early years for healthy development in infancy and across the life course (Boivin & Hertzman, 2012). The science of early childhood and brain development is viewed as having much to offer child welfare policy and practice (National Scientific Council on the Developing Child, 2007). Social workers have a unique vantage point from which to utilize the ever-evolving scientific knowledge in prevention and intervention efforts (Applegate & Shapiro, 2005; Farmer, 2009). Farmer (2009) asserted that social workers have an obligation to contribute to, influence and advocate for neuroscience research that has relevance to the field of child welfare.
Bronfenbrenner (1979) proposed nested and interconnected contexts or ecologies that influence development. At the most influential level, the *microsystem*, an infant’s well-being is impacted by the immediate people that are closest and that have a direct relationship with them (e.g. the child’s primary caregiver, child care providers). Infant-caregiver interactions are embedded within multiple contexts that can support infancy (Bronfenbrenner & Morris, 2006). Consideration of the caregiving context highlights that parenting during infancy is the most challenging of any developmental period. Infant caregiving is marked by high-energy demands, such as lack of sleep; an increase in caregiver interpersonal conflicts; caregiver doubts about managing caregiving responsibilities; and, having to cope with the additional costs of raising a child (Fogel, 2015). At the level of the *exosystem*, infants and their caregivers are influenced by organizations or systems (e.g., the child welfare system, formal and informal support systems, local, provincial and national policies that impact infants (Barrat & Fener, 2014; Fogel, 2015; Jones Harden, 2007)). At the most distal level, the *macrosystem*, infants and their caregivers are influenced by cultural ideologies and patterns of behaviors in multiple ecologies (Jones Harden, 2007). For instance, poverty in the early years has been considered a particularly deleterious influence on development (Knitzer & Perry, 2009). Poverty is believed to exert its greatest influence through the caregiving relationship; more specifically, through the impact of parental depression in disrupting positive parenting behaviors in low-income families (Knitzer & Perry, 2009).

1.3.2 Resilience: The dynamic interplay of developmental risk and protective factors

Developmental resilience refers to patterns of development or positive adaptation in the context of adversity or risk (Masten & Gewirtz, 2006). The term *resilient functioning* has been used to underscore the dynamic nature of resilience and the importance of the infant’s relationship to attachment figures (Easterbrooks, Driscoll, & Bartlett, 2008). An infant’s relationship with a stable, caring, responsive and competent adult is the most critical developmental protective factor for modulating stress and recovering from trauma (Masten, 2006; Zeanah & Zeanah, 2009).

Awareness of the risk factors for infant maltreatment and their possible consequences on infants’ development is important to identifying strategies that may decrease or buffer their deleterious impact. For instance, research on infant development indicates that in addition to maltreatment, there are salient markers of risk that can hinder the successful mastery of tasks for infants in the
socio-emotional domain, including: *prenatal* factors, (e.g. exposure of fetus to alcohol, nicotine and other drugs); *caregiver mental health* factors (e.g., maternal depression); and caregiver *social factors* (e.g., social isolation) (Johnson & Appleyard, 2014). There is a dearth of research focusing on factors predictive of infant maltreatment (Wu, Carter, Ariet, Feaver, & Resnick, 2004), as most of the research focuses on children older than three years of age (Benoit, Coolbear, & Crawford, 2009). There have been two Canadian studies published to date that have explored the factors associated with the provision of ongoing child welfare services for infants, post maltreatment-related investigation (Fallon et al., 2013a, 2013b). In keeping with the findings of the larger extant literature, caregiver risk factors associated with the child welfare service decisions and risk of maltreatment include: few social supports, cognitive impairment, being a victim of intimate partner violence (IPV), drug/solvent abuse, mental health issues, and younger caregiver age (under the age of 21) (Jones Harden & Klein, 2011; Putnam-Hornstein, & Needell, 2011; Palusci, 2011; Wu et al., 2004).

Moderate and predictable stress-inducing experiences can help to create resilience, or the capacity to respond to physical and psychological threats appropriately (Perry, 2005). Adversity in infancy alone is not predictive of poor outcomes - it is the *absence* of a protective, consistent, supportive caregiving relationship (National Scientific Council on the Developing Child, 2007). Such a relationship helps infants to cope. Unfortunately, many infants may experience ‘toxic stress’ or excessive, frequent, uncontrollable, and/or chronic stress that occurs in the absence of a responsive caregiver to buffer this stress (Shonkoff 2010; National Scientific Council on the Developing Child, 2007). Risk factors or triggers for toxic stress include chronic neglect, poverty, exposure to family violence, severe caregiver depression, and parental substance abuse (National Scientific Council on the Developing Child, 2007; Shonkoff, 2010). Exposure to toxic stress in infancy is associated with emotional and physiological dysregulation as a result of chronic or prolonged activation of the hypothalamic-pituitary-adrenocortical axis, which leads to disruptions in brain development, other organs, and permanent alterations of the infant’s stress management system (Knitzer & Perry, 2009; Sheridan & Nelson, 2009; Shonkoff, 2010; Smyke & Breidenstine, 2009). Toxic stress lowers the threshold of the stress management system; thereby increasing the likelihood of stress-related illness and cognitive impairments (Shonkoff, 2010).
Given that infants cannot speak for themselves, symptoms of distress and delays in the achievement of age-salient developmental tasks and milestones can be utilized as key indicators for judging adaptation in the context of adversity (Afifi & MacMillan, 2011). Symptoms of chronic stress and trauma in infancy can include: delays in achievement of developmental milestones, ongoing problems with regulation (e.g., feeding and sleeping disturbances, incessant and inconsolable crying) withdrawal, PTSD, and failure to thrive (Clinton et al., 2014; Wotherspoon, Hawkins, & Gough, 2008; Benoit, Coolbear, & Crawford, 2009; Zeanah, Gleason, & Zeanah, 2009). Adult misinterpretations of infants actions or expressions following traumatic events and the belief that children are unaffected by trauma can act to exacerbate its deleterious impact (Perry, 1995). A resilience-informed framework highlights the importance of identifying infant signals of distress, infant functioning concerns, and trauma promptly within the context of child welfare service provision in order to utilize targeted supports. It is also important to note that child welfare service decisions can contribute to enhancing or hindering resilience processes. For instance, multiple moves and unresponsive substitute caregiving environments can interfere with infants’ optimal development (Jones Harden, 2007).

1.3.3 Attachment theory: The infant-caregiver relationship as the foundation for development

The first year of life has been deemed as particularly important to attachment formation (Bowlby, 1969). Attachment is viewed as the infant’s tendency to seek comfort, nurturance and protection from their caregiver(s). A secure infant-parent attachment is important to both infant survival and development in cognitive, socio-emotional and language domains. Secure attachments help infants with emotional and physiological regulation in times of stress. Contemporary formulations of attachment theory highlight the importance of attachment to neurobiological systems involved with emotional processing and affect regulation (Jones Harden, 2007; Rosenblum, Dayton, & Muzik, 2009; Schore & Schore, 2008). Schore and Schore (2008) posit that on the basis of interpersonal neurobiology, modern attachment theory should be considered a regulation model and can be incorporated into core social work theory, research and practice. Infant-caregiver attachment is the framework from which all other relationships develop (Perry, 2002). Caregiver sensitivity (i.e. warmth, attunement, and acceptance) is critical in modulating stress responses (Sheridan & Nelson, 2009). Adverse experiences or stressors, such as an infant’s separation from...
their primary caregiver, are associated with emotional and physiological dysregulation (Smyke & Breidenstine, 2009).

One of the most damaging consequences of infant maltreatment is its impact on the attachment relationship (Connell-Carrick, 2014; Zeanah & Smyke, 2009). In infancy, healthy brain development is dependent on the quality of caregiving, which is the foundation for optimal socio-emotional functioning and well-being (Perry 2002). Poor or insecure attachment with primary caregivers is associated with problematic physical and mental health outcomes throughout the life course (Connell-Carrick, 2014; Crittenden & Ainsworth, 1989; Jones Harden, 2007). Maltreated infants and young children placed in out-of-home care face disproportionate risks to their development that include disrupted attachments, separation and loss. Separations from primary caregivers and adverse experiences or stressors are associated with dysregulation (Smyke & Breidenstein, 2009). The extant literature suggests that young maltreated children and their foster parents contend with three critical challenges: (1) children’s dysregulation of physiology, emotions and behaviour; (2) confusing child behaviours that push new caregivers away; and, (3) the impact of the child’s behaviour on foster parents’ ability to nurture and care (Smyke & Breidenstein, 2009). It has been proposed that attachment theory and research can assist in informing child welfare decision making at key points in the decision making continuum, including, investigation, out-of-home placement, and reunification stages (Mennen & O’Keefe, 2005). Early intervention is viewed as critical in repairing the attachment relationship as a result of the deleterious impact of maltreatment (Connell-Carrick, 2014).

1.3.4 The life course perspective: Timing and emerging interconnected trajectories

The life course perspective provides a framework for viewing development as contextual, dynamic, interdependent, multilevel, multidirectional and malleable (Billari, 2009; Elder, 1994, 1998). Elder (1994) argued that the life course perspective is part of “...a general conceptual trend that has made time, context, and process more salient dimensions of theory and analysis” (p.5). Hutchison (2005) posited that the life course perspective is a promising approach for social workers because of its emphasis on bio-psycho-social processes. The emerging field of life course epidemiology has helped to illuminate the long term impact of adverse early childhood experiences on developmental health (Boivin & Hertzman, 2012).
There are several constructs that are particularly helpful in conceptualizing and enhancing our understanding of the experiences and consequence of maltreatment, adversity and toxic stress of infants’ development in the child welfare system, including **timing** and **trajectory** (Elder, 1998; White & Wu, 2014). With respect to timing, the life course perspective highlights that the impact of an event is contingent upon its timing. In turn, the event’s timing and it’s duration may be as critical as the event itself (Elder, 1998). Maltreatment during infancy results in more deleterious health and developmental consequences than maltreatment at any other point in childhood (Jones Harden, 2007). Children’s developmental needs are constantly and rapidly changing (Perry, 2002). During infancy, emotional and physical stimulation is necessary for survival and optimal development. For instance, touch is essential to an infant’s development and survival, but this is not the case with adolescents (Perry, 2002). Similarly, the impact of a placement decision varies with the age and the developmental status of the child. More specifically, caregiver separation during infancy may cause emotional and physiological dysregulation. With respect to duration, evidence is consistently suggesting that the earlier and longer a child is in an adverse environment, the more pervasive the deficits in development (Perry, 2002). Toxic stress has been linked to numerous challenges across the life course including unhealthy behaviors, socio-economic inequalities and poor physical and mental health, including depression, heart disease, autoimmune disorders and cancer (National Scientific Council on the Developing Child, 2007; Shonkoff & Garner, 2011). The assessment of the maltreatment of infants and young children can be viewed as a matter of both health and development (National Scientific Council on the Developing Child, 2004).

A **trajectory** is defined as a pattern in timing, duration, spacing, and order of events (Elder, 1998). Each type of maltreatment can be developmentally consequential to infants in both their short-term and long-term trajectories. The development of critical pathways in infancy may be linked to later child and adult functioning (Connell-Carrick, 2014). There are common and unique effects of the various forms of maltreatment on infants’ emerging developmental outcomes and trajectories (Connell-Carrick, 2014; Perry, 2002). Common effects of neglect, physical and sexual abuse include impaired brain development, attachment behavior, behavioral and socio-emotional challenges, and peer problems (Connell-Carrick, 2014).
Perry (2002) describes neglect as “…the absence of critical organizing experiences at key times during development” (p.88). Thus, neglect is notably different than other forms of maltreatment, as it is the omission, not commission of caregiving behavior that characterizes it. It is the most common form of maltreatment experienced by infants (Fallon et al., 2013a, 2013b; Connell-Carrick, 2014). Emotional and physical neglect comprise the majority of neglect cases for infants and young children (Connell-Carrick, 2014). The greater the duration and severity, the more likely it is to lead to irreversible damage to the developing brain (Connell-Carrick, 2014). Thus, neglect is a serious threat for widespread developmental impairments in communication, physical, motor development, cognitive, and socio-emotional functioning. Problematic peer relationships and poor academic performance have also been noted.

Typically occurring in times of great stress, physical abuse can have serious and dire consequences for infants. Considered a unique form of infant physical abuse, shaken baby syndrome appears to occur during times of inconsolable crying and can result in long-term neurological and mental health impairments, should the infant survive (Connell-Carrick, 2014). In addition to physical injuries, the longer term effects of physical abuse can also result in post-traumatic stress disorder, peer conflicts, increased aggression, anxiety and depression, being a perpetrator or victim of violence, and criminality (Connell-Carrick, 2014). Chronic physical abuse can disrupt brain development; thereby, impacting the child to perceive and react to the world as hostile place, even in the absence of a threat. Lastly, sexual abuse in infancy is the rarest form of infant maltreatment, yet it can have long-term ramifications. Perry (2009) reminds us that in contrast to popular perception, infants are more vulnerable to traumatic stress and can in fact ‘recall’ events. The long-term impact of sexual abuse can be a result of different types of memories in physiologic, motor-vestibular, and emotional domains that can be triggered by cues in the environment. Sexual abuse by caregivers can be particularly traumatic because of disruptions in healthy infant-caregiver patterns, creating a prolonged and severe stress response (Perry, 2000). Subsequently, changes in neural and brain organization can ensue (Perry, 2009). Anxiety and sexualized behaviours may be among the effects of sexual abuse (Connell-Carrick, 2014). Thus, sexual abuse within the context of the infant-caregiving relationship may not produce cognitive memories or awareness of the source of fears, but difficulties with intimacy and trust throughout the life course may arise (Perry, 2009).
The life course perspective can be used to inform a multilevel developmental model of child welfare services (Wulczyn, Kogan, & Jones Harden, 2003). Wulczyn and colleagues (2005) have proposed examining three interconnected general child welfare trajectories: service (e.g., placement duration), developmental (e.g., child functioning across domains including socio-emotional and cognitive), and maltreatment (e.g., course of maltreatment). A life course-informed approach can not only assist in understanding the experiences and pathways of infants and young children involved with the child welfare system, but it can yield information regarding when and where to target resources and provide interventions. For instance, age-differentiated cohorts can be examined to determine if different maltreatment and service patterns exist. Infants placed in foster care in the U.S. have been found to be distinct from children in other age groups with respect to child and family characteristics, entries, duration, exits from out-of-home placements (Jones Harden, 2007; Wulczyn, Ernst & Fisher, 2011; Wulczyn, Hislop, & Jones Harden, 2002). Examination of different maltreatment and service patterns and trajectories with age-differentiated cohorts that include infants within a Canadian context is warranted.

### 1.4 Research questions

As outlined in this introductory chapter, the theoretical and empirical literature make a compelling case for moving towards a developmentally driven approach for child welfare practice and policy with infants and young children. The three-paper dissertation provides an opportunity to make unique contributions both empirically and conceptually, while addressing significant gaps within the knowledge base with respect to infants and child welfare practice and policy within a Canadian context. Accordingly, each of the three papers located within their respective chapters is briefly outlined, including the research questions that guided the dissertation, and the methods utilized in ascertaining the answers.

#### 1.4.1 Paper One. A pathway to community supports: Infants and ongoing child welfare services in Ontario

The first paper of the dissertation is presented in Chapter Two and is based on the secondary data analysis of the 2013 cycle of the Ontario Incidence Study of Reported Child Abuse and Neglect (OIS-2013) (Fallon et al., 2015). Utilizing OIS-2013 data, this paper built upon two key Canadian studies utilizing OIS-2008 data and CIS-2008 data (Fallon et al., 2013a, 2013b) to examine the decision to provide ongoing service post-investigation. In contrast to those studies,
this paper broadly explored the clinical factors associated with the decision to transfer a case to ongoing services, regardless of referral source. When compared to other age groups, infants are the most likely to be transferred to ongoing services (Fast et al., 2014); yet, this is only the second study that has examined this decision within an Ontario child welfare context. Regression tree analysis (i.e., CHAID) was utilized to explore the decision to provide ongoing services post-investigation. The research questions that this paper sought to answer include:

- What are the clinical characteristics (infant, primary caregiver, household, case and service) of maltreatment-related investigations involving infants in Ontario in 2013?

- What characteristics are most predictive of the decision to transfer a case to ongoing child welfare services in Ontario in 2013?

1.4.2 Paper Two. Distinctly vulnerable: Infants investigated by the Ontario child welfare system and the decision to refer to services.

Through additional secondary analysis of OIS-2013 data, the second paper is presented in Chapter Three and focuses on another key child welfare service provision decision: to refer any family member to services internal or external to the child welfare organization. This is the first known Canadian study that has specifically explored the decision to refer infants and families to services and the types of services families are referred to by the child welfare system. Moreover, this study extends the knowledge base by exploring age-specific trends in patterns and types of services utilized. The research questions that this paper sought to answer through Chi-square and logistic regression analyses include:

- What are the characteristics (child, caregiver, household, case, and short-term service outcomes) of maltreatment-related investigations of children that are infants (less than 1), preschool aged (1-3), early school-aged (4-7), pre-adolescent (8-11), and adolescent (12-15) children investigated by the child welfare system across Ontario?

- Which characteristics are associated with the service referral decision for maltreatment-related investigations involving infants?

- What are the different types of services families are referred to by child age group?

1.4.3 Paper Three. Back to the beginning: Opportunities and challenges for promoting infant development and well-being within an Ontario child welfare context

The third paper in the dissertation is presented in Chapter Four and examines the disconnect between Ontario child welfare policy and the science of early childhood development. The paper
posits that the vast knowledge amassed from the biological and social sciences has not been adequately integrated into policy responses, resulting in missed opportunities to improve and enhance infants’ developmental outcomes. An understanding of the underlying policies that influence child welfare practices in Ontario is critical to identifying opportunities to improve responses in both policy and practice domains. Key considerations in child welfare policy and practices are presented. The overarching question that this paper sought to examine is: How can the science of early childhood development inform and enhance Ontario child welfare policies and practices?

1.5 Overview of key themes of the dissertation

Although each of the three papers uniquely contributes to the literature by illuminating different opportunities and challenges in both practice and policy contexts to promote the optimal development and well-being of child welfare-involved infants, three key themes emerged from the findings, and they include: (1) child welfare service provision for infants and their families challenge a traditional, one-size-fits-all, protection-focused approach; (2) community resources and infrastructure are critical to the child welfare system’s ability and capacity to meet the unique needs of infants; and (3) the child welfare system may be missing crucial opportunities for early identification, referral and intervention. Each of these themes are discussed in greater detail in the conclusion, found in Chapter 5. Taken together, the findings of this dissertation underscore the need for a more comprehensive, cross-sectorial, transdisciplinary, and developmentally driven research, practice and policy framework for infants involved in the child welfare system in the province of Ontario.

1.6 Conclusion

In the 2014 to 2015 fiscal year, the province of Ontario provided approximately $1.47 billion to the child welfare sector alone (Office of the Auditor General of Ontario, 2015). Of course, this figure does not take into account the financial and human costs of early maltreatment and other adversities on health and development across the life course. If the needs of child welfare-involved infants and their families are unaddressed, the long-term societal costs will be high. The Ontario Association of Children’s Aid Societies (OACAS) (2014) has recently underscored the importance of early intervention and the implementation of timely services. A key recommendation, although not specific to infants, was that there be continued recognition of the
importance of early intervention approaches (OACAS, 2014). Early intervention, however, can and should take on a special significance with respect to infants and young children involved with the child welfare system; more specifically, Shonkoff and Meisels (2011) state that:

> Early childhood intervention consists of multidisciplinary services provided to children from birth to 5 years of age to promote child health and well-being, enhance emerging competencies, minimize developmental delays, remediate existing or emerging disabilities, prevent functional deterioration, and promote adaptive parenting and overall family functioning. These goals are accomplished by providing individualized, developmental, educational, therapeutic services in conjunction with mutually planned support for families” (p. xvii-xviii).

The importance of the child welfare system intervening early or partnering with early intervention services that are readily available and accessible is supported by the knowledge of early childhood and brain development. The malleability of the developing brain to experiences in early childhood makes timely identification and intervention crucial (Perry, 2009). Kamerman (2011) noted that the concept of intervening early has “become almost conventional wisdom” (p. 613). Yet, child welfare policy with respect to infants and young children in Ontario is inadequate. Despite significant changes to the child welfare system and the evolution of knowledge relating to early childhood development over the last decade, child welfare policies have remained fairly static.

The science of early childhood development can help to rethink and re-conceptualize child welfare policies and practices. A developmentally driven approach to child welfare can help to reaffirm and realign child welfare service models with its seemingly dual mandate of promoting the protection and wellbeing of children. In this vein, the findings of this dissertation converge on the notion that infants and their families present the child welfare system and its community partners with an unmatched opportunity to play a pivotal role in promoting their development and well-being. Yet, developmentally-informed practice must be supported by developmentally-informed policies and infrastructure. Otherwise, they will be unsustainable and their directions will be left unrealized. Similarly, child welfare policies and practices require a solid foundation to stand upon; however, the existing evidence base is quite thin. Ontario needs a comprehensive and coherent provincial policy framework that prioritizes the needs of infants and families who are involved with the child welfare system and supports their development through accessible, available, and developmentally responsive services. Social work has a unique vantage point and critical role in practice, policy, research and advocacy efforts.
1.7 References


Chapter 2

2 A pathway to community supports: Infants and ongoing child welfare services in Ontario

2.1 Introduction

Infants under the age of one constitute one of the most vulnerable groups of children in Canada. Compared to all other age groups of children, infants are the most likely to: be investigated (Fast, Trocmé, Fallon, & Ma, 2014); be substantiated for maltreatment (Trocmé et al., 2010); be the recipients of ongoing child welfare services (Fast et al., 2014); be placed out-of-home (Fast et al., 2014), and be re-reported (Putnam-Hornstein, Simon, Eastman, & Magruder, 2015). As a result of their physical vulnerability, infants are also the most likely to suffer injury and death as a consequence of maltreatment (Montgomery & Trocmé, 2004; Trocmé, MacMillan, Fallon, & De Marco, 2003). The research amassed to date from a variety of disciplines, underscores that the rapid rate of brain development leaves infants particularly susceptible to the deleterious consequences of maltreatment on brain architecture and on various developmental domains, including cognitive and socio-emotional (e.g., Barth et. al, 2007; DeBellis, 2002; Jones Harden, 2007). Moreover, a growing and compelling body of research is highlighting the association between early adverse childhood experiences, such as maltreatment, and the increased risk of poor mental and physical health outcomes across the life course (Boivin & Hertzman, 2012), including heart disease (Fuller-Thomson, Brennenstuhl and Frank, 2010), cancer (Fuller-Thomson & Brennenstuhl, 2009), depression (Brown, Cohen, Johnson and Smailes, 1999) and premature mortality (Brown et al., 2009).

Child welfare decisions made on behalf of infants are complex, high stakes, and have consequences that can reverberate throughout an infant’s lifetime. Maltreatment that begins in infancy is likely to become chronic if infant and family needs remain unaddressed and appropriate interventions are not implemented (Putnam-Hornstein et al., 2015). Thus, investigations involving infants and their families present the child welfare system and its community partners with an unmatched opportunity to play a pivotal role in promoting developmental well-being and buffering the negative impact of adversity (Fallon, Ma, Allen, Trocmé, & Jud, 2013a; Putnam-Hornstein et al., 2015). Timely identification and intervention are critical because the developing
brain is most responsive to environmental input and experiences in early childhood (Klein & Jones Harden, 2011; Perry, 2009). Yet, there have been long-standing concerns with the adequacy of the child welfare system’s response to the distinct needs of infants and young children, prompting calls for a more developmentally driven approach to child welfare practice, policy and research (Berrick, Needell, Barth, and Jonson-Reid, 1998; Jones Harden, 2007; Wulczyn, Barth, Ying-Ying, Jones Harden, & Landsverk, 2005).

Although the notions of protection and well-being are central considerations in Provincial and Territorial statutes across Canada (Trocmé, Kyte, Sinha & Fallon, 2014), child welfare services have traditionally placed greater emphasis on protection, including case identification and investigation of maltreatment, in comparison to assessing child functioning and the quality of the infant-caregiver relationship (Boivin & Hertzman, 2012; Trocmé et al., 2013). There are three key challenges that emanate from the literature with respect to meeting the unique needs of infants within the context of traditional child protection frameworks and service delivery models: (1) the large proportion of investigations involving infants where there is no specific incident of maltreatment alleged; (2) the disproportionate developmental vulnerability of infants to the impact of maltreatment and other adversities; and, (3) the intrinsic link and impact of caregiver functioning and the quality of the infant-caregiver relationship to infants’ immediate and long-term development and well-being (National Research Council & Institute of Medicine, 2000).

Changes to the child welfare legislation and practices in Ontario have broadened the investigation mandate, contributing to the increased identification of vulnerable infants to the child welfare system for reasons other than specific incidents of alleged maltreatment (Fallon et al., 2013a; Fallon et al., 2015; Trocmé et al., 2014). The 2008 cycle of the Ontario Incidence Study of Reported Child Abuse and Neglect (OIS-2008) was the first to track risk-only investigations in the province (Fallon et al., 2010). In the OIS-2008 analysis of infant investigations by Fallon and colleagues (2013a), just over two-thirds (66.6%) of all infant investigations were categorized as either risk assessments or as cases where children had been exposed to intimate partner violence (IPV). The exposure of children to IPV has been noted as the fastest growing type of investigated maltreatment in Canada (Trocmé et al., 2013). Canadian research has identified opportunities for implementing alternative or differential responses to child protection in situations where IPV is the sole concern, as in these circumstances, investigations are less likely to lead to ongoing
services, court involvement, or child welfare placement (Black et al., 2008; Trocmé et al., 2013; Fallon, Black, Nikolova, Tarshis, & Baird, 2014)

Infants and young children involved with the child welfare system have also been found to present with higher rates of developmental delays than children in the general population (Casaneuva, Cross & Ringeisen, 2008; Horwitz et al., 2012). The two most recent cycles of the Ontario Incidence Study of Reported Child Abuse and Neglect (2008/2013) and the Canadian Incidence Study of Reported Child Abuse and Neglect (2008) documented child functioning concerns in the physical, emotional, cognitive and behavioral domains that are relevant to infants and younger children, including the presence of attachment issues, intellectual/developmental delays, failure to meet developmental milestones, Fetal Alcohol Syndrome/Fetal Alcohol Effect (FAS/FAE), positive toxicology at birth, and physical disability (Fallon et al., 2010; Fallon et al., 2015; Trocmé et al., 2010). The most common child functioning concern identified for infants in the 2008 cycle for OIS and CIS was positive toxicology at birth (5.6% and 7.2% of all infant investigations, respectively) (Fallon et al., 2013a; Fallon, Ma, Allen, Trocmé, & Jud, 2013b). Very small proportions of all infant investigations noted other functioning concerns in both cycles (Fallon et al., 2013a, 2013b). For instance, in the OIS-2008 the failure to meet developmental milestones (2.3%), attachment issues (2.1%), physical disability (1.7%), intellectual/developmental disability (1.3%), and FAS/FAE (1.1%) were the other relevant functioning concerns noted in investigations involving infants (Fallon et al., 2013a).

In comparison to other age groups, functioning concerns involving infants have been more infrequently identified in both the OIS and CIS (Fallon et al., 2013a). The under-identification of infant functioning concerns may be a consequence of several possible reasons, including: only concerns that are known to the child protection worker at the time of the initial investigation would be documented; detailed assessments of child functioning are not routinely conducted; the OIS checklist included within the study’s standardized data collection instrument is not a validated measurement instrument with established population norms for child functioning concerns; and there is an absence of appropriate measures in the OIS (Fallon et al., 2013a; Fallon et al., 2015; Trocmé et al., 2010). There are also other challenges associated with reliably identifying child functioning concerns in infants and toddlers without the assistance of standardized measures or direct assessment. Infants have minimal verbal capacity and there are
limitations associated with caregiver reporting. Caregivers may be hesitant in reporting their child’s functioning issues as a result of perceived consequences, such as blame and stigmatization (Carter, Godoy, Marakovitz, & Briggs-Gowan, 2009). Moreover, caregivers may have potentially limited developmental knowledge that would help to identify clinically concerning behaviours of infants (Carter et al., 2009).

Ultimately, the under-identification of developmental functioning issues for infants who come into contact with the child welfare system translates into missed opportunities to ameliorate developmental outcomes and trajectories through early identification and intervention. It is important to note, however, that there is minimal research that provides guidance with respect to the implementation of developmental screening and assessment practices and models for infants and young children within a child welfare context (Fluke & Casillas, 2013; Herman-Smith & Schmitt, 2014). For instance, eligibility criteria for screening, which standardized measures to use, the timing, the frequency of use, and which professional should conduct the assessment are among the numerous considerations (Fluke & Casillas, 2013; Herman-Smith & Schmitt, 2014). Yet, despite these issues, the monitoring of developmental outcomes by the child welfare system are critical to addressing and evaluating child well-being, a central component of the child welfare mandate (Fluke & Casillas, 2013).

Despite the vast majority of children remaining in the home following a child protection investigation, most research on child welfare decision-making has been focused on the decision to place children out-of-home (e.g., Jonson-Reid, 2002; Fallon et al., 2015; Jud, Fallon, & Trocmé, 2012). The body of literature focusing on the decision to provide ongoing child welfare services after a child maltreatment investigation is minimal (e.g., Jonson-Reid, 2002; Jud, Fallon, & Trocmé, 2012) and predominantly originates in the United States. The decision to substantiate has been found to be associated with the decision to provide ongoing services (DePanfilis & Zuravin, 2001; Fuller & Nieto, 2013). Younger caregiver age, caregiver impairments, caregiver history of past maltreatment, greater number of children in the home, lower level of social support (DePanfilis & Zuravin, 2001; English, Marshall, Brummel, & Orme, 1999), maternal alcohol and drug use (DePanfilis & Zuravin, 2001) have been associated with the decision to provide ongoing child welfare services. Jonson-Reid (2002) explored the likelihood of a case being opened for services post-investigation among older children and found that early adolescents (ages 11-14
years) had a higher likelihood of a case opening than other age groups (7-10 year olds and 15 to 17 year olds). Ethnicity impacted case opening; African American children who were 2.5 times more likely to have a case opened than non-Hispanic White. There was no difference between non-Hispanic White and Hispanic children in the likelihood of case opening. Moreover, maltreatment type has influenced the decision to provide ongoing services, as children who were reported for sexual abuse and who were under 14 years of age were more likely to have a case opening than children who were reported for physical abuse or neglect. Similarly, Fuller and Nieto (2013) found that maltreatment type influenced the service provision decision; for instance, families with allegations of neglect, emotional abuse, and infants exposed to substances were most likely to receive in-home child welfare services. In addition, families with allegations that their children were “at-risk of harm” were more likely to receive services when compared to those without these allegations (Fuller & Nieto, 2013). Child race was not a significant predictor of in the decision to provide services.

Although evolving, research on the decision to provide ongoing child welfare services within a Canadian context is limited. Fallon, Ma, Black and Wekerle (2011) examined the characteristics of young parents who were investigated and had their cases opened for ongoing child welfare services and found that primary caregiver risk factors (e.g., drug/solvent abuse, cognitive impairment, mental health issues, physical health issues, and few social supports) were the most important predictors associated with the decision to provide ongoing services. Intimate partner violence (IPV) was not a significant factor associated with the decision to provide ongoing child welfare services. Similarly, caregiver functioning issues, few social supports, younger primary caregiver age, and low socio-economic status were significantly associated with the likelihood of receiving ongoing services or a referral to specialized services in Jud, Fallon, & Trocmé’s (2012) study. Moreover, male gender was significantly associated with the decision to provide services. Substantiated risk investigations and suspected or substantiated investigations of exposure to intimate partner violence (IPV) were most likely to receive a service when compared to other investigations. Fast, Trocmé, Fallon, & Ma (2014) explored the decision to provide ongoing services in a Canadian sample of adolescents and found that internalizing functioning concerns was the most significant predictor of this decision. Child Aboriginal status, poor caregiver functioning and household factors also significantly contributed to the decision to provide ongoing services.
To this author’s knowledge there are only two studies that have focused on exploring the factors associated with the decision to provide ongoing child welfare services to infants post-investigation and both are Canadian and utilized a national and provincial dataset, respectively (Fallon et al., 2013a, 2013b). In both studies, caregiver risk factors drove the service provision decision, with differing caregiver risk factors emerging as a result of the referral source (i.e., hospital, police, non-professional sources, and/or community services or social service sources). Caregiver functioning concerns, including cognitive impairment, victim of intimate partner violence, few social supports, drug/solvent abuse, mental health issues, and younger caregiver age (under 21), emerged as the most significant predictors in both studies.

The body of literature that focuses on the decision to provide post-investigation child welfare services is highly varied. There are substantial variations with respect to: the definition of ongoing services, type and measurement of variables examined, the sample and sample size, the methodology used, the time period for data collection, and the country of study origin. The state of the current literature highlights both the complexity and challenges in understanding the impact of various factors on the decision to provide ongoing child welfare services. The lack of consistency or fragmentation across studies makes it difficult to bring cohesion to this body of literature with respect to the ongoing service provision decision and its’ associated factors. The vast majority of the literature was based in the United States and does not focus on infants, calling into question its applicability to a vastly different context with respect to child welfare service provision with infants and their families in Ontario. Several factors act to limit the comparability and generalizability of findings from the broader literature to the Ontario context, including differences in service models (e.g. implementation of differential response, funding, policy, and legislative mandates). For instance, reports that allege risk of harm are not accepted in all states in the US (Fuller & Nieto, 2013). Moreover, the broader environmental context between Canada and the US is quite different; more specifically, in comparison to the US, Canada has lower child poverty rates, lower rates of teen parenting, universal health care, and a broader array of social support programs (Fallon et al., 2012; Gornick & Jantti, 2010, McKay & Barrett, 2010).
Research exploring infants and the child welfare system’s service provision decisions is underdeveloped, underscoring the need to advance the current knowledge base. When compared to all other age groups in Canada, infants have been found to be the most likely to receive post-investigation services (Fast et al., 2014). The decision to provide ongoing child welfare services has enormous implications for infants, their families, and for the child welfare system itself. For instance, the decision to provide ongoing services has financial implications for child welfare organizations that operate in an environment of ongoing fiscal restraint (Fallon, Ma, Black, & Wekerle, 2011).

Infants’ very survival, safety and well-being are intrinsically linked to and impacted by their relationship with their primary caregivers (National Research Council & Institute of Medicine, 2000). Attachment has been identified as the primary developmental need in infancy (Connell-Carrick, 2014). There is a large body of literature that suggests caregiver functioning issues, such as depression, may act to compromise the quality of the infant-caregiver relationship (Centre on the Developing Child at Harvard University, 2009). In turn, the quality of child-caregiver relationship or infants’ quality of attachment is developmentally consequential and is critical to children’s wellbeing. An impaired early attachment relationship can have serious short-term and long-term consequences. Secure attachment contributes to and promotes numerous competencies that include learning, sense of self, and enhanced social skills (National Scientific Council on the Developing Child, 2004).

The present analysis uses the Ontario Incidence Study of Reported Child Abuse and Neglect-2013 (OIS-2013) (Fallon et al., 2015) to examine the profile of infants and families reported and investigated by the child welfare system across Ontario in a representative sample of child welfare organizations. Factors associated with ongoing child welfare service provision will also be examined. The research questions are:

1) What are clinical characteristics (infant, primary caregiver, household, case and service) of maltreatment-related investigations involving infants in Ontario in 2013?

2) What characteristics are most predictive of the decision to transfer a case to ongoing child welfare services in Ontario in 2013?

This exploratory study seeks to contribute to the minimal, yet evolving, knowledge base with respect to infants in a Canadian child welfare context. In contrast to the only previous study
examining the decision to provide ongoing child welfare services to infants in Ontario by Fallon and colleagues (2013a), this study includes child ethnicity and child sex in the model. This study builds on previous research by examining the clinical profile and the child welfare system’s broad response to infants investigated by child welfare in Ontario. A greater understanding of the profile of infants and their families and the factors that influence the child welfare system’s decision to provide post-investigation services is critical to strategically developing appropriate practice and policies that are aligned with their unique needs.

2.2 Methods

A secondary analysis of the fifth cycle of the Ontario Incidence Study of Reported Child Abuse and Neglect (OIS – 2013) was conducted. The primary objective of the OIS-2013 was to examine provincial estimates on the incidence of reported child maltreatment, and the characteristics of the children and families investigated by the child protection system in Ontario. The University of Toronto provided ethics approval.

2.2.1 Sample

The OIS utilized a three-stage sampling design was utilized to select a representative sample of 17 child welfare agencies from a provincial list of 46 child welfare agencies (Fallon et al., 2015). A random sample of Ontario child welfare agencies was selected; a sample of cases is then selected from within each of these agencies. Cases opened between October 1, 2013 and December 31, 2013 of the study cycle were eligible for inclusion in the study. The three-month study period is considered optimal for participation and compliance with study procedures. The final stage of the sampling consisted of identifying investigated children as a result of maltreatment concerns. Maltreatment-related investigations included in the OIS-2013 are comprised of two types of investigations: (1) where there is no specific concern about past maltreatment but future risk of maltreatment is being assessed (risk-only), and, (2) investigations where maltreatment may have occurred. Both types of maltreatment-related investigations, regardless of their substantiation status were included in this analysis. Children over 15 years of age, siblings who were not investigated, and children who were investigated for non-maltreatment concerns were excluded from the sample.
These sampling procedures yielded a final weighted sample of 125,281 children investigated because of maltreatment concerns. The final unweighted sample of all maltreatment-related investigations yielded a final sample of 5,265 children investigated. This study focused specifically on maltreatment-related investigations involving infants (under the age of one year) and explored predictors associated with the decision to provide ongoing child welfare services at the conclusion of the investigation. The final unweighted sample for maltreatment-related investigations involving infants was 345; whereas, the final weighted sample was 7,915 investigations involving infants.

2.2.2 Data collection instrument

Data for the OIS-2013 is collected using a three-page standardized data collection instrument, the Maltreatment Assessment Form. The primary investigating child welfare worker completed this form at the conclusion of the child protection investigation. The instrument collected clinical information that child welfare workers routinely collect as part of their initial investigation, such as: caregiver, infant, case characteristics and short-term service dispositions. The Maltreatment Assessment Form is accompanied by a Guidebook (Appendix A and Appendix B, respectively).

2.2.2.1 Measures

2.2.2.1.1 Outcome variable: Transferred to ongoing service

Workers were asked to indicate whether the case would be opened for ongoing child welfare services at the conclusion of the intake investigation. The decision to transfer a case to ongoing services is a dichotomous. The variable definitions and codes used in this analysis are provided in Table 1.

2.2.2.1.2 Predictor variables

Informed by a bioecological model of human development, clinical variables were chosen based on their availability and the empirical literature on factors related to the occurrence of child maltreatment, its’ consequences, and child welfare system’s response to infants.
### Table 2.1

**Variable definitions and codes**

<table>
<thead>
<tr>
<th>Variable</th>
<th>Description</th>
<th>Measurement</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Outcome</strong></td>
<td>Workers were asked if they planned to keep the case open to provide ongoing services to the family at the conclusion of the investigation.</td>
<td>Dichotomous variable: 1 Transfer to ongoing child welfare services 0 Case closure</td>
</tr>
<tr>
<td><strong>Predictors</strong></td>
<td></td>
<td></td>
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<tr>
<td><strong>Child Characteristics</strong></td>
<td></td>
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</tr>
<tr>
<td>Child sex</td>
<td>Worker identified the sex of the investigated child.</td>
<td>Dichotomous variable: 1 Male 0 Female</td>
</tr>
<tr>
<td>Child functioning</td>
<td>Workers were asked to note up to eighteen child functioning concerns. Six of eighteen dichotomous child functioning variables were relevant to infants: failure to meet developmental milestones, attachment issues, intellectual/developmental disability, FAS/FAE, positive toxicology at birth, physical disability. This analysis noted whether the worker examined at least one of six of these relevant concerns.</td>
<td>1 At least one child functioning concern noted (suspected or confirmed). 0 No child functioning concerns noted</td>
</tr>
<tr>
<td>Child ethnicity</td>
<td>Workers were asked to indicate the ethnicity of the child (Black, Latin American, Arab, Aboriginal, Asian). Ethno-racial categories developed by Statistics Canada.</td>
<td>Dichotomous variable: 1 Ethnic minority 0 White</td>
</tr>
<tr>
<td><strong>Caregiver Characteristics</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Primary caregiver age</td>
<td>Workers were asked to indicate the age category of the primary caregiver.</td>
<td>Categorical variable: 1 18 years and under 2 19-21 years 3 22-30 years 4 31-40 years 5 41 years and up</td>
</tr>
<tr>
<td>Primary caregiver functioning</td>
<td>Workers could note up to nine functioning concerns for the primary caregiver. Concerns were: alcohol abuse, drug/solvent abuse, cognitive impairment, mental health issues, physical health issues, few social supports, victim of domestic violence, perpetrator of domestic violence, and history of foster care/group home.</td>
<td>Nine dichotomous variables: 1 Suspected or confirmed 0 No caregiver functioning concerns noted</td>
</tr>
<tr>
<td>Primary income of caregiver</td>
<td>Workers were asked to indicate the primary source of the primary caregiver's income.</td>
<td>Categorical variable: 1 Full time 2 Part-time/seasonal 3 Other benefits/unemployment 4 No income</td>
</tr>
<tr>
<td>No second caregiver in the home</td>
<td>Workers were asked to describe up to two caregivers in the home. If there was only one caregiver described, it was assumed there was no second caregiver in the home.</td>
<td>Dichotomous variable: 1 No second caregiver in home 0 Second caregiver in home</td>
</tr>
<tr>
<td>Household hazards</td>
<td>Workers were asked to note if the following hazards were present in the home at the time of the investigation: accessible weapons, accessible drugs,</td>
<td>Dichotomous variable: 1 At least one household</td>
</tr>
<tr>
<td>Variable</td>
<td>Description</td>
<td>Measurement</td>
</tr>
<tr>
<td>----------</td>
<td>-------------</td>
<td>-------------</td>
</tr>
<tr>
<td>Household regularly runs out of money</td>
<td>Workers were asked to note if the household regularly runs out of money.</td>
<td>hazard</td>
</tr>
<tr>
<td>Number of moves</td>
<td>Workers were asked to note the number of moves the household had in the past six months.</td>
<td>0 No household hazard</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Dichotomous variable:</td>
</tr>
<tr>
<td></td>
<td></td>
<td>1 Noted</td>
</tr>
<tr>
<td></td>
<td></td>
<td>0 Not noted</td>
</tr>
<tr>
<td></td>
<td></td>
<td>2 2 or more moves</td>
</tr>
<tr>
<td></td>
<td></td>
<td>1 One move</td>
</tr>
<tr>
<td></td>
<td></td>
<td>0 None</td>
</tr>
</tbody>
</table>

**Case characteristics**

| Previous openings | Worker indicated if there were one or more previous child protection openings. | 1 One or more previous openings. |
| Type of investigation | Workers were asked to indicate if the investigation was conducted for a specific maltreatment incident, or if it was to assess a risk of maltreatment only. | 0 No openings |
| | | 1 Maltreatment investigation |
| | | 2 Risk-only investigation |

### 2.2.3 Statistical analysis

Descriptive analyses were conducted to explore the profile of all infant maltreatment-related investigations (n=345). The multivariate tree-classification technique, chi-square automatic interaction detection (CHAID) was utilized for data analysis in order to identify factors predictive of the decision to transfer a case to ongoing child welfare services at the conclusion of the intake investigation. CHAID was deemed an appropriate statistical method as this study is exploratory in nature and CHAID is considered an exploratory data analysis technique (Sullivan & van Zyl, 2008).

CHAID has been used to explore differences in groups based on categorical predictor variables. Predictors are split into categories based on the Chi-square statistic. CHAID selects the predictors that divide the sample into subsets or segments that are most different on the dependent variable. Additional predictors that most influence the classification of the dependent variable then successively split each subset created by the initial split. The segmentation process is based on interactions between predictors (Sullivan & van Zuyl, 2008). Each group created by a split is independently evaluated to determine the next best predictor. Splits are based on the combination of categories that maximize homogeneity within nodes (subgroups) and continue until no significant splits can be made or the node size is too small for further analyses.
Although tree-based analysis is uncommon in child welfare research, it has been recently utilized to explore child welfare service provision decisions with infants specifically in a Canadian child welfare context (see Fallon et al., 2013a, 2013b). There are numerous advantages noted in the literature in using tree classification techniques over other traditional statistical techniques. In comparison to descriptive statistics, chi-square analyses, and logistic regression, classification tree analysis can take complex interactions between variables into account (Hébert et al., 2006; Sullivan & Van Zyl, 2007).

This present analysis included infant (e.g. sex), caregiver (e.g., caregiver functioning), household (e.g., household hazards), and case characteristics (e.g., previous openings). Please see Table 2.1 for all variables included in the model and the definitions of those variables. The model was developed in order to determine how these characteristics interact to predict ongoing service provision. In order to avoid over fitting the data, the minimum sizes for parent (n=50) and child nodes (n=20) was specified. Cross validation was utilized in order to assess the generalizability and stability of the final model. CHAID analysis classifies missing values for a particular variable as a unique category, which it subsequently collapses with other statistically homogenous categories (Thomas & Galambos, 2004). Full weights were applied in order to derive provincial estimates. The multivariate CHIAD analysis was unweighted in order to examine the individual decisions at the worker level. Please see Appendix C for a description of the weight calculations (Fallon et al., 2015; Trocmé, Sinha, Fallon, & MacLaurin, 2012). All analyses were conducted using SPSS, version 23.

2.3 Results

2.3.1 Profile of maltreatment-related investigations involving infants

Important descriptive information was revealed with respect to the characteristics of maltreatment-related investigations involving infants in Ontario in 2013, including information with respect to infant, family, maltreatment, household and case characteristics. The clinical profile of infant maltreatment-related investigations is presented in Table 2.2.
2.3.1.1 Child and family characteristics

Just over half of maltreatment-related infant investigations involved males (50.7%, 3999 investigations). Approximately 30.9% (2056 investigations) of investigations were comprised of infants who were identified as ethnic minorities. At least one child functioning issue was noted in 7.8% of investigations (n=614 investigations). The three most common concerns noted for infants by workers were positive toxicology at birth (3.9%, 305 investigations), followed by failure to meet developmental milestones (2.1%, 162 investigations) and physical disability (1.6%, 124 investigations).

Almost one-third of primary caregivers (31.3%, 2467 investigations) were under the age of 21 years. At least one primary caregiver functioning issue was noted in 74.3% (5883 investigations) of investigations. The most common caregiver functioning issue was victim of IPV (37.6%, 2978 investigations), followed by caregiver with few social supports (32.8%; 2597 investigations) and caregiver mental health issues (31.1%, 2459 investigations).

2.3.1.2 Household characteristics

Approximately a third of investigations involved single-parent households (30.4%, 2403 investigations). Almost three-quarters of caregivers (73.9%, 5471 investigations) involved in infant investigations were receiving benefits or unemployment (e.g. social assistance, employment insurance) as their primary source of income. In approximately 13.3% (1498 investigations) of investigations, there was no reported income. A smaller minority of caregivers was identified as having either full-time (7.7%, 571 investigations) or part-time/seasonal employment (5.1%, 375 investigations). The presence of at least one household hazard (e.g., mold, inadequate heating) was noted in a small proportion of investigations (8.8%, 664 investigations). Half (50%, 3261 investigations) of investigated families had not moved in the past year. One-third (32.5%, 2121 investigations) moved once; whereas, 17.4% (1138 investigations) of investigated families moved two or more times.

2.3.1.3 Case characteristics and service dispositions

Out of a total of 7915 investigations involving infants, approximately 39.8% (3151) of those investigations were transferred to ongoing child welfare services. Many investigations (43.7%, 3445 investigations) had at least one previous opening. Of those investigations with previous
openings, almost two-thirds (65%, 2243 investigations) were reopened within 12 months of case closure. In the majority of infant investigations (57.2%, 4530 investigations), there was at least one referral for specialized services provided. The decision to initiate a court application was noted in the small minority of infant investigations (8.8%, 693 investigations), as was the decision to place out-of-home (8.6%, 680 investigations).

Table 2.2

Clinical profile of maltreatment-related investigations involving infants in Ontario in 2013 (estimated number of provincial investigations, n=7915).

<table>
<thead>
<tr>
<th>Variable</th>
<th>Frequency</th>
<th>%</th>
<th>% Transferred to ongoing services</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Child characteristics</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Child Sex</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Female</td>
<td>3887</td>
<td>49.3</td>
<td>45.9</td>
</tr>
<tr>
<td>Male</td>
<td>3999</td>
<td>50.7</td>
<td>34.1</td>
</tr>
<tr>
<td><strong>Child Ethnicity</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ethnic minority</td>
<td>2396</td>
<td>30.9</td>
<td>29.5</td>
</tr>
<tr>
<td>White</td>
<td>5355</td>
<td>69.1</td>
<td>43.9</td>
</tr>
<tr>
<td><strong>Child Functioning Concerns</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Attachment Issues</td>
<td>64</td>
<td>0.8</td>
<td>100</td>
</tr>
<tr>
<td>Intellectual/Developmental Disability</td>
<td>46</td>
<td>0.6</td>
<td>73.9</td>
</tr>
<tr>
<td>Failure to Meet Developmental Milestones</td>
<td>162</td>
<td>2.1</td>
<td>84.7</td>
</tr>
<tr>
<td>FAS/FAE</td>
<td>63</td>
<td>0.8</td>
<td>100</td>
</tr>
<tr>
<td>Positive Toxicology at Birth</td>
<td>305</td>
<td>3.9</td>
<td>87.5</td>
</tr>
<tr>
<td>Physical Disability</td>
<td>124</td>
<td>1.6</td>
<td>50.0</td>
</tr>
<tr>
<td>At Least One Child Functioning Concern</td>
<td>614</td>
<td>7.8</td>
<td>78.5</td>
</tr>
<tr>
<td><strong>Primary caregiver characteristics</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Primary Caregiver Age</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>18 years and under</td>
<td>851</td>
<td>10.8</td>
<td>45.1</td>
</tr>
<tr>
<td>19 to 21 years</td>
<td>1616</td>
<td>20.5</td>
<td>59.7</td>
</tr>
<tr>
<td>22 to 30 years</td>
<td>3347</td>
<td>42.5</td>
<td>35.9</td>
</tr>
<tr>
<td>31 to 40 years</td>
<td>1952</td>
<td>24.8</td>
<td>28.1</td>
</tr>
<tr>
<td>41 years and up</td>
<td>112</td>
<td>1.4</td>
<td>14.3</td>
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<tr>
<td><strong>Primary Caregiver Risk Factors</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Alcohol Abuse</td>
<td>842</td>
<td>10.6</td>
<td>77.1</td>
</tr>
<tr>
<td>Drug/Solvent Use</td>
<td>1490</td>
<td>18.8</td>
<td>76.6</td>
</tr>
<tr>
<td>Cognitive Impairment</td>
<td>699</td>
<td>8.8</td>
<td>84.1</td>
</tr>
<tr>
<td>Mental Health Issues</td>
<td>2459</td>
<td>31.1</td>
<td>68.2</td>
</tr>
<tr>
<td>Physical Health Issues</td>
<td>466</td>
<td>5.9</td>
<td>68.2</td>
</tr>
<tr>
<td>Few Social Supports</td>
<td>2597</td>
<td>32.8</td>
<td>65.2</td>
</tr>
<tr>
<td>Victim of Intimate Partner Violence (IPV)</td>
<td>2978</td>
<td>37.6</td>
<td>51.5</td>
</tr>
<tr>
<td>Perpetrator of Domestic Violence</td>
<td>854</td>
<td>10.8</td>
<td>51.3</td>
</tr>
<tr>
<td>History of Foster Care</td>
<td>1031</td>
<td>13.0</td>
<td>58.8</td>
</tr>
<tr>
<td>At Least One Caregiver Functioning Concern</td>
<td>5883</td>
<td>74.3</td>
<td>50.3</td>
</tr>
<tr>
<td><strong>Household characteristics</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>No Second Caregiver in Home</td>
<td>2403</td>
<td>30.4</td>
<td>54.1</td>
</tr>
<tr>
<td><strong>Primary Income</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Full-time</td>
<td>571</td>
<td>7.7</td>
<td>23.3</td>
</tr>
<tr>
<td>Part-time/Seasonal</td>
<td>375</td>
<td>5.1</td>
<td>23.2</td>
</tr>
</tbody>
</table>
### Variable Frequencies

<table>
<thead>
<tr>
<th>Variable</th>
<th>Frequency</th>
<th>%</th>
<th>% Transferred to ongoing services</th>
</tr>
</thead>
<tbody>
<tr>
<td>Other Benefits/Unemployment</td>
<td>5471</td>
<td>73.9</td>
<td>42.7</td>
</tr>
<tr>
<td>No Income</td>
<td>1498</td>
<td>13.3</td>
<td>49.8</td>
</tr>
<tr>
<td>At Least One Household Hazard</td>
<td>664</td>
<td>8.8</td>
<td>72.7</td>
</tr>
<tr>
<td>Household Regularly Runs Out of Money</td>
<td>1030</td>
<td>15.7</td>
<td>67.2</td>
</tr>
</tbody>
</table>

**Number of Moves**

| No Moves | 3261 | 50.0 | 26.4 |
| One Move | 2121 | 32.5 | 42.0 |
| Two or More Moves | 1138 | 17.4 | 80.9 |

#### Maltreatment characteristics

**Types of Maltreatment**

- Physical Abuse: 163 (2.1) 19.0
- Sexual Abuse: 93 (1.2) 61.3
- Neglect: 1618 (20.4) 43.1
- Emotional Maltreatment: 424 (5.4) 41.5
- Exposure to IPV: 2467 (31.2) 24.2
- Risk: 3150 (39.8) 50.6

**Case characteristics and short-term service outcomes**

- Opened for ongoing services: 3151 (39.8) --
- At least one previous case opening (family-level): 3445 (43.6) 51.1
- Reopened within 12-month period: 2243 (65.1) 51.9
- Infant previously investigated for alleged maltreatment: 1339 (16.9) 44.6
- At least one referral for specialized services: 4530 (57.2) 57.1
- Child welfare court: 693 (8.8) 98.1
- Placement: 680 (8.6) 89.0

Source: 2013 Ontario Incidence Study of Reported Child Abuse and Neglect*

### 2.3.2 Results of CHAID analysis

To explore which predictors were most associated with the decision to provide ongoing child welfare services at the conclusion of the maltreatment-related investigation involving infants, a classification tree model was developed. The results of the model are illustrated in Figure 1, including probability values that are adjusted for multiple comparisons using the Bonferroni approach. The resulting tree model predicted the decision to provide ongoing services among all infant investigations and consisted of 12 nodes across 3 levels. Each node is representative of a particular subgroup of maltreatment-related investigations involving infants. CHAID segmentation split the sample into 7 relatively homogenous subgroups with respect to the outcome variable. A risk estimate of the cross-validation, a measure of the tree’s predictive accuracy was .325 (SE=. 025), indicating that the category predicted by the model is incorrect for 32.5% of cases; whereas, the classification table indicates that the model classified 75.7% of infant investigations correctly.

Primary caregiver with few social supports emerged as the most highly significant predictor of the decision to provide ongoing child welfare services ($\chi^2 = 58.74$, df=1, adj. $p<.0001$), as it was the
first predictor selected by CHAID to split the sample of infant maltreatment-related investigations. Infant investigations where few social supports were noted by the investigating child welfare worker were more likely to be transferred to ongoing services in comparison to those that were not identified with this risk factor (70.2% vs. 27.6%). Among infant investigations where primary caregiver with few social supports was noted the next best predictor of the investigation being transferred was primary caregiver drug/solvent abuse ($\chi^2 = 14.70$, df=1, adj. p<.0001). Among this subsample, infant investigations where the primary caregiver was identified as having a drug/solvent abuse issue were more likely to be transferred than those who were not (96.9% vs. 60.9%). Among infant investigations where caregiver drug/solvent abuse was not noted, the next best predictor was primary caregiver mental health issues ($\chi^2 = 8.68$, df=1, adj. p<.005).

Among infant investigations where primary caregiver with few social supports was not noted, the next best predictor of the transfer to ongoing services was primary caregiver mental health issues ($\chi^2 = 20.67$, df=1 adj. p<.0001). Among this subsample, infant investigations with primary caregiver mental health issues identified were more than twice as likely to be transferred to ongoing services than investigations without this concern identified (50.0% vs. 19.3%). Among infant investigations where primary caregiver mental health issues was not noted, infant sex was the next best predictor ($\chi^2 = 8.70$, df=1 adj. p<.05). More specifically, investigations involving female infants were more likely to be transferred than those involving males (28.9% vs. 10.6%). However, when mental health issues were noted, primary caregiver age was the next best predictor of ongoing issues ($\chi^2 = 12.38$, df=1, adj. p<.005). The subsample containing infant investigations with primary caregivers under the age of 21 were more likely to be opened for ongoing services than those with primary caregivers 22 years of age or more (81.0% vs. 33.3%). The CHAID analysis collapsed the initial five different age categories into two separate subgroups. This suggests that the two initial age categories that formed the under 21 age group can be treated as homogenous, as can the three initial age categories that comprised the over 22 group.
Overall, primary caregiver risk factors (few social supports, mental health issues, drug/solvent abuse, and primary caregiver age) were predominant in this model. Infant sex was the only child characteristic that emerged as an influential predictor. Several child, household and case characteristics did not reach statistical significance in the model and were subsequently excluded. The exclusion of many predictor variables may be a result of small sample sizes in many categories; thereby, reducing the possibility of their inclusion in the CHAID analyses and their impact on the outcome variable.

In summary, the CHAID analysis identified subgroups of investigations involving infants for which the likelihood of being transferred to ongoing services ranged from 10.6% to 96.9%. As noted earlier, 40% of all investigations were transferred to ongoing services. The subgroup of infant investigations with the greatest likelihood of remaining open were those identified with primary caregiver risk factors of few social supports and drug/solvent abuse (96.9%) (i.e., Node 6). The subgroup of infant investigations (Node 9) where primary caregivers were below 21 years
of age and identified mental health issues were also among the most likely subgroups to be provided ongoing services (81%). Overall, the CHAID analysis revealed the five following salient factors in predicting the decision to transfer infant investigations for ongoing service provision: primary caregiver few social supports, primary caregiver mental health issues, child sex, primary caregiver age, and primary caregiver drug/solvent abuse.

2.4 Discussion

This study used a Canadian provincial dataset to explore the clinical profile of infants and their families involved in maltreatment-related investigations and to determine which factors predict the provision of ongoing child welfare services at the conclusion of the investigation. Overall, the emerging clinical portrait of infant maltreatment-related investigations underscores the many burdens experienced by the infants and families that are investigated by the child welfare system. These findings provide a broad profile of the clinical factors that influence service provision and have practice, policy and research implications for the field of child welfare. This study both confirms and extends the knowledge base with respect to infants investigated by the child welfare system.

In approximately 7 of every 10 infant investigations in Ontario, at least one primary caregiver risk factor was identified. Notably, when considering all infant investigations, the most influential predictor of service provision was primary caregiver with few social supports. Primary caregiver risk factors (few social supports, mental health issues and younger caregiver age) drove the decision to provide ongoing child welfare services in this analysis. Caregiver functioning issues have consistently emerged as driving service provision for infants in a Canadian child welfare context (Fallon et al., 2013a, 2013b). In contrast, the emergence of child sex as a significant predictor of service provision was an unexpected finding in this study. The incidence rates for maltreatment-related investigations involving infants are fairly similar for female and male infants in Ontario (58.88 versus 57.61, respectively) (Fallon et al., 2015); yet, there were a larger proportion of female infants transferred to ongoing services when compared to male infants (45.9% versus 34.1%) at the conclusion of the maltreatment-related investigations.

The Canadian research on child sex and service provision decisions is mixed. This study’s findings corroborate Jud, Fallon and Trocmé’s (2012) study indicating that child’s gender was
significantly associated with the decision to provide ongoing services or a referral for specialized services for the family; more specifically, male children received fewer services than female children. In contrast, Fast and colleagues (2014) did not find an association between child gender and the provision of ongoing service for adolescents in a Canadian sample. Canadian studies that have examined the association between gender and placement (Tonmyr et al., 2011) or the substantiation decision (Williams, Tonmyr, Jack, Fallon, & MacMillan, 2011) in infant maltreatment investigations have not found a significant relationship at the bivariate level with an infant’s gender. Are the families of female infants perceived to be at greater risk and need of ongoing child welfare services than male infants? Understanding how gender influences the child welfare system’s response to infants and younger children is an important endeavor in light of the research that suggests that there are gender differences in the onset of early childhood mental health problems (Children’s Mental Health Ontario, 2002; Hinshaw & Joubert, 2014) with developmental psychopathology predominating in males in the first ten years of life (e.g., autism, aggressive conduct disorder) (Hinshaw & Joubert, 2014). There is also emerging evidence that the impact of early childhood maltreatment on behavioural problems seems to be modified by gender (Godinet & Berg, 2014). Further research is indicated with respect to the influence of child sex in maltreatment-related investigations and service provision decision-making involving infants. This analysis revealed that approximately 4 of every 10 investigations involving infants received ongoing services. In addition, through the process of segmentation, the CHAID analysis revealed several seemingly high-risk subgroups of infants and families subject to investigations that did not receive ongoing services. The challenge of trying to discern and define when a child is at risk of future maltreatment for the field of child welfare has been noted in the literature (Fallon, 2011). Further research disentangling the possible differences between families that receive post-investigation child welfare services from those who do not is warranted. Understanding differences may assist in ensuring that scarce resources are appropriately targeted and aligned with infant and caregiver needs.

Interestingly, although type of investigation (risk versus maltreatment) was not a significant predictor in this analysis, the proportion of investigations transferred to ongoing services that assessed risk exceeded investigations that assessed different types of maltreatment incidents (i.e., physical abuse, neglect, emotional maltreatment and IPV). Sexual abuse was the only exception. Jud, Fallon and Trocmé’s (2012) study found that risk-only investigations were more likely to be
referred to services than other investigation types. Moreover, although infant functioning concerns were identified infrequently, they were transferred to ongoing services in high proportions. For instance, although attachment issues and Fetal Alcohol Spectrum Disorder and Fetal Alcohol Effects (FAS/FAE) were each noted in less than 1% of investigations, they were transferred to ongoing services 100% of the time. Positive toxicology at birth was noted in 3.9% of cases and these investigations were transferred approximately 87.5% of the time. Another noteworthy finding relates child ethnicity on the decision to provide services. Although child ethnicity was not an influential predictor in this model, the proportion of cases transferred to ongoing services differs. Children who were identified as an ethnic minority were not transferred to ongoing services as frequently as children who were identified as white (29.5% versus 43.9%). Recent Canadian studies are mixed with respect to the impact of ethnicity on the decision to transfer to ongoing services. Jud, Fallon and Trocmé (2012) found that ethnicity did not influence the decision to refer to specialized services; whereas, Fast and colleagues (2014) found adolescents’ Aboriginal status did impact the decision to transfer to ongoing services. This finding warrants future research specifically examining infants in a Canadian child welfare context.

Among infant investigations with at least one previous case opening at the family level (43.7%), almost two-thirds were re-opened by the child welfare system within a 12-month period. Moreover, 17.9% of infants involved in the index investigation had been previously investigated by the child welfare system for alleged maltreatment. High rates of re-reported maltreatment have been found in the literature among infants with both substantiated and unsubstantiated reports post-investigation (Putnam-Hornstein et al., 2015). Moreover, families that receive ongoing child welfare services have been found to be more likely to be re-reported than those who do not (Fuller & Nieto, 2013). The large proportion of case re-openings and the short timeframe for child welfare re-involvement in this study is concerning. Repeated child welfare involvement suggests that infants are at high risk of ongoing adversities (Putnam-Hornstein et al., 2015). This study’s findings highlight the chronicity of issues experienced by infants and their families and may signal complex, unmet and unresolved needs (Putman-Hornstein et al., 2015). Moreover, the exposure of infants to chronic and excessive stress is believed to be “toxic” as it can adversely and permanently influence brain development (National Research Council on the Developing Child, 2005/2014; Perry, 2009; Sheridan & Nelson, 2009). Timely and appropriate interventions may decrease the likelihood that maltreatment beginning in infancy becomes chronic, adversely
impacting development. These findings highlight the challenges of service provision and the importance of examining infants’ trajectories and child welfare service patterns (i.e. re-reports) over time in a Canadian context.

This analysis revealed that child welfare workers did not endorse the presence of any child functioning concerns in approximately 90% of all infant investigations in Ontario in 2013. Infant screening instruments can assist in assessing developmental risks in various developmental domains (e.g., motor, socio-emotional, cognitive) and in determining when referrals for further evaluation and intervention are needed (Easterbrooks, Driscoll, & Bartlett, 2008). Under-identification of infant functioning issues may be translating into missed opportunities for understanding, monitoring and enhancing developmental well-being and resilient functioning for infants involved with the child welfare system. Further research is required on developmental screening and assessment models for infants and young children who are involved with the child welfare system (Herman-Smith & Schmitt, 2014), particularly in a Canadian child welfare setting. The lack of routine, detailed and more systematic assessments of child functioning within a Canadian child welfare context would likely result in the identification of more issues for all children investigated (Trocmé et al., 2010). Reliable and valid screening tools are important to this endeavor; however, in order for screening tools to be adopted and for models to be feasible and sustainable, the unique demands of child welfare settings must be considered. Moreover, the use of standardized tools would require training and/or close partnerships with professionals who are qualified to both administer and interpret the results of these instruments.

The vulnerability of infants that are referred and investigated by the Ontario child welfare system is confirmed by this study’s findings. Risk, IPV and neglect were the three most common primary concerns noted in infant investigations. Risk investigations comprised the largest proportion of all infant investigations in this present analysis of the OIS-2013 and the previous OIS-2008 cycles, comprising 39.8% and 45.1%, respectively. The large proportion of risk-only investigations may be due to increasing professional awareness of the developmental impact of chronic exposure of family dysfunction and stress (Trocmé et al., 2014). Exposure to IPV was identified as the primary concern in almost one-third of infant investigations and comprised the second largest proportion of investigations in this study. Canadian research is suggesting the importance of considering a differential systems response to IPV (Fallon et al., 2014; Trocmé et al., 2014).
Moreover, the child welfare response to IPV is dependent on the specific subtype of exposure to IPV being investigated (i.e., direct witness to physical violence, indirect exposure to physical violence, and exposure to emotional violence) (Fallon et al., 2014). Further research is needed to specifically explore the child welfare response to infants exposed to IPV and its subtypes. Lastly, neglect was the primary concern in 1 of every 5 infant investigations. Neglect has particularly pernicious effects on infants’ short-term and long-term well-being. Furthermore, neglect has been noted to be more chronic in duration and can result in a broader range of developmental harm in comparison to other maltreatment types, including language delays and deficits, cognitive deficits, impulsivity, and poor school performance (Connell-Carrick, 2014).

In the majority (57.2%) of investigations involving infants, referrals were made for services. This finding further highlights the complexity of family needs and the importance of connecting families with additional supports and services. The large proportion of referrals is not surprising given that caregiver with few social supports was the most influential predictor in the decision to provide ongoing services. The ability of the child welfare system to meet the needs of infants and families is tied to other systems. Caregiver isolation means less community surveillance for a very vulnerable population and may explain why infants are most likely to be transferred to ongoing services. Moreover, it is also possible that a transfer to ongoing services triggers other services for the family and may signal a lack of available and accessible community supports for caregivers and infants. Insight from the field, particularly from the perspective of child welfare workers with respect to decision-making and service provision is notably absent in the literature, but is viewed as necessary to advancing the knowledge base on decision-making processes, contexts and outcomes for infants.

Findings indicate that caregivers are struggling with numerous challenges that can adversely compromise their parenting and their ability to meet the unique developmental needs of their infant. Given that the protection and well-being of infants is intrinsically linked to their primary caregiver, exploration of how the child welfare system can simultaneously address and buffer infant and caregiver risk factors while promoting protective factors is critical. The infant-caregiver relationship is critical to promoting infant well-being.
Within the larger Canadian child welfare context, there has been a noted shift in the focus of investigations from immediate safety to the long-term impact of family dysfunction (Trocmé et al., 2014). Yet, it appears that shifts in investigative focus have not been accompanied by shifts in child welfare service models. Child welfare service models have been characterized as short-term and reactive - a mismatch with the longer-term, proactive model structure (Fuller & Nieto, 2013) that is necessary to meet the needs of many infants and families involved with the child welfare system. This raises questions about the utilization of alternative or differential response models or initiatives with respect to infants. Although the child welfare system in Ontario has shifted towards differential response options, Ontario has not yet implemented wide-scale programs (Fallon et al., 2013a; Nikolova, Fallon, Black & Allan, 2014). A comprehensive understanding of how the Canadian child welfare system is responding to infants is challenging to discern. Child welfare in Canada is governed by legislation that is specific to each province and territory (Courtney, Flynn & Beaupré, 2013; Mulcahy & Trocmé, 2010). Although there are four other provincial incidence studies conducted in Canada in 2008 (Alberta, British Columbia, Saskatchewan and Quebec), there are no known published studies that have specifically examined child welfare practice with respect to infants and infant functioning issues and trends within these unique provincial contexts.

A developmentally informed perspective views the involvement of infants and their families with the child welfare system as an unmatched opportunity to intervene to not only ensure children’s physical safety, but to also ameliorate infant development and well-being. The National Scientific Council on the Developing Child (2004) suggests that maltreatment should be assessed and treated as a matter of health and development. Thus, when viewed through a developmental lens, these findings raise several questions with respect to the provision of child welfare services to infants and their families: 1. How are current child welfare service models and policies addressing the unique developmental needs of infants? 2. Given that the notion of well-being is a central consideration in child welfare mandates, what alternate or differential response options could best address the needs of infants and their families? And lastly, 3. How can the science of early childhood development inform and enhance child welfare service models? The answers to these questions will guide, and perhaps, re-conceptualize child welfare practice and policy responses with infants and their families.
2.5 Limitations

There are several limitations to this study that must be considered when interpreting the results. Data collected from the OIS is collected directly from the investigating child welfare worker and are not independently verified. The data is representative of an investigative period of thirty days after the case has opened. There may not be enough time for a more comprehensive assessment of child and caregiver functioning, and thus, this may result in the under identification of functioning concerns for either children and/or their caregivers. Other concerns could emerge post-investigation. It is unknown whether families were engaged in other community services during this period.

2.6 Conclusion

Despite its limitations, this study presents important findings that contribute to the minimal literature on child welfare service provision to infants and their families. The findings of this research are yet another reminder of the importance of effective targeted prevention and early intervention strategies for this particularly vulnerable subgroup of children and their families. It is critical that child welfare intervention efforts be predicated upon understanding infants’ profiles, developmental vulnerabilities, protective factors, and the risks faced in multiple ecologies (Jones Harden, 2007). This study underscores the need for future research that contributes to expanding our understanding of the child welfare systems’ responses to infants. Moreover, future research can help to inform, develop and target services to the unique needs of infants and families involved with the child welfare system.
2.7 References


Chapter 3

3 Distinctly vulnerable: Infants investigated by the Ontario child welfare system and the decision to refer to services

3.1 Introduction

Epidemiological evidence underscores that the age of children influences the risk of maltreatment and how the child welfare system subsequently responds to it (Wulczyn, 2008; Wulczyn, Barth, Yuan, Harden & Landsverk, 2005). Findings from Canadian incidence studies at both the provincial and national levels suggest that infants are a distinctly vulnerable population of children involved with the child welfare system (Fallon, Ma, Allen, Trocmé, & Jud, 2013a; Fallon, Ma, Allen, Trocmé, & Jud, 2013b, Fast, Trocmé, Fallon, & Ma, 2014). This is underscored by the differences in key service provision decisions between infants and adolescents. Investigations involving infants are most likely to be transferred to ongoing services (Fast et al., 2014) and to result in out-of-home placements (Fast et al., 2014). Caregiver functioning concerns have been found to drive the decision to provide ongoing child welfare services (Fallon et al., 2013a, 2013b) and out-of-home placements for infants (Tonmyr, Williams, Jack, & MacMillan, 2011). In contrast, child functioning concerns are key contributors for both decisions involving adolescents (Fast et al., 2014). Collectively, these findings underscore the importance of exploring the unique mix of child, family and broader environmental factors that emerge around specific ages and stages of development, and its impact upon service decisions (Wulczyn, 2008). This knowledge can assist in aligning, organizing, and targeting child welfare and community services to address developmental risks and needs.

Maltreatment that begins in infancy has the potential to become chronic and developmentally deleterious (Putnam-Hornstein, Simon, Eastman, & Magruder, 2015). Children and families involved with the child welfare system are often referred to services that exist both within the child welfare system and through external community services. Social supports from the community can help to buffer stress and reduce social isolation, a risk factor for both infant
maltreatment and poor infant psychosocial functioning (Connell-Carrick, 2014; Johnson & Appleyard, 2014). Notably, a caregiver’s social support network can positively impact the quality of infant-caregiver relationship (Johnson & Appleyard, 2014). Thus, the social service system is part of the larger ecological context that surrounds and influences infants, their caregivers, their relationship, and ultimately, infants’ development (Mendoza, 2014). Service referrals are an important step to mitigating risk and promoting both the safety and well-being of infants. Moreover, service referrals can signal the child welfare systems’ recognition of child and/or family need (Font, 2013). Recognition or identification of needs is a critical first step to meeting them.

When compared to the general population, children reported for maltreatment have been found to have higher rates of developmental issues (Ringeisen, Casaneuva, Cross, & Urato, 2009). In fact, a high rate of developmental problems has been found regardless of whether investigations involving infants and toddlers were substantiated or unsubstantiated (Casanueva, Cross & Ringeisen, 2008; McCrae, Cahalane, & Fusco, 2011). Children who have been involved with the child welfare system as infants have been found to have high levels of unmet mental health and educational needs at school entry (Ringeisen et al., 2009). Moreover, developmental difficulties that emerge in early childhood can become more serious and harder to address over time (National Scientific Council on the Developing Child, 2008/2012). The benefit of services to infants and their families is dependent upon timely identification (Wulczyn, 2008). Yet, there have been consistent concerns emerging from the literature that indicate that the child welfare system is missing opportunities to ameliorate the developmental outcomes and trajectories of infants and young children through early identification and intervention (Horwitz et al., 2012; Jones Harden, 2007; McCrae, Cahalane, & Fusco, 2011; Stahmer et al., 2005; Williams et al., 2012). In Ontario, infants have been noted to be the least likely group of children to be identified as having a child functioning concern (Fallon et al., 2013a). Time-limited observations, competing demands inherent in child welfare work, relying solely on child welfare worker judgment and not integrating standardized developmental screening tools may be contributing to inaccurate assessment, the under identification of young children’s development, and the need for early intervention services (Herman-Smith & Schmitt, 2014). The lack of identification of developmental issues for infants by child welfare workers can result in low referral rates to, and underuse of early intervention options (Wiggins, Fenichel, & Mann, 2007).
For infants and younger children, the focus in the broader literature has been on the examination of gaps between needs identified and services utilized (e.g., McCrae, Cahalane, & Fusco, 2011). Research suggests that younger children tend to receive more services than older children do (Jud, Fallon, & Trocmé, 2012; Palusci, 2011). There is a dearth of literature focusing on the factors associated with the decision to refer children and/or families to specialized services (Jud, Fallon, & Trocmé, 2012). Villigrana (2010) examined the factors that influence a referral to mental health services for child welfare-involved children by both court social workers and child welfare social workers in California by using case abstraction of closed court cases. No significant predictors were found for the decision to refer children to mental health services by child welfare social workers; whereas, predictors of a referral for mental health service for court social workers included the child remaining in their home as opposed to being placed in foster care and the experience of multiple types of abuse in comparison to neglect. Font (2014) found that factors associated with service referrals differed by ethnicity (i.e., Black and White families). For instance, a substantiation decision was more likely to result in a service referral for white families than for black families.

Research exploring the service referral decision is also underdeveloped within a Canadian child welfare context. The available research exploring service provision has focused on factors that impact the decision to place children out-of-home (e.g., Fluke, Chabot, Fallon, MacLaurin, & Blackstock, 2010; Esposito et al., 2013) and to provide ongoing services (e.g., Fallon et al., 2013a, 2013b). To this author’s knowledge there is only one Canadian study that has explored the factors that influence the decision to provide a referral during an investigation. Jud, Fallon, and Trocmé (2012) found that several caregiver functioning issues including few social supports, younger primary caregiver age, and socio-economic disadvantage were significantly associated with the likelihood of receiving a referral for services post-investigation. Child sex was significantly associated with the decision to provide services with male children receiving fewer services than female children. Substantiated risk investigations and suspected or substantiated investigations of exposure to intimate partner violence (IPV) were most likely to receive a service when compared to other investigations.
Overall, there is a dearth of research that specifically focuses on the factors that influence the decision to refer children and/or families to services. The literature available is inconsistent with respect to the definition of the referral to services, type and measurement of variables examined, the sample criteria, sample sizes, the methodology used, the time period for data collection examined, and the country of study origin. For instance, Palusci’s (2011) study on post-investigation services after recurrence does not solely examine infants but instead combines infants and young children aged 0-5. The broader literature originates from the United States which has different policy and practice contexts than Ontario, Canada, raising inherent limitations with the comparability and generalizability of the findings with respect to infants and younger children as a result of these differences. More specifically, there are federal and state-level policies in the US that address the gap in early intervention services for maltreated children aged 0-3 years (McCrae, Cahalane, & Fusco, 2011). Child welfare and early intervention in the agencies must have referral procedures in place for all infants and young children (0-3) who have been substantiated for child maltreatment. The referral criteria of substantiation has been raised as a concern given that the rates of developmental need in infants and young children do not vary by substantiation status (McCrae, Cahalane, & Fusco, 2011).

The state of the literature suggests that the child welfare decision to refer families to services is an important one that warrants more focused attention, particularly as it pertains to infants. Moreover, a developmentally-informed perspective suggests that the composition of services needed to support infants and their families should differ from those needed to support older children (Wulczyn, 2008). To this author’s knowledge, there is no study that has specifically examined the child welfare service referral decision for infants and families who have been investigated by the child welfare system. Nor has there been an examination of the patterns and types of services families are referred to amongst differing age groups of children involved in maltreatment-related investigations that examine infants alone. As a result of the significant gaps in the knowledge base, this exploratory study uses the Ontario Incidence Study of Reported Child Abuse and Neglect-2013 (OIS-2013) (Fallon et al., 2015) to answer the following questions:

1. What are the characteristics (child, caregiver, household, case, and short-term service outcomes) of maltreatment-related investigations of children that are infants (less than 1), preschool aged (1-3), early school-aged (4-7), pre-adolescent (8-11), and adolescent (12-15) children investigated by the child welfare system across Ontario?
2. Which characteristics are associated with the service referral decision for maltreatment-related investigations involving infants?

3. What are the different types of services families are referred to by child age group?

The decision to refer infants and families for services is an opportunity to address their specific needs and possibly enhance their developmental trajectory (Jones Harden, 2007). Identifying and appropriately addressing infant and/or family needs early could help to prevent deterioration in family functioning, maltreatment, or recurrent involvement with the child welfare system. Notably, the OIS is the only source of provincially aggregated data with respect to service referrals for Ontario. Understanding factors associated with child welfare service referral decisions for infants and age-specific trends for the broader population of children is important to strategically addressing and targeting child and family needs. Given the dearth of research on infants and the decision to provide service referrals within a Canadian child welfare context, this exploratory analysis is warranted.

3.2 Methods

A secondary analysis of the OIS – 2013 was conducted. The primary objective of the OIS-2013 was to examine provincial estimates of the incidence of reported child maltreatment and characteristics of the children and families investigated by the child protection system in Ontario. The University of Toronto provided ethics approval.

3.2.1 Sample

The OIS utilizes a three-stage sampling design to select a representative sample of 17 child welfare agencies from a national list of 46 child welfare agencies (Fallon et al., 2015). A random sample of Ontario child welfare agencies was selected; a sample of cases is then selected from within each of these agencies. Cases opened between October 1, 2013 and December 31, 2013 of the study cycle were eligible for inclusion in the study. The three-month study period is considered optimal for participation and compliance with study procedures. The final stage of the sampling consisted of identifying investigated children as a result of maltreatment concerns. Maltreatment-related investigations included in the OIS-2013 are comprised of two types of investigations: (1) where there is no specific concern about past maltreatment but future risk of maltreatment is being assessed (risk-only), and, (2) investigations where maltreatment may have
occurred. Maltreatment-related investigations, regardless of their substantiation status were included in this analysis. Children over 15 years of age, siblings not investigated, and children who were investigated for non-maltreatment concerns were excluded from the sample.

These sampling procedures yielded a final weighted sample of 125,281 children investigated because of maltreatment concerns. The final unweighted sample yielded a final sample of 5,265 children investigated. This study focused specifically on maltreatment-related investigations involving infants (under the age of one year) and explored predictors associated with the decision to provide ongoing child welfare services at the conclusion of the investigation. The final unweighted sample for maltreatment-related investigations involving infants was 345; whereas, the final unweighted sample of investigations involving infants was 7,915.

3.2.2 Data collection instruments

Data for the OIS-2013 is collected using a three-page standardized data collection instrument, the Maltreatment Assessment Form. The primary investigating child welfare worker completed this form at the conclusion of the child protection investigation. The instrument collected clinical information that child welfare workers routinely gathered as part of their initial investigation, such as: caregiver, infant, case characteristics and short-term service dispositions, referrals for services, and types of services referred to. The Maltreatment Assessment Form is accompanied by a Guidebook (Appendix A and Appendix B, respectively).

3.2.3 Measures

3.2.3.1 Outcome variable: Referral to services

Workers were asked to indicate whether any referrals for services had been made for any family member. These referrals include internal referrals to a special program provided by the child welfare organization or to other agencies or services external to the child welfare organization. The decision to refer to services is a dichotomous variable. The variable definitions and codes used in this analysis are provided in Table 3.1.

3.2.3.2 Predictor variables

Informed by a bioecological model of human development, clinical variables were chosen based on their availability in the dataset and on the empirical literature addressing factors related to the
occurrence of child maltreatment, its’ consequences, and the child welfare system’s response to infants.

Table 3.1

**Variable definitions and codes**

<table>
<thead>
<tr>
<th>Variable</th>
<th>Description</th>
<th>Measurement</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Outcome</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Referral to specialized services</td>
<td>Workers were asked to indicate if a referral was made to any services internal to the child welfare system or externally to community services (e.g., parent support group) for any family member.</td>
<td>Dichotomous variable: 1 Referral for services 0 No referral for services</td>
</tr>
<tr>
<td><strong>Predictors</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Child Characteristics</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Child sex</td>
<td>Worker identified the sex of the investigated child.</td>
<td>Dichotomous variable: 1 Male 0 Female</td>
</tr>
<tr>
<td>Child functioning</td>
<td>Workers were asked to note up to eighteen child functioning concerns. Six of eighteen dichotomous child functioning variables were relevant to infants: failure to meet developmental milestones, attachment issues, intellectual/developmental disability, FAS/FAE, positive toxicology at birth, physical disability. This analysis noted whether the worker examined at least one of these six concerns.</td>
<td>1 At least one child functioning concern noted. 0 No child functioning concerns noted</td>
</tr>
<tr>
<td>Child ethnicity</td>
<td>Workers were asked to indicate the ethnicity of the child (Black, Latin American, Arab, Aboriginal, Asian). Ethno-racial categories developed by Statistics Canada.</td>
<td>Dichotomous variable: 1 Ethnic minority 0 White</td>
</tr>
<tr>
<td><strong>Caregiver Characteristics</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Primary caregiver age</td>
<td>Workers were asked to indicate the age category of the primary caregiver.</td>
<td>Categorical variable: 1 21 years and under 2 22 years and up</td>
</tr>
<tr>
<td>Primary caregiver functioning</td>
<td>Workers could note up to nine functioning concerns for the primary caregiver. Concerns were: alcohol abuse, drug/solvent abuse, cognitive impairment, mental health issues, physical health issues, few social supports, victim of domestic violence, perpetrator of domestic violence, and history of foster care/group home.</td>
<td>Nine dichotomous variables: 1 Suspected or confirmed 0 No or unknown</td>
</tr>
<tr>
<td>Primary income of caregiver</td>
<td>Workers were asked to indicate the primary source of the primary caregiver’s income.</td>
<td>Categorical variable: 1 Full time/Part time 0 Other benefits/unemployment/ No income</td>
</tr>
<tr>
<td><strong>Household characteristics</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>No second caregiver in the home</td>
<td>Workers were asked to describe up to two caregivers in the home. If there was only one caregiver described there was no second caregiver in the home.</td>
<td>Dichotomous variable: 1 No second caregiver in home 0 Second caregiver in home</td>
</tr>
<tr>
<td>Household hazards</td>
<td>Workers were asked to note if the following hazards were present in the home at the time of the investigation: accessible weapons, accessible drugs, production/trafficking of drugs, chemicals/solvents, used in drug production, other home injury hazards, and other home health hazards.</td>
<td>Dichotomous variable: 1 At least one household hazard 0 No household hazard</td>
</tr>
</tbody>
</table>
### Statistical analysis

Descriptive analyses were conducted in order to explore and compare the profile of investigations involving infants (under the age of 1), preschool (1-3), and early school-age (4-7), pre-adolescent (8-11) and adolescent (12-15) children in Ontario in 2013. Annualization and regionalization provincial incidence estimates were calculated by dividing the weighted estimates by the child population based upon 2011 Census data from Statistics Canada. Incidence rates were deemed appropriate for age group comparisons as variations in the general population are considered, rather than the count of investigations alone (Fallon et al., 2015). Moreover, the examination of incidence and proportions was appropriate given the similar directions or patterns (i.e., infant investigations had high rates of service referrals and greater proportions when compared to other age groups). See Appendix C for a description of the weight calculations (Fallon et al., 2015; Trocmé, Sinha, Fallon, & MacLaurin, 2012). Bivariate chi-square analyses were conducted to explore the relationship between the outcome variable (i.e., referral for service), and each variable deemed theoretically important for maltreatment-related investigations involving infants. Chi-square analyses for three categorical variables were conducted in order to explore age-specific associations between variables and the service referral decision. For the exploration of age-specific associations, all significance values noted were adjusted p values for multiple comparisons. Chi-square tests were also conducted in order to explore the overall relationship between the types of services referred to and age. Chi-square tests of significance were conducted using the normalized sample weight, which adjusts for the
inflation of the chi-square statistic by the size of the estimate by weighing the estimate down to the original sample size.

Multivariate analysis was conducted in order to explore which predictors were significant to the decision to provide a service referral at the conclusion of the maltreatment-related investigations involving infants. Only predictors that were significant at the bivariate level (p<.05) were included in the logistic regression model. The model was run with a smaller set of statistically significant predictors. Logistic regression was deemed an appropriate analysis strategy as the outcome variable is dichotomous and it can estimate the relationship between one or more predictor variables with the likelihood or probability an event occurring (Wright, 1995). The cutoff point for the decision to refer to services was 0.57, which reflects the proportion of investigations referred for services for the infant population. This analysis did not include missing data in the bivariate or multivariate analysis. Unweighted data were used in the multivariate model to ensure unbiased results due to the inflation of significance due to a large sample size. All analyses were conducted using SPSS, version 23.

3.3 Results

3.3.1 The profile of maltreatment-related investigations by child age

The results reveal important descriptive information about maltreatment-related investigations by child age in Ontario in 2013. Please see both Table 3.2 and Figure 3.1. In comparison to all other age groups, maltreatment-related investigations involving infants have the highest incidence of a service referral at 33.5 per 1000; followed by early school-aged children at 24.69 per 1000; preadolescents at 23.07 per 1000 investigations; pre-schoolers at 22.93 per 1000; and, adolescents at 20.66 per 1000 (Figure 3.1). Incidence rates suggest that investigations involving adolescents were the least likely to result in the decision to provide a service referral for any family member, with a rate of 20.66 per 1000.
3.3.1.1 Child characteristics

As shown in Table 3.2, the distribution of child characteristics, including sex and ethnicity are fairly equal across the five different age groups. The likelihood of a child welfare worker identifying a child functioning concern increased with age. Infants had the lowest incidence at a rate of 4.53 per 1000. Please see Figure 3.2. In contrast, adolescents (12-15) had the highest incidence rate at 11.93 per 1000.

With respect to age-specific associations, three-way chi-square analyses between child variables and the decision to provide a referral revealed that there were no significant differences by age in referrals to specialized services by type of investigation (risk versus maltreatment), the presence of a second caregiver in the home, or caregiver age. Having at least one child functioning issue identified was significantly associated with a service referral amongst all age groups, with the exception of infants, given the adjusted p-value resulting from the Bonferroni correction. There was also a statistically significant association found between child sex and the decision to provide a service referral for maltreatment-related investigations for children involving preschool children only. Within this age group, a higher proportion of females received a referral for services than males. Moreover, adolescents were the only age group of children with a statistically significant relationship between child ethnicity and a service referral. Adolescents that were part of an ethnic minority were less likely to receive a service referral than adolescent who were white.
Figure 3.2. Incidence of a child functioning concern in maltreatment-related investigations

![Incidence of a child functioning concern in maltreatment-related investigations](image)

Table 3.2

Profile of maltreatment-related investigations by child age in Ontario 2013 (weighted provincial estimates)

<table>
<thead>
<tr>
<th>Variable</th>
<th>Less than 1 year old</th>
<th>1-3 year olds</th>
<th>4-7 year olds</th>
<th>8-11 year olds</th>
<th>12-15 year olds</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>n=7,915</td>
<td>n=21,801</td>
<td>n=36,730</td>
<td>n=29,907</td>
<td>n=28,928</td>
</tr>
<tr>
<td>Child characteristics</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Child Sex (female)</td>
<td>49.3%</td>
<td>49.4%</td>
<td>48.5%</td>
<td>45.1%</td>
<td>51.3%</td>
</tr>
<tr>
<td>Child Ethnicity</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ethnic minority</td>
<td>30.9%</td>
<td>36.1%</td>
<td>35.6%</td>
<td>35.3%</td>
<td>34.9%</td>
</tr>
<tr>
<td>White</td>
<td>69.1%</td>
<td>63.9%</td>
<td>64.4%</td>
<td>64.7%</td>
<td>65.1%</td>
</tr>
<tr>
<td>Child Functioning Concerns</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>At Least One Child Functioning Concern</td>
<td>7.8%</td>
<td>10.1%</td>
<td>17.1%</td>
<td>21.3%</td>
<td>26.2%</td>
</tr>
<tr>
<td>Primary caregiver characteristics</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Primary Caregiver Age</td>
<td></td>
<td></td>
<td></td>
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<td></td>
</tr>
<tr>
<td>21 years or under</td>
<td>31.3%</td>
<td>9.8%</td>
<td>0.7%</td>
<td>0%</td>
<td>0.1%</td>
</tr>
<tr>
<td>22 years or more</td>
<td>68.7%</td>
<td>90.2%</td>
<td>99.3%</td>
<td>100%</td>
<td>99.9%</td>
</tr>
<tr>
<td>Primary Caregiver Risk Factors</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Alcohol Abuse</td>
<td>10.6%</td>
<td>6.5%</td>
<td>6.8%</td>
<td>7.3%</td>
<td>5.7%</td>
</tr>
<tr>
<td>Drug/Solvent Use</td>
<td>18.8%</td>
<td>8.6%</td>
<td>6.2%</td>
<td>6.4%</td>
<td>4.1%</td>
</tr>
<tr>
<td>Cognitive Impairment</td>
<td>8.8%</td>
<td>3.9%</td>
<td>3.8%</td>
<td>4.3%</td>
<td>2.6%</td>
</tr>
<tr>
<td>Mental Health Issues</td>
<td>31.1%</td>
<td>22.1%</td>
<td>19.0%</td>
<td>19.5%</td>
<td>20.6%</td>
</tr>
<tr>
<td>Physical Health Issues</td>
<td>5.9%</td>
<td>4.7%</td>
<td>5.6%</td>
<td>6.8%</td>
<td>9.0%</td>
</tr>
<tr>
<td>Few Social Supports</td>
<td>32.8%</td>
<td>30.9%</td>
<td>22.3%</td>
<td>21.5%</td>
<td>24.5%</td>
</tr>
<tr>
<td>Victim of IPV</td>
<td>37.6%</td>
<td>33.5%</td>
<td>25.6%</td>
<td>24.8%</td>
<td>20.0%</td>
</tr>
<tr>
<td>Perpetrator of IPV</td>
<td>10.8%</td>
<td>11.8%</td>
<td>7.3%</td>
<td>7.8%</td>
<td>6.1%</td>
</tr>
<tr>
<td>History of Foster Care</td>
<td>13.0%</td>
<td>7.4%</td>
<td>4.1%</td>
<td>4.0%</td>
<td>2.2%</td>
</tr>
<tr>
<td>At least one caregiver functioning concern</td>
<td>74.3%</td>
<td>63.1%</td>
<td>52.3%</td>
<td>52.8%</td>
<td>52.3%</td>
</tr>
</tbody>
</table>
Table 3.2 presents the distribution of primary characteristics across the five different age groups. Overall, when compared to older children, caregivers of infants are more likely to be identified as having several risk factors (e.g., alcohol abuse, drug/solvent use, cognitive impairment, mental health issues, few social supports, victim of IPV, and history of foster care). As shown in Table 3.2 and Figure 3.3, infants had the highest proportion and incidence of caregivers identified as having at least one functioning issue, with a rate of 43.44 per 1000. Early school-aged children followed next with an incidence rate of 33.64 per 1000, preschoolers have an incidence rate of 32.33 per 1000, and preadolescents have an incidence rate of 27.17 per 1000. Adolescents have
the lowest incidence rate of caregivers identified with at least one caregiver risk factor at a rate of 23.78 per 1000. Three-way chi-square analyses revealed age-specific differences in the relationships between several caregiver characteristics and the child welfare decision to offer services. There were two caregiver risk factors that were found to have a significant association with the decision to provide a service referral in every age group: few social supports and being a victim of intimate partner violence (IPV). Conversely, the three-way analyses revealed no significant relationships between services being offered and the following variables in any age group; having a primary caregiver with a history of foster care, having a second caregiver in the home, type of maltreatment-related investigation (i.e., maltreatment versus risk-only), or caregiver age with the service referral decision. It is noteworthy that once adjusting for multiple comparisons, caregiver age was not significantly associated with service referrals for infants.

Overall, proportions suggest that families with primary caregivers who were younger (under the age of 21 years) and with the following risk factors identified: alcohol abuse, drug/solvent use, cognitive impairment, mental health issues, physical health issues, few social supports, victim of domestic violence, and/or a history of foster care (Table 3.2), were more likely to have received a service referral than not.

Figure 3.3. Incidence of a caregiver functioning concern in maltreatment-related investigation in Ontario 2013.
3.3.1.3 Household characteristics

Compared to other age groups, there was a higher prevalence of infants that experienced greater challenges with respect to household safety, socio-economic disadvantage, and housing instability. Please see Table 3.2. Infants were most frequently identified as living in households with at least one hazard, regularly running out of money, and moving two or more times. Three-way chi-square analyses indicated that infants were the only group of children for which there was a significant relationship between the number of household moves and a referral. The relationship between at least one household hazard and a service referral was also significant for infants, as it was for early school aged children and pre-adolescents. Despite being identified as most frequently living in households that regularly run out of money, infants were the only group of children for which this risk factor was not significantly associated with a service referral.

3.3.1.4 Maltreatment, case characteristics and short-term service outcomes

As indicated in Table 3.2, infants were most commonly investigated for risk of maltreatment. Together, infants and pre-school children were more likely than older age groups to be investigated for exposure to IPV. When compared to all other age groups, infants were most likely to be involved in investigations where there is no specific incident of maltreatment alleged (e.g. risk and IPV); whereas, adolescents were least likely. Neglect was the most common type of investigated maltreatment, with minimal variation across age groups. The three-way chi-square analysis examined the impact of investigation type (risk versus maltreatment) on the service referral decision and no significant association was found for any age group.

Proportions revealed that infants were least likely to be previously investigated for an alleged incident of maltreatment; whereas, adolescents were most likely. Moreover, in comparison to older age groups, investigations involving infants comprised the largest proportion of children with court involvement and out-of-home placement by the conclusion of the investigation. Maltreatment-related investigations involving infants were most commonly transferred to ongoing services. Although investigations involving infants were the least likely to have a previous case opening, among those that did, almost two-thirds of infants had a case reopened.
within a 12-month period. In comparison, adolescents had the highest proportion of cases with a previous opening; however, less than half were re-opened within the previous 12-month period.

3.3.1.5 Characteristics related with service referrals for maltreatment-related investigations involving infants

Chi-square analyses were conducted in order to determine which child, caregiver, household and case characteristics influenced the decision to provide a referral for maltreatment-related investigations involving infants. The ongoing service variable was removed from the analysis because it was highly correlated with the outcome variable. Table 3.3 shows the characteristics of maltreatment-related investigations involving infants that received a referral for services and the eight variables that were significantly associated with the decision to provide referrals for specialized services: the identification of a child functioning issue \( \chi^2 = 4.41, \text{df}=1, p<.05 \); younger primary caregiver age \( \chi^2 = 5.29, \text{df}=1, p<.05 \); drug/solvent use \( \chi^2 = 7.79, \text{df}=1, p<.01 \); victim of IPV \( \chi^2 = 15.99, \text{df}=1, p<.001 \); few social supports \( \chi^2 = 6.29, \text{df}=1, p<.05 \); at least one household hazard \( \chi^2 = 9.18, \text{df}=1, p<.001 \); regularly running out of money \( \chi^2 = 3.06, \text{df}=1, p<.05 \); and greater number of moves \( \chi^2 = 24.45, \text{df}=1, p<.001 \). Thus, the eight variables found to be significant in relation to service referrals were then placed in the binary logistic regression model. Although not significant in this bivariate analysis, investigations in which the primary caregiver was identified as having an issue with alcohol abuse, received a service referral more frequently than those who were not. Similarly, with respect to investigation type, risk-only investigations garnered more frequent service referrals than maltreatment-related investigations.
Table 3.3

Referral-related characteristics in maltreatment-related investigations involving infants in Ontario in 2013 (weighted estimates n=7915; Chi-square: normalized sample weight applied).

<table>
<thead>
<tr>
<th>Variable</th>
<th>Referral for services</th>
<th>Pearson χ²</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Estimate</td>
<td>%</td>
</tr>
<tr>
<td><strong>Child Characteristics</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Child sex</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>2302</td>
<td>57.6</td>
</tr>
<tr>
<td>Female</td>
<td>2228</td>
<td>57.3</td>
</tr>
<tr>
<td>Child ethnicity</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ethnic minority</td>
<td>1212</td>
<td>50.6</td>
</tr>
<tr>
<td>White</td>
<td>3310</td>
<td>61.8</td>
</tr>
<tr>
<td>Child functioning issue</td>
<td></td>
<td></td>
</tr>
<tr>
<td>At least one identified</td>
<td>472</td>
<td>76.9</td>
</tr>
<tr>
<td><strong>Caregiver Characteristics</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Primary caregiver age</td>
<td></td>
<td></td>
</tr>
<tr>
<td>21 years and under</td>
<td>1638</td>
<td>66.4</td>
</tr>
<tr>
<td>22 years and up</td>
<td>2855</td>
<td>52.8</td>
</tr>
<tr>
<td>Primary caregiver functioning</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Alcohol Abuse</td>
<td>556</td>
<td>66.0</td>
</tr>
<tr>
<td>Drug/Solvent Use</td>
<td>1087</td>
<td>73.0</td>
</tr>
<tr>
<td>Cognitive Impairment</td>
<td>488</td>
<td>69.8</td>
</tr>
<tr>
<td>Mental Health Issues</td>
<td>1590</td>
<td>64.7</td>
</tr>
<tr>
<td>Physical Health Issues</td>
<td>321</td>
<td>68.9</td>
</tr>
<tr>
<td>Few Social Supports</td>
<td>1743</td>
<td>67.1</td>
</tr>
<tr>
<td>Victim of IPV</td>
<td>2124</td>
<td>71.3</td>
</tr>
<tr>
<td>Perpetrator of IPV</td>
<td>517</td>
<td>60.6</td>
</tr>
<tr>
<td>History of Foster Care</td>
<td>580</td>
<td>56.3</td>
</tr>
<tr>
<td>Primary income of caregiver</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Full time/Part time</td>
<td>457</td>
<td>48.3</td>
</tr>
<tr>
<td>Other benefits/ unemployment/no income</td>
<td>4016</td>
<td>62.2</td>
</tr>
<tr>
<td><strong>Household characteristics</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>No second caregiver in the home</td>
<td>1470</td>
<td>61.1</td>
</tr>
<tr>
<td>Household hazards</td>
<td>566</td>
<td>85.1</td>
</tr>
<tr>
<td>Household regularly runs out of money</td>
<td>749</td>
<td>72.7</td>
</tr>
<tr>
<td>Number of moves</td>
<td></td>
<td></td>
</tr>
<tr>
<td>None</td>
<td>1499</td>
<td>46.0</td>
</tr>
<tr>
<td>One move</td>
<td>1604</td>
<td>75.6</td>
</tr>
<tr>
<td>Two or more moves</td>
<td>849</td>
<td>74.6</td>
</tr>
<tr>
<td><strong>Case characteristics</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Previous openings</td>
<td>2096</td>
<td>60.8</td>
</tr>
<tr>
<td>Type of investigation</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Maltreatment</td>
<td>2598</td>
<td>54.5</td>
</tr>
<tr>
<td>Risk</td>
<td>1932</td>
<td>61.3</td>
</tr>
</tbody>
</table>

Source: 2013 Ontario Incidence Study of Reported Child Abuse and Neglect
*=p<.05; **=p<.01; ***=p<.001.
3.3.1.6 Predictors of service referral for maltreatment-related investigations involving infants: Logistic regression analysis

There were two primary caregiver characteristics that contributed to the prediction of a service referral for infants in the final model: being a victim of IPV and primary caregiver age. Thus, infants’ exposure to IPV and having a younger caregiver increased the likelihood of a service referral (Table 3.4). Having a caregiver who was a victim of IPV was the largest contributor to the decision to refer to specialized services. Having a primary caregiver aged 21 years or younger, in comparison to having a primary caregiver 22 years or older, more than doubled the odds of being referred for services (OR=2.54, p<.01). The presence of IPV among primary caregivers increased the likelihood of a service referral being made by a factor of 2.81 (OR=2.81, p<.01). The omnibus tests of model co-efficients $\chi^2 (8) = 39.24$, $p<.001$ indicates that the model was significant. The model accounted for approximately 20.0% of the variance on the outcome (Nagelkerke $R^2=.20$).

Table 3.4.

*Logistic regression model predicting service referrals for maltreatment-related investigations involving infants in Ontario in 2013 (unweighted $n=345$)*

<table>
<thead>
<tr>
<th>Variable</th>
<th>B (SE)</th>
<th>Wald</th>
<th>OR</th>
<th>95% CI</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Child characteristics</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>At least one child functioning issue</td>
<td>0.39 (0.53)</td>
<td>0.53</td>
<td>1.47</td>
<td>0.52-4.16</td>
</tr>
<tr>
<td><strong>Primary caregiver characteristics</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Primary Caregiver Age (22 years or more)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>21 years or under</td>
<td>0.93 (0.32)</td>
<td>8.52</td>
<td>2.54**</td>
<td>1.36-4.75</td>
</tr>
<tr>
<td><strong>Primary Caregiver Risk Factors</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Drug/Solvent Abuse</td>
<td>0.32 (0.40)</td>
<td>0.65</td>
<td>1.38</td>
<td>0.63-3.02</td>
</tr>
<tr>
<td>Few Social Supports</td>
<td>0.57 (0.32)</td>
<td>3.16</td>
<td>1.76</td>
<td>0.94-3.28</td>
</tr>
<tr>
<td>Victim of IPV</td>
<td>1.04 (0.31)</td>
<td>11.32</td>
<td>2.83**</td>
<td>1.54-5.18</td>
</tr>
<tr>
<td><strong>Household characteristics</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>At Least One Household Hazard</td>
<td>0.73 (0.59)</td>
<td>1.54</td>
<td>2.07</td>
<td>0.66-6.51</td>
</tr>
<tr>
<td>Household Regularly Runs Out of Money</td>
<td>0.12 (0.41)</td>
<td>0.08</td>
<td>1.12</td>
<td>0.52-2.42</td>
</tr>
<tr>
<td>Number of Moves (No Moves)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>One Move</td>
<td>0.45 (0.32)</td>
<td>2.04</td>
<td>1.60</td>
<td>0.85-2.91</td>
</tr>
<tr>
<td>Two or More Moves</td>
<td>0.06 (0.50)</td>
<td>0.16</td>
<td>1.06</td>
<td>0.42-2.67</td>
</tr>
<tr>
<td>Omnibus Chi-Square Test</td>
<td>39.24</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>p-value</td>
<td>P&lt;0.001</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Nagelkerke R-square</td>
<td>0.20</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>% Classified correctly</td>
<td>67.6</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>-2 Log Likelihood</td>
<td>301.54</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Source: 2013 Ontario Incidence Study of Reported Child Abuse and Neglect
SE, Standard error; OR, Odds Ratio; CI, Confidence Interval
*p<.05; **p<.01; ***p<.001.
3.3.1.7 Referral to specialized services

Child welfare workers were asked to indicate whether a referral was made to a service internal or external to the child welfare system for any family member. If so, workers were asked to indicate all referrals that applied. General areas for possible referrals include: parenting and family support; addiction and mental health support; physical health; intimate partner violence (IPV), legal and victim support; income, food and housing support; cultural services; speech and language; and, recreational services. Interesting patterns emerged in the types of referrals provided by child welfare workers by age group. Chi-square analysis revealed significant differences between the types of services referred to and the age group of children investigated (Table 3.5). In comparison to all other age groups, families of infants were most commonly referred to a parent support group and in-home family or parenting counseling, and/or addiction counseling. Amongst families of infants, parenting and family support was the most common type of service referred to by child welfare workers.

Mental health support, and not drug or alcohol counseling, was found to have a significant relationship with child age. Families with infants were most likely to receive a referral for drug or alcohol counseling; whereas, families with adolescents were most likely to receive referrals for mental and physical health. Statistically significant associations were also found between IPV, legal, victim support, income, food, and housing support with child age. Overall, families of infants and preschool aged children were most likely to receive referrals for supports for meeting their basic needs, and included income, food and housing supports. When compared to families of children in older age groups, families with younger children (i.e., infants and preschool aged children) were almost equally likely to be referred for IPV supports.
Table 3.5.

Type of service referrals in maltreatment-related investigations by age group in Ontario in 2013.

<table>
<thead>
<tr>
<th>Variable</th>
<th>Child age</th>
<th>Less than 1year old</th>
<th>1-3 year olds</th>
<th>4-7 year olds</th>
<th>8-11 year olds</th>
<th>12-15 year olds</th>
<th>p-value</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Type of service(s) referred to</strong></td>
<td></td>
<td>n=4530</td>
<td>n=9755</td>
<td>n=14,104</td>
<td>n=13,400</td>
<td>n=13,148</td>
<td></td>
</tr>
<tr>
<td><strong>Parenting or family support</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Parent support group</td>
<td></td>
<td>22.7</td>
<td>14.2</td>
<td>16.1</td>
<td>10.9</td>
<td>14.9</td>
<td>p&lt;.01</td>
</tr>
<tr>
<td>In-home family/parent counseling</td>
<td></td>
<td>20.8</td>
<td>12.8</td>
<td>13.5</td>
<td>11.9</td>
<td>11.9</td>
<td>p&lt;.05</td>
</tr>
<tr>
<td>Other family/parent counseling</td>
<td></td>
<td>22.6</td>
<td>35.8</td>
<td>43.4</td>
<td>44.8</td>
<td>53.8</td>
<td>p&lt;.001</td>
</tr>
<tr>
<td>Child or day care</td>
<td></td>
<td>6.3</td>
<td>16.0</td>
<td>5.8</td>
<td>1.7</td>
<td>0.8</td>
<td>p&lt;.001</td>
</tr>
<tr>
<td><strong>Addiction and mental health support</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Drug or alcohol counseling</td>
<td></td>
<td>17.4</td>
<td>14.3</td>
<td>11.3</td>
<td>11.9</td>
<td>11.2</td>
<td>n/s</td>
</tr>
<tr>
<td>Psychiatric or psychological services</td>
<td></td>
<td>10.4</td>
<td>14.5</td>
<td>15.4</td>
<td>16.0</td>
<td>19.5</td>
<td>p&lt;.05</td>
</tr>
<tr>
<td><strong>Physical health support (medical/dental)</strong></td>
<td></td>
<td>6.4</td>
<td>6.7</td>
<td>4.4</td>
<td>5.3</td>
<td>5.0</td>
<td>n/s</td>
</tr>
<tr>
<td><strong>IPV, legal and victim support</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>IPV services</td>
<td></td>
<td>24.0</td>
<td>24.7</td>
<td>19.6</td>
<td>18.1</td>
<td>14.0</td>
<td>p&lt;.001</td>
</tr>
<tr>
<td>Victim support program</td>
<td></td>
<td>4.7</td>
<td>11.1</td>
<td>9.4</td>
<td>7.3</td>
<td>6.4</td>
<td>p&lt;.05</td>
</tr>
<tr>
<td>Legal</td>
<td></td>
<td>13.3</td>
<td>16.5</td>
<td>9.8</td>
<td>10.2</td>
<td>7.1</td>
<td>p&lt;.001</td>
</tr>
<tr>
<td><strong>Income, food and housing support</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Welfare or social assistance</td>
<td></td>
<td>7.8</td>
<td>6.0</td>
<td>3.1</td>
<td>1.4</td>
<td>3.3</td>
<td>p&lt;.001</td>
</tr>
<tr>
<td>Food bank</td>
<td></td>
<td>7.8</td>
<td>7.0</td>
<td>6.4</td>
<td>5.7</td>
<td>6.0</td>
<td>n/s</td>
</tr>
<tr>
<td>Shelter services</td>
<td></td>
<td>5.5</td>
<td>11.4</td>
<td>7.0</td>
<td>4.2</td>
<td>5.7</td>
<td>p&lt;.001</td>
</tr>
<tr>
<td>Housing</td>
<td></td>
<td>9.6</td>
<td>12.8</td>
<td>4.8</td>
<td>6.5</td>
<td>4.0</td>
<td>p&lt;.001</td>
</tr>
<tr>
<td><strong>Cultural services</strong></td>
<td></td>
<td>2.7</td>
<td>2.8</td>
<td>3.4</td>
<td>4.1</td>
<td>5.7</td>
<td>n/s</td>
</tr>
<tr>
<td>Speech or language</td>
<td></td>
<td>0.8</td>
<td>5.6</td>
<td>1.9</td>
<td>1.2</td>
<td>1.1</td>
<td>P&lt;.001</td>
</tr>
<tr>
<td>Recreational services</td>
<td></td>
<td>3.7</td>
<td>6.7</td>
<td>5.3</td>
<td>5.9</td>
<td>4.2</td>
<td>n/s</td>
</tr>
</tbody>
</table>

Source: Ontario Incidence Study of Reported Child Abuse and Neglect 2013
All n’s are estimates of the number of I investigations provincially.
Percentages do not add up to 100% because investigating child welfare workers could identify more than one service referred to.

3.4 Discussion

Utilizing a Canadian provincial dataset, this study builds upon the knowledge base by specifically exploring maltreatment-related investigations involving infants and the factors influencing the decision to provide service referrals. These findings provide a broad understanding of the clinical factors that drive the decision to provide a referral to services for infants. This study also examined the clinical profile of children by age groups. Overall, the findings indicate that the profile of infants and their families does in fact differ from that of older children in various child, family, household, case, service characteristics, and the types of services referred to.

When compared to older children, maltreatment-related investigations involving infants were the most likely to result in a service referral. The fact that the majority of investigations involving
infants (57.2%) received a service referral is indicative of the child welfare system’s recognition of the complex challenges families of infants are contending with and the importance of working with services in the community to address them. Notably, only two factors were significant in predicting the decision to refer to services. Both pertained to the primary caregiver: being a victim of IPV and younger caregiver age. Corroborating the findings of Jud, Fallon, and Trocmé’s (2012) study, the presence of IPV had a significant impact on the decision to refer to services. Having a caregiver who was a victim of IPV was the most common caregiver risk factor across every age group. Moreover, having a caregiver as a victim of IPV was also the most influential predictor for a referral for families of infants. When compared to all other age groups, infants’ households were the most likely to have a younger primary caregiver. Service referral decisions were also predicted by younger caregiver age and this finding corroborates previous research (Jud, Fallon, & Trocmé, 2012). This finding is consistent with the broader literature indicating that young caregiver age is a risk factor for maltreatment and is associated with the decision to provide ongoing services (Fallon et al., 2013a, 2013b; Fallon, Ma, Black, & Wekerle, 2011).

It is notable that many variables (e.g. child functioning concern, primary caregiver drug/solvent use, primary caregiver with few social supports) did not contribute to the decision to provide a service referral for infants. It appears that child welfare workers were most clinically concerned about the impact of infants being exposed to IPV and younger caregiver age on caregiving skills and ability to meet infants’ needs. Accordingly, the most common type of service referral for families of infants was for IPV support, followed by parenting support group and family/parenting counseling. The absence of association between caregiver mental health and service referral at the bivariate level is not in keeping with broader Canadian research on infants that has linked caregiver mental health to other service provision decisions, such as the decision to provide ongoing services (Fallon et al., 2013a, 2013b), and the decision to place infants out-of-home (Tonmyr et al., 2011). Moreover, there is a well-established body of research that suggests that caregiver functioning issues, such as chronic depression, may act to compromise the quality of the infant-caregiver relationship and negatively impact short-term and long-term development (Centre on the Developing Child at Harvard University, 2009).
Disparities in the decision to provide services and service utilization have been linked to child race and ethnicity (Font, 2013; Garland, Landsverk, & Lau, 2003; Stahmer, 2005). In this study, child ethnicity was excluded in the multivariate model for infants, as it was not significant at the bivariate level. It is noteworthy that child ethnicity was significantly associated with service provision for adolescents. Fast and colleagues’ (2014) study revealed a significant relationship between child Aboriginal status and ongoing service provision. The role of child race in service referral decision-making is not well understood (Font, 2013). The majority of research examining ethnic and racial disparities involving infants and child welfare service decision focus on the decision to place out-of-home (e.g., Wulczyn, Ernst, & Fisher, 2011; Wulczyn, Hislop, & Jones Harden, 2002; Stahmer et al., 2005). Further research is needed to explore racial and ethnic disparities in service provision decisions regarding infants within a Canadian child welfare context. Moreover, in corroboration with other research (e.g. Fast et al., 2014), the findings suggest that infants are more likely than older children to be placed out-of-home; however, in over 90% of maltreatment-related investigations involving infants, infants were not subsequently placed out-of-home. There is some evidence that suggests that children who remain at home post-investigation have developmental issues as significant as those children who are placed out-of-home (McCrae, Cahalane, & Fusco, 2011; Stahmer, 2005). Moreover, infants who remain at home following alleged maltreatment experience high rates of re-reporting (Putnam-Hornstein et al., 2015). These findings are a stark reminder of the opportunity and need to focus prevention, intervention and research efforts on infants and families with children who remain in the home post-investigation.

There were numerous other distinctions that emerged in the clinical profiles between infants and older children that require further consideration. Both proportion and incidence rates underscore that caregivers of infants were the more likely than caregivers of older children to be identified as having at least one functioning issue. Additionally, alcohol abuse, drug/solvent use, cognitive impairments, mental health issues, few social supports, being a victim of IPV, and having a history of foster care were risk factors that were most commonly identified for caregivers of infants. Socio-economic disadvantage (e.g., running out of money for basic necessities) was most frequently identified in families with infants. These findings are consistent with research indicating that families with younger children tend to experience greater socio-economic hardships than older children (Esposito et al., 2013; Fast et al., 2014). However, although socio-
economic disadvantage may be perceived to be a greater risk factor for infants and younger children as a result of their vulnerability (Fast et al., 2014), it did not seemingly impact the likelihood of service referrals in this study. It may be that the measures informing socio-economic disadvantage are somewhat crude and socio-economic status is generally quite low for many families that come to the attention of the child welfare system in Ontario. The literature does suggest that low socio-economic status is linked to poor developmental outcomes for younger children as a result of its detrimental impact on the quality of the infant-caregiver relationship (Bornstein & Tamis-LeMonda, 2014). Poverty has also been identified as a risk factor for neglect (Connell-Carrick, 2014). This study found that neglect was the primary form of maltreatment alleged in approximately 1 in every 5 maltreatment-related investigations across age groups. The rapidity of brain development during infancy makes infants particularly susceptible to the profound and widespread developmental effects of neglect (Connell-Carrick, 2014).

Confirming previous research, when compared to older children, infants were most likely to be transferred to ongoing services. Moreover, amongst cases that were previously opened, families of infants were most likely to have a case re-opened within a 12-month period. This underscores the complexity of family struggles and the possible consequences of unmet family needs on infants’ safety and well-being. Infants were most likely to be reported and investigated for reasons other than specific incidents of alleged maltreatment. Although the type of investigation (risk-only versus maltreatment) was not associated with the decision to provide a referral in this study, previous research suggests that risk only investigations where no specific incident of maltreatment is being investigated present with similar household and poverty-related concerns as maltreatment investigations (Fallon, Trocmé, & MacLaurin, 2011). This raises issues with respect to the operationalization of child welfare’s dual mandate of child safety and well-being for infants, within the context of a traditional service delivery models that emphasize protection. A child safety focus tends to prioritize the assessment of risk; whereas, a focus on well-being prioritizes the assessment of child and family needs (Kudfeldt & McKenzie, 2011). Child welfare service decisions, including the decision to refer to services, should be based on a comprehensive assessment that includes consideration of both risk and needs (Kudfeldt & McKenzie, 2011). Ontario has not yet implemented wide-scale programs with respect to differential response options (Fallon et al., 2013a; Nikolova, Fallon, Black & Allan, 2014).
Together with other studies, these findings lead to questioning whether alternative or differential response options with infants should be a consideration given their distinct clinical profile and vulnerability.

Referral to appropriate services for families and children starts with the accurate identification of needs. It is notable that proportion and incidence rates revealed that infants in Ontario are the least likely group of children identified as having a child functioning issue. Although found to be significant at the bivariate level for infants in predicting a service referral, the identification of a child functioning concern did not predict a service referral in the multivariate model. The literature compellingly suggests that the mental health needs of infants and young children involved with the child welfare system are under-identified and under-treated (Williams et al., 2012). These findings are particularly troubling as children who have been involved with the child welfare system as infants have been found to have high levels of unmet mental health and educational needs at school entry (Ringeisen et al., 2009). There is no comprehensive or systematic developmental screening strategy in place in Ontario for infants involved with the child welfare system. Standardized measures may assist child welfare workers in the assessment and determination of need (Ringeisen et al., 2009). It is noteworthy that standardized tools require training of child welfare workers and/or partnerships with qualified professionals that can administer and interpret the results of these instruments.

In principle, service referrals should be primarily driven by case or clinical factors; however, child welfare service decisions are complex and can be influenced by factors at other levels, including, worker, organizational, and the broader environment (Baumann, Dalgleish, Fluke & Kern, 2011). In addition, organization-level factors and regional variations have been found to influence the likelihood of service referrals (Jud, Fallon, & Trocmé, 2012). The availability and accessibility of services may also be impacting child welfare workers’ decisions to refer to services to and the types of services are referred to. As such, both availability and accessibility may be influenced by geographic location (Freisthler, 2013). In turn, availability and accessibility can influence the ability of families to utilize community services (Freisthler, 2013). Location may be a proxy measure for several underlying organizational constructs, including differential access to resources and partnerships between social service agencies and child welfare organizations (Fallon & Trocmé, 2011). Differences in child welfare services and
geographic location or jurisdiction have not been adequately addressed in the literature (Fallon & Trocmé, 2011). Thus, influences at the organizational and social structural levels require further research, particularly with respect to maltreatment-related investigations involving infants (Jud, Fallon & Trocmé, 2012).

With respect to infants, policy initiatives that promote partnerships between sectors for children at-risk and involved with the child welfare system are underway in Ontario. More specifically, infant and childhood mental health has been identified as, “… an issue that requires further policy development to ensure the availability and accessibility of optimal and consistent services across the province” (Clinton et al., 2014, p.5). To date, there is no provincial strategy that has focused on the mental health needs of infants and young children in Canada (Clinton, 2014). A key recommendation made for immediate policy development includes the provision of targeted supports to populations at-risk and working with an inter-generational intervention model. Clinton and colleagues (2014) noted that infant-caregiver dyad is not the primary client focus in Ontario services, as infants and caregivers are treated as distinct entities within the service system. In corroboration with other research, this study suggests that there is no population of children involved with the child welfare system more vulnerable to the impact of maltreatment and other adversities than infants. This should be reflected in child welfare policy and practice models.

### 3.5 Limitations

There are several limitations to this study that must be considered when interpreting the results. Data collected from the OIS is collected directly from the investigating child welfare worker and are not independently verified. The data is representative of an investigative period of thirty days after the case has opened. The sample size of maltreatment-related investigations involving infants may have precluded some significant relationships from emerging. Types of service referred to were categorized broadly by family, not by child or caregiver and provide a broad understanding of risk and needs. Moreover, it is unknown whether families were engaged in other community services or whether they actually utilized services referred to during this period. Moreover, the amount of variance explained by this model was small, with a large proportion of variance unaccounted for.
3.6 Conclusion

This study contributes to the minimal knowledge base relating to infants served by the child welfare system within a Canadian context. The findings suggest that infants are a distinctly vulnerable group of children reported to and investigated by the Ontario child welfare system. A referral for services can be viewed as a critical step to enhancing infants’ safety and well-being and should be predicated upon the accurate identification of infant and family risks and needs. Is the child welfare system missing opportunities to identify, and thereby, ameliorate infants’ functioning? The extant literature and this study’s findings of low identification of infant functioning issues suggests that this is a possibility requiring further research. Moreover, adequately addressing infant well-being requires services that are accessible, available and effective. As the findings suggest, infants are the most vulnerable group of children involved with the child welfare system and require urgent and coherent attention at policy and practice levels within the field of child welfare and across multiple sectors.
3.7 References


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Chapter 4

4 Back to the beginning: Opportunities and challenges for promoting infant development and well-being within an Ontario child welfare context

4.1 Introduction

Research amassed from numerous disciplines provides compelling evidence to prioritize and integrate the science of early childhood development within a child welfare context. Nowhere is the need more urgent than for infants who have experienced maltreatment or are at risk for maltreatment. The profound and rapid development that occurs during infancy is unparalleled at any other point in the life course. Moreover, the negative impact of maltreatment on development across various domains (e.g., cognitive, socio-emotional, physical) is considered indisputable (Ellenbogen, Klein, & Wekerle, 2014). In the absence of appropriate and effective intervention, maltreatment that begins in infancy can become developmentally deleterious and chronic in nature (Putnam-Hornstein, Simon, Eastman, & Magruder, 2015). Child welfare organizations have a critical role in mitigating or averting negative child and family outcomes linked to maltreatment and other adversities (Ellenbogen, Klein, & Wekerle, 2014). The science of early childhood development has the potential to inform and transform child welfare practices and their underlying policies for infants and young children (Center on the Developing Child at Harvard University, 2010). Yet, child welfare policy with respect to infants and young children is not adequately aligned with what is known about the developmental consequences of early childhood maltreatment and other adversities on children’s short-term and long-term development.

This paper forwards the proposition that it is an opportune time to critically examine child welfare policy in Ontario, its disconnect from the science of early childhood development, and why the proliferation of knowledge from the social and biological sciences has not triggered a significant policy response for infants and young children who come into contact with the child welfare system. Notably, a sustainable child welfare system in Ontario has been recently defined as one that “…Constantly adapts to evolving challenges, needs and knowledge…” (Commission to Promote Sustainable Child Welfare (Commission); 2012b, p.7). It is this paper’s contention that
current child welfare policies have not adapted to the burgeoning scientific knowledge base. To the contrary, child welfare policy has remained inexplicably static in the face of it. Consequently, this failure to adapt to the evolving knowledge base is leading to missed opportunities to promote the development and well-being of infants, the most vulnerable population of children who come into contact with the child welfare system.

Prioritizing and enhancing the development of infants involved with the child welfare system is consistent with Ontario’s child welfare legislative mandate that gives central and equal consideration to the notions of both protection and well-being (Trocmé, Kyte, Sinha, & Fallon, 2014). It is also consistent with policy directions that underscore a more balanced approach to child welfare practice that acknowledges the importance of early detection, intervention and family preservation efforts (MCYS, 2005; Commission 2012a). The child welfare sector and the field of social work have a key role to play in driving policy and practice responses that enhance early childhood development. It is acknowledged that there are numerous and complex challenges to promoting early childhood development within the child welfare sector and other allied sectors; however, the ever-evolving knowledge base, particularly the evidence derived from the science of early childhood development, suggests that there are opportunities inherent in these challenges that demand urgent consideration and action for the sake of ensuring the well-being of society’s most vulnerable children. How can the science of early childhood development inform and enhance child welfare policies and practices? This paper reflects upon this overriding question and many essential others by briefly exploring the importance of situating early childhood development within a child welfare context, examining the Ontario child welfare policy landscape, outlining some emerging trends from Ontario child welfare research on infants, and offering several considerations for moving towards developmentally-informed child welfare practice through underlying policy.

4.1.1 The salience of early childhood development within a child welfare context

As science continues to unravel the mysteries of early childhood, it is becoming increasingly clear that infancy is unlike any other period of post-natal development. The most rapid period of physical growth occurs in infancy (Fogel, 2015). All aspects of development, including socio-emotional, physical, moral, and intellectual domains are influenced by the relationships
surrounding the infant (National Scientific Council on the Developing Child, 2004). Relationships can either act to buffer or exacerbate environmental risk factors (Zeanah & Zeanah, 2009). Of critical importance to infants is the quality of their relationship with their primary caregiver. Notably, infant-caregiver relationships are considered the “…conduit through which infants experience environmental risk factors” (Zeanah & Zeanah, 2009, p.8). This relationship lays the foundation for brain development and resilience (Perry, 2005). Infants are most vulnerable to the impact of maltreatment, trauma and its’ subsequent cost in diminished capacity or lost potential in development (Berrick, Needell, Barth, & Jonson-Reid, 1998; Perry 1995). Developmental tasks and milestones in various domains provide clues about how an infant is progressing. Furthermore, there is general consensus in the literature with respect to socio-emotional (mental health) milestones in infancy, which are defined as, “A set of behaviours with normative developmental timing that can be considered universal” (Thomann & Carter, 2009, p.421). The need to pay attention to early socio-emotional functioning is indicated in the literature (National Scientific Council on the Developing Child, 2008/2012; Perry, 2002). Socio-emotional and cognitive capacities are inextricably linked in infancy and provide the foundation for development (National Scientific Council on the Developing Child, 2007). Emerging capacities for learning and relating to others are inherently linked to how early mental health unfolds in infancy (National Scientific Council on the Developing Child, 2008/12).

**By the first year of life**—

- A wide range of affect is conveyed, including expressions of anger, fear, sadness, joy, mixed emotions, and ambivalence through their facial expressions and body language (Fogel 2015; Johnson & Appleyard, 2014; Rosenblum, Dayton, & Muzik, 2009). For instance, infants may experience distress and/or turn away in response to fear, anger or sadness (Thomann & Carter, 2009).
- Social interactions and play are enjoyed (Thomann & Carter, 2009).
- Emotional regulation strategies or behavioural attempts to control feelings through their caregiver are developing (Fogel, 2015, Rosenblum, Dayton & Muzik, 2009).
- Infants utilize social referencing or others’ expressions to shape their environmental responses (Rosenblum, Dayton, & Muzik, 2009).
- The capacity to form an attachment emerges (Zeanah & Smyke, 2009) and stranger anxiety and separation distress become prominent (Rosenblum, Dayton, & Muzik, 2009).
Infants are developing expectations about how they and others with whom they interact will feel and behave (Zeanah & Smyke, 2009).

The accomplishment of salient developmental milestones is intrinsically linked to brain development, which is, in turn, impacted by the dynamic interplay of genetic and environmental influences. Early experiences can alter how genes are expressed (National Scientific Council on the Developing Child, 2010). The brain of an infant also rapidly organizes and is exquisitely sensitive to environmental experiences and relationships (Perry, 2002). Notably, an infant’s brain is more malleable or plastic to experience than a mature brain (Perry, 2002). Thus, early experiences and relationships influence the nature and quality of the brain’s architecture by impacting the type and quantity of neural circuits that develop and whether these circuits are reinforced or pruned as a result of lack of use (Perry, 2002; Sokolowski, Boyce, & McEwen, 2013). Infant brain development is not simply a matter of adaptation, but also incorporation (Fogel, 2015). The environment is incorporated into the formation and architecture of the brain. Brain development follows a hierarchical and sequential process (Perry, 2002). The development of each brain region requires or is sensitive to organizing experiences and cues at different times (Perry, 2002). For instance, an infants’ hearing at birth is better than their vision as a result of in utero exposure to sound and not light (Fogel, 2015). The brain organizes itself from the least (brainstem) to the most complex (cortical and limbic) areas (Perry, 2002). Thus, an infant’s sensory system develops prior to the prefrontal cortex, which regulates emotion. Moreover, it is during infancy that the regulatory regions of the prefrontal cortex grow at the most rapid pace (Fogel, 2015).

Maltreatment is one of the most significant environmental risk factors impeding or sabotaging the accomplishment of salient developmental tasks and milestones in infancy, possibly derailing healthy development (Barth et. al, 2007; Connell-Carrick, 2014; Wiggins, Fenichel & Mann, 2007; Johnson & Appleyard, 2014). For instance, maltreated infants and young children are more likely to exhibit a range of emotional and behavioural problems that include: poor emotional comprehension and regulation, heightened arousal to negative emotions, and insecure attachment (Wiggins, Fenichel, & Mann, 2007). Research suggests that the impact of maltreatment during early childhood has a long reach. There’s a growing body of research linking early adverse childhood experiences, such as maltreatment to an increased risk of poor mental and physical
health outcomes across the life course (Boivin & Hertzman, 2012; Brown, Cohen, Johnson and Smailes, 1999; Fuller-Thomson & Brennenstuhl, 2009; Fuller-Thomson, Brennenstuhl and Frank, 2010).

All systems that work with infants and young children, including the child welfare system, have an opportunity to strengthen both the foundations and capacities for lifelong health and development (Centre on the Developing Child at Harvard University, 2010). The child welfare system is a critical provider of early childhood experiences. Social workers are on the front-lines of the child welfare system and their decisions with respect to infants and their families are high stakes. Child welfare policies and practices can either positively or negatively impact infants’ development and well-being. Infants are the most distinctly vulnerable group of children who come into contact with the child welfare system. In order to identify opportunities to move towards policies and practices that prioritize infancy and the science of early childhood development, Ontario child welfare policy and practice contexts warrant further exploration and consideration.

4.2 The Ontario landscape: The disconnect between child welfare policy, practice and early childhood development

Child welfare policy can impact the emerging developmental trajectories of infants that are involved with the child welfare system. Numerous shifts have occurred over the last decade in child welfare policy in Ontario in response to changes in knowledge, societal values, and the successes and failures of the system (Commission 2012b). In 2006, the Ontario Child Welfare Transformation Agenda launched significant policy changes to the child welfare system. These changes were intended to realize the balanced approach to child welfare that was inherent in Ontario child welfare legislation – protecting children while promoting well-being and strengthening family and community capacity (Commission, 2012a). The Transformation Agenda emphasized prevention, early detection, early intervention, and improved coordination amongst child welfare with other key allied sectors, which include children’s mental health and youth justice (Fallon et al., 2015; MCYS, 2005). The Transformation Agenda’s guiding principles for policy development and implementation included a focus on outcomes, research, and a balanced
service approach that emphasized child safety and building upon family and community strengths (MCYS, 2005). A key element of the Transformation Agenda was a shift in intake and assessment through alternative or differential responses in order to foster a less adversarial or more customized response to lower risk situations. New child welfare legislation and standards of practice were also introduced in 2007 in Ontario that emphasized a customized approach to investigations. Despite the existing policy orientation, Ontario has yet to implement wide-scale differential or alternative response programs (Nikolova, Fallon, Black, & Allan, 2014). The customized approach is primarily focused on the provision of alternate post-investigative services (e.g., court mediation, family group conferencing) and there is no streaming of cases at the investigation level (Trocmé et al., 2013).

In 2009, the Ontario Minister of Children and Youth Services established the Commission to Promote Sustainable Child Welfare. Given a three-year mandate, the Commission was charged with the development and implementation of changes to the child welfare system in Ontario. The Commission identified the broader integration of services for vulnerable children and families as a key overarching priority. The sustainability of the child welfare sector was viewed as inextricably linked to other sectors serving children across the province. Moreover, the early identification of vulnerable and at-risk children was deemed important to avoid deterioration in family functioning. Both the Transformation Agenda and the Commission’s vision underscored that early identification and support of at-risk and vulnerable children was important to prevent deterioration in the circumstance of children and families (MCYS, 2005; Commission, 2012a). Notably, there is no comprehensive strategy currently in place at the provincial level with respect to the use of standardized and validated screening and assessment tools for identifying the developmental needs of infants or young children who are involved with the Ontario child welfare system.

Research utilizing the 2008 Ontario Incidence Study of Reported Child Abuse and Neglect (OIS-2008) has indicated that functioning concerns for infants are less frequently identified when compared to other age groups (Fallon, Ma, Allen, Trocmé, & Jud, 2013). Early detection and intervention may be hindered by the numerous challenges of assessing infant functioning without the use of standardized tools. The most common child functioning concern identified for infants in the 2008 cycle of the OIS was positive toxicology at birth (5.6% of all infant investigations),
failure to meet developmental milestones (2.3% of all infant investigations), and attachment issues (2.1% of all infant investigations) (Fallon et al., 2013). Moreover, the evolving research in Ontario suggests that caregivers of infants who come into contact with the child welfare system are most commonly burdened by the stresses of intimate partner violence (IPV), having few social supports, and mental health challenges (Fallon et al., 2013).

The numerous changes to the child welfare sector in Ontario have resulted in a broadening of the investigation mandate and a subsequent increase in the number infants coming into contact with the child welfare system for reasons other than specific incidents of alleged maltreatment (Fallon et al., 2013; Fallon et al., 2015; Trocmé, Kyte, Sinha & Fallon, 2014). There has been a noted shift in Canadian child welfare investigations from a focus on assessing situations where there is an acute threat to the safety to concerns about chronic family dysfunction, and the subsequent risk posed to a child’s development and well-being (Trocmé et al., 2014). In keeping with the broader national trend, the OIS-2008 analysis of infant investigations by Fallon and colleagues (2013) indicated that infant investigations were most often (45.1%) categorized as risk assessments, where there was no specific incident of abuse or neglect alleged. The large proportion of risk investigations for infants offer a unique opportunity to reflect upon current policies and practices in the province that can be considered proactive interventions that help to buffer risk and prevent family deterioration and more intrusive child welfare interventions. The Commission concluded that every child welfare organization in the Ontario must provide child protection services as a result of maltreatment occurrence and proactive intervention if risk of maltreatment was identified (Commission, 2012a). It was the assertion of the former Commission that the legislative and policy framework established by Ontario’s Child and Families Services Act and the Transformation Agenda, “…is one that balances child protection and family preservation while promoting permanency, least intrusive options and proactive partnerships and referrals to community providers.” (Commission, 2012a, p. 61). Barriers to realizing this policy direction have included the funding approach to child welfare, constrained funding in other sectors, variations in community needs, the availability and accessibility of community services.

The sustainability of the child welfare system is directly influenced by the orientation of provincial policy. A narrow orientation that emphasizes protection and involvement after maltreatment occurrence is considered unsustainable, as it inadequately addresses family
dysfunction, which may lead to more intrusive and costly services, including out-of-home placement (Commission, 2012a). In contrast, a policy orientation with wide boundaries may result in the duplication of services provided by other sectors. In comparison to other age groups, infants have been noted to be recipients of more intrusive, and therefore, costlier child welfare interventions. For instance, infants are most likely to be placed into out-of-home care following a maltreatment-related investigation (Fast, Trocmé, Fallon, & Ma, 2014). Taken together, recent research findings and policy directions raise questions with respect to the dual mandate of protection and well-being (Trocmé et al., 2014) in Ontario, as it specifically pertains to infants. How is child well-being operationalized and assessed for infants in Ontario? All domains of well-being should be considered in child welfare service delivery models, such as physical, developmental, and mental health as development in one domain is contingent upon the development in another (Jones Harden, 2007). Thus, a comprehensive approach to assessment and intervention practices is crucial.

Although an extensive examination is beyond the scope of this paper, there are policies in other sectors that are informed by the science of early childhood development. These policies may impact infants and families involved with the child welfare system. For instance, a critical opportunity is emerging for coordinated policy initiatives and linkages between children’s mental health and child welfare sectors that would help to meet the unique needs of vulnerable infants and their families. This is in keeping with both the Transformation Agenda and the Commission that underscored the importance and impact of other sectors on child welfare service delivery. The need for a policy framework that formally prioritizes mental health in infancy and the importance of providing targeted supports for at-risk populations has been identified (Clinton et al., 2014). Notably, Ontario lacks a child and youth mental health strategy that specifically and explicitly focuses on the unique needs of infants and young children aged 0 to 6 years (Clinton et al., 2014).

The Ontario Early Years Policy Framework is another example of the government’s commitment to early childhood development by its emphasis on developing a provincially coordinated approach to guide and support several key initiatives, including the full implementation of Full-Day Early Learning Kindergarten program in 2014 (Ministry of Education, 2013). The knowledge of early childhood development guided the transformation of early education in this province. It is increasingly apparent that a more cohesive and comprehensive approach to
policies and practices is needed both within the child welfare sector and in tandem with other sectors that impact the well-being of infants and their families. Moreover, these recent developments underscore that it is an opportune time to explore opportunities to rethink child welfare policy and practice by aligning it with the knowledge of early childhood development.

4.3 Considerations for a developmentally driven child welfare policy and practice agenda

Guided by the science of early childhood development and current research on infants involved with the child welfare system, key considerations are offered as a guide to garner greater focus and discussion on ways to prioritize and promote the optimal development and well-being of infants involved with the child welfare system. These considerations are viewed as complementary to the policy directions that have been unfolding within Ontario over the past decade. The scientific knowledge relating to early childhood development underpins these considerations. Some of these considerations are child welfare-sector specific; most, are inherently cross-sectoral by nature and necessity.

4.3.1 Strengthening and maintaining child welfare worker capacity

A skilled and trained workforce knowledgeable about early childhood development is critical to responsive practices that promote the healthy development of infants. An examination of training provided to all child welfare professionals (e.g., child welfare workers, supervisors, foster parents, legal counsel, and judiciary) and others who work with infants and very young children and their families is needed. The core training curriculum priorities must be informed by the science of early child development and the impact of maltreatment, and other adversities on immediate and longer-term development. Recognizing and responding to signs of trauma and developmental or mental health issues are critical to ensuring infants and families are connected to the appropriate services. The curriculum should also include an understanding of the triggers, signs and consequences of toxic stress on infants’ physical and mental health. The common and unique effects of various forms of maltreatment and adversity on the infant’s short-term and long-term well-being require attention as this understanding can inform referrals to community supports.

Substitute caregivers have a critical role in helping to promote the development and well-being of children who they are caring for. They also require training and support given the challenges
inherent in caring for an infant who has been maltreated and is dealing with symptoms of dysregulation and trauma. Promoting the recruitment and retention of foster parents who are able to meet the unique needs of infants and young children should be a priority. Given that the evidence base is rapidly evolving, ongoing training is needed. Moreover, information on resources available in the community for infants and their caregivers should comprise key curriculum content.

4.3.1.1 Special consideration: Visitation between infants and caregivers

Training for all individuals involved in facilitating visitation is critical to the adequate assessment of infant-caregiver interactions. Individuals other than the assigned child welfare worker may have responsibility for facilitating visitation between the infant placed out-of-home and their caregiver. The science of early child development highlights the importance of the infant-caregiver relationship to the child’s mental health and development. Yet, there have been concerns that the needs of infants placed out-of-home are not being met with respect to infant-parent contact (Miron et al., 2013). More specifically, there is inadequate consideration by child welfare policies and practices of infants’ well-being, attachment, placement stability and permanency planning. The visitation needs of infants placed out-of-home differ from those of other children (Miron et al., 2013). Infants are still in the process of developing self-regulation skills, and these skills are dependent upon a responsive caregiver. While visitation can help to repair or promote the attachment relationship with a caregiver who is attuned or responsive; a caregiver who is unresponsive and insensitive to their infant’s cues can cause stress (Miron et al., 2013). The impact of prolonged and severe stress on brain development in infancy is quite different than that of older children and can have long-term consequences (Miron et al., 2013).

Visitation or contact between infants and caregivers provides an opportunity to observe the quality of this key relationship and the infant’s attachment to the caregiver. The observation of infant-caregiver interactions is crucial to supporting the child’s development and potentially assisting caregivers who are experiencing challenges in identifying or responding to their infant’s cues and needs appropriately. The observations of infant-caregiver interactions are particularly important for infants placed out-of-home. Infants who are placed out-of-home face disproportionate risks to their development, particularly given the disruption in attachment and
separation from their caregivers are likely traumatic. Moreover, visitation between infants and caregivers presents the child welfare system with unique opportunities and challenges. Knowledge gaps with respect to infant development and infant mental health are a barrier to addressing their infants’ needs through visitation with their caregivers (Miron et al., 2013). Decisions regarding the frequency and duration of visits should be informed by observations of infants’ responses to their caregiver before, during and after visitation (Miron et al., 2013). Behavioural responses of the infant may indicate challenges with attachment, trauma or developmental issues that require timely referrals and intervention. Assessing interactions between infant and caregivers through a developmental lens is important at all phases of service delivery as it provides insight into caregiver capacity. Visitation is particularly crucial with infants placed out-of-home, given the need to inform decisions with respect to reunification or adoption.

4.3.2 Supporting infants and caregivers: Comprehensive assessments

In Ontario, the promotion of well-being is of equal importance to the promotion of protection. Supporting and enhancing infants’ relationship with their caregiver is critical to ensuring infants’ well-being. The unique needs of infants and their families must be understood and addressed. Caregivers of infants who come into contact with the child welfare system often face significant burdens during one of the most challenging and demanding periods to parent. A report to the child welfare system signals concerns with the caregiver’s ability to meet their child’s needs. An infant’s relationship with a stable, nurturing, and responsive caregiver is the most critical developmental protective factor for modulating stress and recovering from trauma (Masten, 2006; Zeanah & Zeanah, 2009); thus the most effective way to help infants is to help their caregivers (Knitzer, 2007).

A developmentally-informed approach to child welfare practice underscores that the infant-caregiver relationship is embedded in multiple, dynamic and interrelated contexts and environments that include: the infant (e.g., developmental concerns), the caregiver (e.g., mental health issues), and the broader social environment (e.g., caregiver social support system). A thorough understanding of risks, needs and protective factors that are associated within each of these contexts and environments is necessary to implementing appropriate child welfare interventions that support this relationship. Key practice strategies that can help to support and enhance caregiver’s capacity to meet the needs of their infants and these include targeted focus
on: assessing caregiver knowledge of early childhood development, the identification of red flags related to infants and caregiver needs, and facilitating social connections for caregivers of infants.

4.3.2.1 Enhancing caregiver knowledge of early childhood development

Child welfare workers that work with infants and their families encounter many opportunities for promoting infant development in their daily practice. It is important to assess whether caregivers have concerns about their infant’s development. Similarly, understanding caregiver’s knowledge of child development and whether their expectations of the child are aligned with their infant’s stage of development is important to informing next steps. Thus, caregiver knowledge of infant development should be assessed, and if necessary, enhanced.

4.3.2.2 Identification of red flags

There are inherent challenges in identifying developmental and mental health issues in infants within a child welfare context. Infants are primarily non-verbal and their behavior may be the most important clue that something is developmentally amiss. Yet, the signs and symptoms of socio-emotional and other developmental problems are both observable and measurable in infancy and early childhood (DelCarmen-Wiggins & Carter, 2004). An understanding of infant mental health, trauma, developmental tasks and milestones, along with developmental risk and protective factors is integral to identifying red flags and warning signals for infants that the child welfare system comes into contact with. This knowledge is important to making service decisions that are aligned with infant needs, implementing appropriate and timely services that support parents and substitute caregivers to promote the optimal development and well-being of the infant they are charged with caring for.

Standardized checklists or tools have been utilized in child welfare settings to guide and organize observations, help identify warning signs or presence of risk factors, help formulate questions, and inform decisions with respect to warning signs and/or the presence of risk factors that require a more comprehensive developmental assessment and/or specialized early intervention services (He, Lim, Lecklitner, Olson, & Traube 2015). Obtaining information from multiple sources with respect to the child’s development in numerous developmental domains can also help to provide a more accurate and comprehensive portrait of the infant’s needs and what service would best meet them. A developmentally driven child welfare approach to assessment and evaluation underscores
the importance of obtaining information in various environmental contexts. Although not exhaustive, some key questions and issues to consider within the clinical/case (e.g., infant, caregiver) and broader environmental domains may include:

- **What are the specific physical and developmental needs of the infant?**
  
  - Identification of any medical needs, including: any diagnoses, premature birth, vaccination status, prenatal exposure to alcohol or other substances.
  
  - Concerns with infant functioning and the accomplishment of salient developmental tasks.
  
  - Results of developmental screening and assessments of multiple developmental domains (e.g., socio-emotional, cognitive, motor).
  
  - Concerns with infant-caregiver relationship quality and attachment.
  
  - Exposure to toxic stress (e.g., numerous case openings, multiple placements).
  
  - Any symptoms of dysregulation (e.g., prolonged sleeping and feeding disruptions) or trauma.

- **What challenges is the caregiver(s) experiencing that may impact their ability to meet the developmental needs of their infant?**

  - Examine the social context of caregiving. Formal and informal supports networks in family and community.
  
  - Exploring the developmental needs of the caregiver (e.g. adolescent, a new parent adjusting to a new role?).
  
  - The presence of trauma, mental health concerns, particularly chronic caregiver depression.
  
  - The presence of alcohol or substance misuse.
  
  - Previous issues with parent’s willingness to follow through with previous child welfare recommendations or from professionals in other sectors.
  
  - The caregiver’s knowledge of parenting and child development.
• What specific supports can the infant and/or caregiver be referred to in order to promote the child’s optimal development and well-being?

  o The availability and accessibility of supports that focus on enhancing early childhood development.
  o Are the services referred to developmentally-informed? Are they infant-specific? Is there emphasis on infant-caregiver interactions (e.g., importance of being responsive, nurturing)? Are they attachment-oriented?

4.3.2.3 Facilitating social connections

Given the burdens and challenges that caregivers of infants face, assistance may be required in meeting their own needs, and subsequently the needs of their infants. The facilitation of social supports can impact a caregiver’s availability and responsiveness to their infants; thereby improving the quality of the infant-caregiver relationship (Bornstein & Tamis-LeMonda, 2014). Child welfare workers may be viewed as service brokers that strengthen social support networks; however, referrals to services alone are not enough and may not necessarily result in service utilization or the amelioration of child and/or caregiver functioning. Child welfare workers may need to help caregivers navigate social service systems and help families overcome barriers. For instance, caregivers may be reluctant to engage in services as a result of the stigma attached to the service and/or the stigma associated with maltreatment (Connell-Carrick, 2014). Other barriers may be more concrete in nature; for example, caregivers may not have the financial resources for transportation or they may not have someone they can rely on to take care of their infant while they are utilizing services.

4.3.2.4 Other key considerations

Providing caregivers of infants with intensive and targeted education and support on infant care and development, including the importance of nurturing and responsive caregiving and ensuring a safe and stimulating home environment are key elements to building upon the capacity of caregivers (Jones Harden, 2007). With respect to infants placed out-of-home, the goals of visitation should include maintaining and enhancing infant-caregiver contact through observation and coaching that fosters positive interactions between caregiver and infants (e.g., reading infant
cues, appropriate play, routines, and developmental expectations). Determining the frequency of infant-parent contact for infants living out-of-home is complex and contentious (Miron et al., 2013). Visiting structure, including the timing, duration and frequency should be based upon infant need, as opposed to the needs of the child welfare organization, caregiver or court (Miron et al., 2013). The need for child welfare policies that consider the unique needs of infants is indicated. Moreover, ensuring placement stability is critical to promoting infants’ well-being and preventing further dysregulation and trauma (Jones Harden, 2007). Although there are many other practice considerations, a more detailed discussion of best practice considerations or guidelines are beyond the scope of this paper. Moreover, it is deemed important that best practices guidelines for infants who are involved in the child welfare system are developed through cross-sector and trans-disciplinary collaborations.

4.3.2.5 Re-examination of child welfare tools utilized for infants and younger children

Currently mandated tools focus on the assessment and evaluation of risk and safety, not on the development or functioning of the child. Reflecting perhaps the current balance between the notions of safety and protection in child welfare policy and practice, tools that assess child well-being are considered supplementary in the Ontario Child Protection Tools Manual (Ministry of Children and Youth Services, 2007). Moreover, the supplementary screening tool that assesses well-being is not appropriate for children less than three years of age. Perhaps this is reflective of the unique challenges in screening infants within a child welfare context. In order for screening tools to be successfully adopted, unique logistical, time and competing demands of child welfare settings at different phases of service provision must be considered. There is no comprehensive strategy with respect to developmental screening, assessment, or the monitoring outcomes of infants within an Ontario child welfare context. This is a barrier to informed decision making in both practice and policy contexts.

A developmentally informed perspective suggests that risk assessments should consider age-specific risks of children (Jones Harden, 2007). Informed by the consequences of maltreatment on children’s development, there are factors at various levels that elevate risk of infant maltreatment. Factors at the following levels should be included in risk assessment protocols: infant, infant-caregiver, caregiver, family, and household (Jones Harden, 2007). Infant-specific risk factors for
maltreatment include prematurity, low birth weight, developmental delay, and emotional dysregulation (e.g. inconsolable crying).

4.3.2.6 Implementation of feasible and sustainable screening strategies

The demands of child welfare work, the lack of feeling qualified to conduct developmental screenings and the need for more support, have been identified as barriers to the sustainable implementation of child welfare organizational screening where workers had primary responsibility (Herman-Smith & Schmitt, 2014). Models that utilize cross-sector collaborations offer promising possibilities for the child welfare sector (He et al., 2015). A co-location model, where early childhood professionals and child welfare workers are housed in one location has been forwarded as a possible alternative (He et al., 2015; Herman-Smith & Schmitt, 2014). Given the profound rapidity of an infant’s development, monitoring infants’ developmental progress over time is indicated (Squires, Brickler, & Twomby, 2003). For instance, the Ages and Stages Questionnaire: Social-Emotional Development (ASQ:SE) has established 6-month screening intervals for children between 6, to 60 months of age (Squires, Brickler, & Twomby, 2003). The high rates of developmental challenges found in infants and young children who are involved with the child welfare system underscore the need for comprehensive developmental assessment being conducted (Jones Harden, 2007).

4.3.2.7 Focus on the developmental needs of infants that remain at home with caregivers

In 2006, the government of Ontario mandated Looking after Children, a developmental and resilience-based approach for children placed out-of-home. Children placed in out-of-home care are required to undergo an annual assessment of their developmental progress with their assigned child welfare worker; thereby informing plans of care (Courtney, Flynn, & Beaupré, 2013). Although this model marks an important shift towards a more developmentally-informed, resilience driven approach to child welfare practice with children placed out-of-home, much more needs to be done within an Ontario child welfare context to promote a developmental approach that addresses the unique needs of infants and young children. Although infants are most likely to be placed out-of-home following a maltreatment-related investigation when compared to older children, the vast majority of infants remain with their families post-investigation (Fast et al., 2014). Arguably, the developmental well-being of infants that remain home with their families
and are involved with the child welfare system has not been adequately addressed in child welfare policy and practice.

4.3.2.8 Developmental partnerships with allied sectors

Wulczyn and colleagues (2005) posited that in order to improve well-being, partnerships between sectors should be “explicitly developmental in their structure” (p.5). Thus, partnerships with other sectors are an opportunity to alter the developmental trajectory of an infant. The developmental period of infancy demands service structures that allow for inter-agency or inter-sector collaborations and service coordination in order to address early identification and management of developmental issues (Klein & Gilkerson, 2011). For instance, collaborative practices and policies in screening across sectors have been noted to be beneficial in identifying children at risk of mental health issues and to providing appropriate and timely referrals to community supports (He et al., 2015). Thus, linkages with other early childhood policy initiatives across sectors are necessary in order to promote optimal early childhood development. The need and necessity to partner with other service sectors to provide coordinated services focusing on infants’ key relationships in order to enhance their development is clear.

An integrated approach to child welfare service provision is important for infants and their families (Jones Harden, 2007). Moreover, this is in keeping with the policy directions of the Transformation Agenda and key priorities of the former Commission. Given the emerging research in Ontario with respect to caregiver risk factors and infant functioning concerns, key cross-sector collaborations to further explore and/or enhance include the domestic violence sector, adult mental health, addictions, and infant developmental services and interventions that target attachment. Without adequate intervention, emerging emotional difficulties in infants can become more concerning over time (National Scientific Council for the Developing Child, 2008/2012). Timely detection must be accompanied by timely intervention. Accordingly, limited accessibility and availability of infant mental health or other developmental services have profound implications for infants and families. Numerous gaps, inconsistencies and regional variations of services have been found in infant and early childhood mental health services in Ontario (Clinton et al., 2014).
Clinton and colleagues (2014) noted that the infant-caregiver dyad is not the primary client focus in Ontario, as infants and caregivers are treated as distinct entities within the larger service system. This has enormous implications for infants and caregivers who come into contact with the child welfare system. Given the vulnerability of infants involved with the child welfare system and the primacy of the attachment relationship, these services can have a critical role in promoting infants’ optimal development by enhancing infant-caregiver relationships. Addressing the needs of caregivers and connecting them to services integral to the well-being of their infants is crucial (Clinton et al., 2014). Multi- or inter-generational, family-centred approaches that consider the developmental needs of the children within the context of community-based supports are important and are considered best practice (National Scientific Council on the Developing Child 2008/2012; Shonkoff & Fisher, 2013); however, few programs offer this approach in the province (Clinton et al., 2014). A recommendation for further policy development in Ontario by Clinton and colleagues was for the provision of targeted supports to populations at-risk and working with an inter-generational intervention model.

4.3.3 Building a knowledge base for Ontario child welfare policy and practice decisions

Data collection and research on infants is integral to informing services and policies in the field. Given that the state of the knowledge with respect to infants involved with the child welfare system within an Ontario child welfare context is minimal, there are numerous opportunities for moving forward in a more comprehensive and coordinated manner both within the child welfare sector and in partnership with others. Evidence is needed to guide efforts to improve infant well-being.

4.3.3.1 Taking stock

A critical step in determining whether child welfare practices across the province are developmentally driven is to take stock of existing child welfare initiatives, protocols, practices, programs, and policies with infants and their families (Jordon, Szrom, Cooper & DeVooght, 2013). What specific policies and procedures specifically address the safety and well-being of infants and their families in the organization? What are the aims and goals of child welfare initiatives, interventions and policies with respect to infants and families? Are they effective? These questions are difficult to answer. The structure of child welfare organizations in Ontario
further underscores the need for systematic data collection and research efforts. There are 47 child welfare organizations throughout Ontario and each organization is a not-for-profit, independent legal entity that is governed by independent and volunteer board of directors (Office of the Auditor General of Ontario, 2015). Child welfare organizations across Ontario vary in the way services are delivered and in models of service delivery at a local level (Office of the Auditor General of Ontario, 2015).

To this author’s knowledge, there has been no published comprehensive survey of provincial or territorial child welfare practices, initiatives, and policies with respect to infants in Ontario. The absence of provincially aggregated and reliable data about existing policies across organizations translates into missed opportunities to promote infant well-being. Given the lack provincially aggregated information, it is important to determine whether existing practices are aligned with what we know about early childhood development and whether evaluations have been conducted. It is important to identify and share innovative practices and programs for infants that exist across the province. For instance, several child welfare organizations have high risk infant teams that include nurses that work with child welfare workers. To this author’s knowledge there has been no peer-reviewed study that has examined and explored any of these service approaches to infants. Consequently, key gaps, successes, challenges and barriers that child welfare organizations across the province and country face in meeting the needs of infants are not well understood and require more systematic exploration.

One prominent example of the science of early childhood development being translated and mobilized into innovative practice approaches for children and families is the Canadian child welfare system’s response to the neurodevelopmental disorder Fetal Alcohol Spectrum Disorder (FASD). Given the high prevalence of prenatal alcohol exposure for children in care, the risk of FASD in this subpopulation of children is considered high (Popova, Lange, Burd, Rehm, 2014). Canadian research has estimated that the annual cost of children and youth in care with FASD ranged from $57.9 to $198.3 million (Popova, Lange, Burd, & Rehm, 2014). Through cross-sector (child welfare sector, academia and government) and inter-provincial collaborations, a FASD and Child Welfare Interprovincial Community of Practice was created. This includes access to learning opportunities, organizations that provide FASD services in relation to child welfare, and a platform to share innovative research with respect to FASD and child welfare
practice (FASD & Child Welfare Community of Practice, n.d.). Developing and supporting best practices and informing practice and policy were among the many project functions. Contributing to stable and nurturing caregiving environments for children and youth with FASD was a key goal of the initiative.

4.3.3.2 Examining opportunities for differential responses

The distinct risks, needs and experiences of infants involved with the child welfare system provide a compelling argument for prioritizing and differentially responding to their needs in policies and practices (Jones Harden, 2007). The fairly large proportion of risk-only investigations, suggests that in the absence of immediate safety concerns, a comprehensive assessment on infant and family needs and strengths may be a viable alternative to the traditional approach that allows for one investigative response to all reports. Given that differential response has not been widely implemented in Ontario, there is an opportunity to explore child welfare strategies that specifically address the unique developmental needs of infants and their families. Could infant’s needs and those of their families be best addressed through an alternate response? What are more optimal models for service delivery in the child welfare system for infants and young children in an Ontario context? Further research and an examination of approaches in other provinces and countries may be helpful in addressing these questions.

4.3.3.3 Prioritizing infants in data collection and research efforts

Transdisciplinary research for infants is critical for promoting their optimal development and well-being. Undoubtedly, research agendas require collaboration and input between academia, child welfare and other allied service providers, families, and government (Boivin & Hertzman, 2012). For instance, there is a dearth of research that provides guidance with respect to the implementation of developmental screening and assessment models within a child welfare context (Herman-Smith & Schmitt, 2014). Moreover, the vast majority of research that does exist on child welfare-involved infants originates from the United States and not a Canadian child welfare context. Social workers have an obligation to contribute to and advocate for child welfare research that has relevance to infants and their families.

The Transformation Agenda identified research capacity as a key priority; however, there is a notable absence of provincial funds for child welfare research initiatives. There is a critical need
to examine child welfare system responses by age cohort. Infants and young children require prioritization given their distinct vulnerability for maltreatment and poor developmental outcomes. The lack of provincial funding is a barrier to building research capacity, to supporting a cohesive and coherent child welfare research agenda, and, ultimately to identifying and building upon practice and policies that do in fact promote infant development and well-being. Moreover, it further underscores the need and vital importance for partnerships between child welfare with other sectors. An understanding of the risks and opportunities that infants and families who are involved with the child welfare face can lead to more strategic, targeted and effective policies and services.

4.3.3.4 Advocacy efforts: The role of social work

What is the role of social workers within the field of child welfare and those in other allied sectors to promote early childhood development of child welfare-involved infants and young children? Are the early years a priority for the profession and how is it demonstrated through action? Social work is arguably the dominant profession in the field of child welfare, uniquely positioned to collaborate with partners and provide leadership to seize this opportunity to forward a policy and practice agenda that would promote the optimal development for the most vulnerable and at-risk subgroup of children involved with the child welfare system. The profession of social work must take a critical look at advocacy efforts to promote early childhood development and well-being for infants who are at-risk. The profession of social work has a long history of advocating for the most vulnerable members of society – infants who come the attention of the child welfare system can certainly be considered members of this group.

4.4 Conclusion

There is compelling evidence that provides a rationale for critically examining and adjusting child welfare’s response to infants and their families. For example, emerging Canadian research underscores the heavy burdens that infants and families face. Furthermore, the extant research suggests that more children begin their exposure to child welfare services in infancy than any other developmental period (Wulczyn, 2008). When compared to other groups of children, infants are disproportionatley represented at key points in service provision. A developmental approach to child welfare must be underpinned by the science of early childhood and brain development;
otherwise, the disproportionate burdens experienced by infants and their potential developmental consequences will not be fully understood or adequately addressed. This knowledge should inform child welfare service delivery models, our partnerships with other allied sectors, and our expectations on how these services should impact infants’ development, and ultimately, they’re well-being in infancy and beyond (Wulczyn, 2008).

Leveraging and integrating new insights from the biological and social sciences into practice and policy presents substantial challenges and opportunities. Undoubtedly, using and targeting scarce resources for infants in an effective manner is challenging. There is an opportunity for the child welfare sector, in partnership with the provincial government, academia, public health, and other allied sectors to ensure that infants and families who come to the attention of the child welfare system are afforded the best beginning possible. A policy and practice framework underpinned by the science of the early childhood development may help to unify efforts to promote well-being both within the sector and between sectors. Innovative practices and partnerships with other allied sectors are needed and may go beyond current funding models. Jones Harden (2007) asserted that the child welfare sector should ensure that children receive the services needed to optimize their development and ignoring the well-being of infants is “tantamount to causing harm, which is in direct conflict with child welfare’s goal of promoting children’s safety” (p.262). Investing in timely services for vulnerable children and families has been deemed critical to the Ontario child welfare system moving forward (Ontario Association of Children’s Aid Societies, 2014). Infants’ development is rapid and profound; policy, practice, research and advocacy efforts should reflect this.
4.5 References


Chapter 5

5 Conclusion

Research focusing on infants is underdeveloped in a Canadian child welfare context. The two main objectives of dissertation were to: (1) build upon and extend the knowledge base with respect to infants in a Canadian provincial child welfare context, and (2) identify opportunities and challenges for promoting the development and well-being of infants through the exploration of the Ontario child welfare practice and policy contexts. The findings suggest that infants are the most vulnerable subgroup of children involved with the Ontario child welfare system; consequently, they are at greatest risk for poor developmental outcomes. The safety and well-being of infants is inextricably linked to their caregiver. Infants are totally dependent on their caregivers’ ability to meet their needs. In this vein, caregiver risk factors drove the child welfare decision to provide ongoing services and the decision to refer infants and/or their families to services.

This final chapter of the dissertation provides a summary of the dissertation’s key findings that are organized under three key themes: (1) the need to rethink traditional service approaches with infants; (2) the critical importance of community supports; and, (3) the possibility that the child welfare system is missing critical opportunities for early identification, referral and intervention. A brief overview of the dissertation’s limitations will follow. Implications for social work, recommendations for future directions, and an overview will conclude this chapter.

5.1 Summary and discussion of key findings

Opportunities and challenges in developing a coherent and comprehensive agenda for practice, policy, research and advocacy for infants were offered and informed by the science of early childhood development.
5.1.1 The need to rethink traditional service approaches with infants

The findings of this research highlight the challenges of utilizing a traditional, one-size-fits-all model that emphasizes protection to address the needs of infants and their families. The two challenges that emerged from the findings include: (1) the distinct vulnerability of infants; and, (2) investigative trends suggesting a shift from urgent protection concerns to an increased focus on the consequences of family dysfunction on child development and well-being. Only 6% of all maltreatment-related investigations in Ontario in 2013 involve infants (Fallon et al., 2015); yet, the findings show that infants were disproportionately represented at all key phases of child welfare service delivery. More specifically, the findings of the second paper indicated that when compared to older children, infants were most likely to be transferred to ongoing services, to receive a referral for services, to be placed out-of-home, and to be the subject of child welfare court proceedings. Additionally, amongst investigations with at least one previous case opening, infants were most likely to be re-opened within the preceding 12-month period. Moreover, the large proportion of maltreatment-related investigations involving infants assessed the risk of future maltreatment (risk-only), not an allegation of a maltreatment incident. The findings of the first paper revealed that over half of risk-only investigations involving infants were transferred to ongoing services. Risk-only investigations were transferred to ongoing services in greater proportions than investigations assessing allegations of all other forms of maltreatment, with the exception of sexual abuse. Moreover, when compared to older children, the findings of the second paper showed that investigations involving infants were most likely to assess future risk and not an incident of maltreatment. Using a developmental lens, the large proportion of risk-only investigations involving infants raises concerns about the fit of traditional, one-size-fits-all service model that emphasize protection, as opposed to the promotion of well-being or development. The findings of the second paper highlighted the differing profile of infants when compared to that of older children in various child, family, household, case characteristics, short-term service outcomes, and the types of services referred to also raises questions about the utility of a traditional model in light of the unique clinical profile and needs of infants.

The child welfare system’s policy orientation has significant implications for promoting infants’ development and well-being. In that vein, the child welfare’s system’s underlying policy context was explored in the third paper. The Commission to Promote Sustainable Child Welfare
(Commission) (2012a) noted that a residual policy orientation that narrows the scope of child welfare to more intrusive protection services might place insufficient focus on interventions that strengthen the family. It is notable that the second paper found that infants are most likely to be subject to child welfare court proceedings and to be placed in out-of-home care post-investigation, both outcomes are considered intrusive and costly; thus, the orientation child welfare policy has significant resource implications for the child welfare system and its sustainability (Commission, 2012a; Fallon, Ma, Black, & Wekerle 2011).

The differential response model was a critical component of the Transformation Agenda that emphasized the importance of identifying child and family needs and strengths. In keeping with the findings and in light of existing policy orientation in support of differential response models, a key consideration for the third paper was that differential or alternate response models for infants and their families be explored. More specifically, the implementation of a dual response pathway could include a traditional investigative track and alternate response track. An alternate approach can emphasize a less adversarial, needs and strengths driven approach to service provision (Fuller, 2014). An assessment of differential response models involving infants and their families in other jurisdictions in North America and elsewhere would be helpful to determining their applicability to an Ontario context. For instance, in the U.S., child welfare practices and policies were implemented to increase parental engagement and to identify appropriate services (Fuller, 2014). Contrary to concerns that a differential response would negatively impact child safety, Fuller (2014) noted that no study has found higher rates of maltreatment recurrence in families between traditional and differential response models. Regardless, adequate funding and infrastructure within the sector and other allied sectors (e.g. children’s mental health, adult mental health, addictions) is necessary to support differential response models; otherwise, wide-scale implementation is unlikely and unsustainable. In summary, the three papers collectively suggest that it is time to rethink traditional child protection approaches with infants and young children.
5.1.2 The importance of community supports and infrastructure

The critical importance of community supports to infants and families that come into contact with the child welfare system was a key, converging theme emanating from the findings. In the first paper, the exploratory analysis revealed that having a primary caregiver with few social supports was the most highly influential predictor of the decision to provide ongoing child welfare services. The child welfare system’s concern with respect to social isolation is warranted. The stresses of parenting during infancy in combination with social isolation are known risk factors for both maltreatment and poor developmental outcomes. As noted initially in the first paper, referrals for services internal and/or external to the child welfare system were made in over half of maltreatment-related investigations involving infants. Building upon the findings of the first paper, the second paper revealed that when compared to older children, families of infants were most likely to receive a referral for services. The need and necessity of partnerships with the community takes on a particular importance when working with families of infants. The findings of both papers underscored the disproportionate burdens that infants and their caregivers face and the child welfare system’s recognition that supportive services are necessary to promote the child’s safety and well-being.

The findings of this dissertation demonstrated that caregiver functioning concerns drove child welfare service decisions for the provision relating to ongoing services and for referral to services. Moreover, when compared to older children, both proportion and incidence rates suggested that caregivers of infants were most likely to have a caregiver functioning concern. Child welfare workers appear to be most clinically concerned about the ability and capacity of caregivers to meet the needs of infants. The science of early childhood development underscores that the well-being of an infant is inextricably linked to the well-being of his or her caregivers. In this vein, key caregiver functioning issues identified in the first paper suggest that vital community resources for primary caregivers of infants include intimate partner violence (IPV), mental health, and addictions services. The second paper further highlighted that the services most commonly referred to for infants included: IPV services, parent support group, and in-home family/parent counseling. When compared to older children, families of infants were most likely to be referred to a parenting support group.
As previously noted, the identification of an infant functioning concern was found to be quite low in this dissertation and this is in keeping with previous Ontario research findings (Fallon et al., 2013). The most commonly identified infant functioning concerns include positive toxicology at birth, failure to meet developmental milestones, and a physical disability. These findings highlight the importance of early intervention services that address multiple developmental domains. Moreover, available and accessible services are critical to families with infants as timing is an important factor given infancy is a period of rapid development. The ability of the child welfare system to promote the well-being of infants is linked to resources and services that are typically considered outside of its boundaries (Wulczyn et al., 2005). Ultimately, enhancing the development and well-being of infants involved with the child welfare system requires a strong and supportive infrastructure.

Ontario child welfare policy initiatives and directions examined in the third paper acknowledge the critical importance of community partnerships and services (Commission, 2012a, Commission, 2012b; Ministry of Children and Youth Services (MCYS), 2005; Ontario Association of Children’s Aid Societies (OACAS), 2014). However, the unique needs of infants involved with the child welfare system have not been prioritized in Ontario policy. Emerging opportunities to create policy frameworks that prioritize the unique developmental needs of infants across sectors and service systems were discussed in the third paper. It was proposed that the science of early childhood development and research from the field should be a guiding and galvanizing force for comprehensive and coherent policies across sectors that support a developmental approach to child welfare practice. The promotion of early child development is inherently complex, multi-disciplinary and cross-sectoral in nature. This is in keeping with the Commission’s (2012a) recommendation that the provincial government enhance service integration between child welfare and other sectors and services.

5.1.3 Missing opportunities for early intervention

Early interventions can mitigate and prevent the developmental consequences of maltreatment and other adversities. The large proportion of case re-openings within a short period of time, the possible under-identification of infant functioning concerns, and the current state of child welfare policies that do not explicitly address the specific needs of infants, raise concerns about missing opportunities to promote the optimal development and well-being of child-welfare involved
infants. The first two papers of this dissertation underscored the complexity of issues that infants and families face and the need for timely identification, appropriate referrals, and intervention.

Maltreatment-related investigations involving infants had a fairly large proportion of case re-openings over a short period of time. Moreover, re-openings were most frequently noted in maltreatment-related investigations involving infants when compared to older children. This finding may be signaling complex, unmet and chronic family needs. High rates of re-reporting have been found in the literature with respect to infants (e.g. Putnam-Hornstein, Simon, Eastman, & Magruder, 2015). Moreover, according to proportions and incidence rates, infants were found to be the least likely group of children identified as having a child functioning issue in the second paper, suggesting that the child welfare system may be under-identifying infant functioning issues. The lack of standardized developmental screening tools utilized with infants in Ontario may be contributing to inaccurate assessments. This is concerning as referrals to appropriate services are predicated on the accurate assessment of infant needs. It is unclear as to how child welfare workers are assessing infant development within the context of child welfare investigations. Thus, under-identification may be leading to infants and their families being under-served.

As discussed in the third paper, the need to intervene early in the lives of children is recognized in Ontario child welfare policy initiatives (MCYS, 2005; Commission, 2012a); however, the unique developmental needs of infants are not specifically or explicitly addressed in child welfare policy. Nor are policies aligned with or informed by the science of early childhood development. A developmentally informed approach to child welfare policy and practice is critical to promoting the healthy development of infants. Taken together, these dissertation findings raise concerns that the child welfare system in Ontario is missing opportunities to identify, refer, and intervene in a timely manner. This is concerning as the scientific evidence suggests that early adversity can lead to problems that reach beyond infancy and that early intervention can assist in averting or buffering its consequences (National Scientific Council on the Developing Child, 2007).
5.2 Implications for social work and recommendations for next steps

The findings of this dissertation have numerous implications with respect to social work research, practice, policy, and advocacy efforts.

5.2.1 Research efforts

Ensuring a sustained focus on infants and young children in data collection and research is a key component to constructing, enhancing, and sustaining a developmental approach to child welfare. The minimal research focusing on infants in a Canadian child welfare context underscores the need to extend the knowledge base to provide a sound foundation for guiding practice and policy decisions. Some emerging priorities for research outlined in the third paper include: taking stock of current child welfare policy and practice initiatives, examining opportunities for differential or alternate service responses, and prioritizing infants in data collection and research efforts. In light of these findings, other opportunities to build upon the knowledge base are identified and are briefly outlined.

The findings of this dissertation corroborate those of the broader Canadian literature (e.g., Fast et al., 2014); that is, when compared to older children, infants comprise the largest proportion of children entering out-of-home care post-investigation. Infants who enter out-of-home care face disproportionate risks to their development. Moreover, infants’ experiences in the care of the child welfare system can adversely impact their long-term development (e.g. multiple caregivers) (Jones Harden, 2007). Research from the U.S. suggests that infants in foster care have distinct foster care experiences compared to older children (Wulczyn, Hislop, & Jones Harden, 2002). There is a dearth of Canadian research that has examined the child welfare trajectories of children involved with the child welfare system (see Esposito et al., 2013 for a notable exception). To this author’s knowledge, there has been no study that has examined the child welfare trajectories of infants within an Ontario child welfare context. As indicated by the findings of this dissertation research, families of infants have a fair proportion of case re-openings. High re-reporting rates underscore the child welfare system’s challenge in addressing or resolving the complex circumstances that resulted in the report (Putnam-Hornstein et al., 2015). Additionally, age-differentiated cohorts can inform policy and practice efforts with respect to the targeting of scarce resources for intervention and prevention efforts. Given the
science of early childhood development and the impact of ‘toxic stress’ on infants’ short-term and long-term health and development, an understanding of children’s child welfare experiences and pathways should also be an urgent research priority.

There is minimal research that has focused on the characteristics of infants, their needs, their experiences, and what drives the child welfare system’s decision to provide ongoing services and/or place infants out-of-home within a Canadian child welfare context. The need for the examination of the relative influence of case, child welfare worker and organizational characteristics on child welfare decisions to intervene on behalf of infants is indicated in the theoretical and extant literature. Moreover, there has been no study that has examined the impact of worker or organizational characteristics on child welfare decision-making involving infants as a subpopulation of children involved with the child welfare system. Moreover, no studies have applied a multi-level analytic framework to the decision to provide ongoing services, referrals to specialized services, or out-of-home placements for infants.

The need for research that evaluates the effectiveness of services offered to infants and their families by child welfare organizations and other sectors should be a priority. In Fuller and Nieto’s (2013) discussion with respect to provision of child welfare services, they note that, “There is very little evidence to suggest that the two biggest components of in-home child welfare services – casework and parent training- have any effectiveness at all” (p.8). The findings of this dissertation did in fact show that families of infants were most commonly referred to parent support groups, but their effectiveness is unknown. Moreover, given the specific challenges of parenting and infant and infant’s unique developmental needs, it is unknown if the parenting support groups that families of infants were referred to address the specific needs of infants and their caregivers.

Utilizing multiple sources of data and other methods can enhance the existing knowledge base. For instance, qualitative research methods such as semi-structured interviews or focus groups can assist in enhancing the understanding of child welfare worker’s perspectives. Possible future areas of research could include how they assess and respond to the needs of infants, the challenges and barriers experienced in providing services. Qualitative research can inform, complement, and lead to other research studies. Moreover, the integration of various data sources may also assist in advancing the knowledge base (Putnam-Hornstein, Needell, &
Rhodes, 2013; Putnam-Hornstein et al., 2015). For instance, data linkage possibilities exist between various Canadian and provincial incidence studies that provide national and provincial level data with respect to child maltreatment-related investigations and OCANDS. Both Canadian and provincial incidence studies collect data at the initial child welfare investigative phase and not at other points of child welfare service provision. OCANDS can assist with examining administrative data past the intake phase of service provision for infants placed in out-of-home care or are living in the community. Moreover, linkages with census data could assist in examining community level risk and protective factors.

5.2.2 Policy, practice and advocacy efforts

The findings of this dissertation, in combination with past Canadian child welfare research on infants, and the knowledge emanating from the science of early childhood development, strongly suggest that careful consideration should be given to the creation of provincial child welfare policy that addresses the developmental needs of infants in practice. A developmental framework, informed by the science of early childhood development can contribute to forming a sound foundation for developmentally driven child welfare practices that can help to realize the direction of recent policy changes in Ontario and child welfare’s mandate of promoting protection and the well-being of children. Child welfare services place greater emphasis on case identification and investigating maltreatment, as opposed to assessing child functioning and parenting quality (Boivin and Hertzman, 2012). Fluke and Casillas (2013) asserted that, “In order to address child well-being, child welfare also needs to be able to monitor well-being outcomes” (p.20). A developmental approach to measuring child well-being is indicated in the literature and it could be utilized to assess the impact of services on children’s development (Wulczyn et al., 2005).

It is noteworthy, but unsurprising, that caregiver factors drove child welfare decisions to transfer a case to ongoing services and to provide a referral for services. Knitzer (2007) asserted that, “Intervention research suggests that the best way to help young children is to help their caregivers to provide the nurturing and the structure they need” (p.239). The findings of this dissertation suggest that reducing isolation and connecting caregivers of infants to social supports is a key priority for the child welfare system in Ontario. A developmentally-informed approach rooted in the science of early childhood development and brain development places critical importance on promoting stable
and nurturing relationships for all infants who come into contact with the child welfare system. This means that child welfare practitioners place emphasis on enhancing the infant-caregiver relationship through numerous possible resources both within the child welfare organization and/or external to it. For instance, visitation between infants who are placed-out-of-home and their caregiver should be supported and enhanced by child welfare practitioners who are trained in early childhood development and trauma. Child welfare workers must also be aware of community resources, including: early intervention services, adult mental health, and addiction resources in the community.

The findings of the second paper that explored the type of referrals made underscored that families with infants require a fairly broad range of services, including concrete assistance. Socio-economic disadvantage was particularly evident for families with infants and young children as they were more likely to receive referrals for income, food and housing supports. This finding is particularly concerning given the challenges that caregivers may be facing in meeting the basic needs of infants and the stress that low socio-economic status places on parenting during such a critical developmental period. Although poverty reduction is beyond the scope of child welfare, social work advocacy efforts should not forget the impact of poverty and other broader environmental factors that impact infants and families involved with the child welfare system that also adversely influence child development.

Underlying policies should support the use of feasible and sustainable developmental screening practice strategies. There is no comprehensive strategy in Ontario with respect to developmental screening, assessment or monitoring outcomes of infants involved with the child welfare system. The absence of a comprehensive policy or initiative is in total contradiction to a vast body of scientific research, particularly research on the exposure to toxic stress and heightened risk for poor health and mental health outcomes in infancy and beyond (Centre on the Developing Child at Harvard University, 2010; National Scientific Council on the Developing Child). It is also in contradiction to the evidence that supports the importance of early intervention efforts. The lack of a screening, monitoring, and data collection strategy for child welfare involved infants is a barrier to meeting the unique needs of infants and their families. It is noteworthy that the OIS-2013 is the only source of provincially aggregated service referral data, which represents service referrals made by the child welfare worker at the conclusion of the maltreatment-related investigation and not at other points of service provision. Ontario has yet to complete full implementation of a common,
provincial-level child welfare information system, Child Protection Information Network (CPIN). The inability to extract data relating to service needs and referrals for children and their families is a significant barrier to understanding and implementing needed supports and advocating for services. Data that is able to capture the needs of infants and their families can help to inform decision-making.

Shonkoff (2006) noted a paradox of “a strong and expanding science base yet persistently inadequate and ineffective societal investments in the healthy development of children and their families, particularly for those who are the most vulnerable” (p.2190). The need to advocate on behalf of infants and young children is strikingly evident. How has social work called attention to the needs of infants who are involved in the child welfare system? As the predominant profession in child welfare, social work has a unique vantage point from which to provide leadership and partnership with other sectors and disciplines to promote the well-being of children in policy, practice and research efforts. It is in keeping with a profession that has a legacy so deeply rooted in social justice and in advocating for society’s most vulnerable members.

5.3 Limitations

Several limitations must be considered when interpreting the findings of this research. Although numerous limitations were previously noted, there are two additional limitations that also require consideration. Firstly, it is important to note that infants (less than 1 year) are not a homogenous group of children (Wulczyn, Hislop, & Jones Harden, 2002). Their rapid development and ever-changing needs suggests that there may be variations in how the child welfare system responds (e.g., infants younger than 3 months versus older). However, a more refined analysis of age was not possible, as the OIS-2013 does not collect age by months. Secondly, the scope of this paper was limited to the Ontario child welfare policy and practice context. Policies in other sectors were very briefly mentioned in the third paper. A critical exploration of other provincial, federal and international policy contexts that may impact child welfare-involved infants and their families in Ontario would be informative to providing a clearer picture of other gaps and opportunities that may exist for galvanizing research and policy efforts.
5.4 Conclusion

The findings of these three papers individually and collectively are a cause for concern. Inadequate child welfare policy and practice responses to the developmental needs of infants can reverberate throughout a child’s life course. Data collection and research initiatives that focus on infants are integral to informing services and policies in the field of child welfare. Given that the state of the knowledge with respect to infants and the child welfare system’s response is minimal, there are opportunities for moving forward in a more comprehensive, cogent, and coordinated manner with respect to research efforts. Policies and practices should be predicated on a thorough understanding of infants’ characteristics, their needs, the child welfare system’s response to those needs, and child welfare outcomes and trajectories. This understanding is critical to informing and targeting prevention, intervention, policy, and advocacy strategies. Ultimately, this understanding is critical to assessing whether the mandate of the child welfare system – to promote the best interests, protection and well-being of children, is being met.
5.5 References


Appendices
Appendix A

Canadian Incidence Study of Reported Child Abuse and Neglect – CIS-2008

CIS Maltreatment Assessment

INTAKE FACE SHEET (Please complete this face sheet for all cases)

1. Date referral was received: [ ] [ ] [ ] [ ] [ ]
2. Date case opened: [ ] [ ] [ ] [ ] [ ]

3. Source of allegation/referral (Fill in all that apply)
   - Custodial parent
   - Neighbor
   - Hospital (any person)
   - School
   - Police
   - Non-custodial parent
   - Social assistance worker
   - Community health nurse
   - Other child welfare service
   - Community agency
   - Child (subject of report)
   - Crisis counselor
   - Community physician
   - Day care center
   - Anonymous
   - Foster parent
   - Community recreation center
   - Community mental health professional
   - Other

4. Please describe referral, including alleged maltreatment or risk of maltreatment (if applicable) and results of investigation
   In jurisdictions with differential/alternative response please check
   - Custodial alternative response
   - Traditional protection investigation

5. Caregiver(s) in the home
   - Primary caregiver
     a) Sex: [ ] Male [ ] Female
     b) Age: [ ] 0-5 yrs [ ] 6-10 yrs [ ] 11-18 yrs
     c) Relationship to child:

   - Second caregiver in the home at time of referral
     a) Sex: [ ] Male [ ] Female
     b) Age: [ ] 0-5 yrs [ ] 6-10 yrs [ ] 11-18 yrs
     c) Relationship to child:

Use the following relationship code to indicate caregiver’s relationship to the child in 6d) and 6e) and, in the case of “other,” please specify the relationship in the space provided

6a) List first names of all children (20 yrs) in the home at time of referral
   - [ ] [ ] [ ] [ ]
6b) Age of child
6c) Primary caregiver’s relationship to child
   - [ ] [ ]
6d) Other caregiver’s relationship to child
   - [ ] [ ]
6e) Risk investigation only
6f) Investigated incident of maltreatment

A Child Information Sheet should be completed for each child investigated for a risk of maltreatment (6g) or incident of maltreatment (6h).

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This information will remain confidential, and no identifying information will be used outside your own agency.
The two-digit portion of the instrument will be destroyed by the site manager of the agency/office upon completion of data collection.

McGill University, Centre for Research on Children and Families, 3088 University Street, Suite 100, Montreal QC H3A 3A7 • t. 514.398.5346 • f. 514.398.5357
University of Ottawa, Faculty of Social Work, 2455 Robarts Street West, Ottawa ON K1H 5H2 • t. 613.562.7142 • f. 613.562.7143
University of Calgary, Faculty of Social Work, 2500 University Drive NW, Calgary AB T2N 1N4 • t. 403.220.4000 • f. 403.220.7249
First Nations Child and Family Caring Society of Canada, 251 Bank Street, Suite 302, Ottawa ON K1P 1X9 • t. 613.236.3100 • f. 613.230.3100

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### CIS Maltreatment Assessment: Household Information

**Primary Caregiver:**
- [ ] Full time
- [ ] Part time (<30 hrs/week)
- [ ] Multiple jobs
- [ ] Social assistance
- [ ] Unknown

**Primary income:**
- [ ] Seasonal
- [ ] Employment insurance
- [ ] None
- [ ] Other

**Ethno-social:**
- [ ] White
- [ ] Black
- [ ] Hispanic
- [ ] Chinese
- [ ] Other

**Residential school:***
- [ ] Yes
- [ ] No
- [ ] Unknown

**A10. Contact with caregiver in response to investigation:**
- [ ] Co-operative
- [ ] Not co-operative
- [ ] Not contacted

**B1. Case history:**
- [ ] No
- [ ] Unknown

**B2. Case history:**
- [ ] Yes
- [ ] No
- [ ] Unknown

**B3. Case history:**
- [ ] Yes
- [ ] No
- [ ] Unknown

**B4. Case history:**
- [ ] Yes
- [ ] No
- [ ] Unknown

**B5. Case history:**
- [ ] Yes
- [ ] No
- [ ] Unknown

**B6. Case history:**
- [ ] Yes
- [ ] No
- [ ] Unknown

**B7. Case history:**
- [ ] Yes
- [ ] No
- [ ] Unknown

**B8. Case history:**
- [ ] Yes
- [ ] No
- [ ] Unknown

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**Second Caregiver in the home:**
- [ ] Full time
- [ ] Part time (<30 hrs/week)
- [ ] Employment insurance
- [ ] Social assistance
- [ ] Unknown

**Primary income:**
- [ ] Seasonal
- [ ] Employment insurance
- [ ] None
- [ ] Other

**Ethno-social:**
- [ ] White
- [ ] Black
- [ ] Hispanic
- [ ] Chinese
- [ ] Other

**Residential school:***
- [ ] Yes
- [ ] No
- [ ] Unknown

**A11. Contact with caregiver in response to investigation:**
- [ ] Co-operative
- [ ] Not co-operative
- [ ] Not contacted

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**A12. Caregiver risk factors:**
- [ ] Alcohol abuse
- [ ] Drug/alcohol abuse
- [ ] Cognitive impairment
- [ ] Marital health issues
- [ ] Physical health issues
- [ ] Poor social supports
- [ ] Victim of domestic violence
- [ ] Perpetrator of domestic violence
- [ ] History of foster care/group home

**A13. Caregiver risk factors:**
- [ ] Alcohol abuse
- [ ] Drug/alcohol abuse
- [ ] Cognitive impairment
- [ ] Mental health issues
- [ ] Physical health issues
- [ ] Poor social supports
- [ ] Victim of domestic violence
- [ ] Perpetrator of domestic violence
- [ ] History of foster care/group home

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**A14. Other adults in the home:**
- [ ] None
- [ ] Grandparent
- [ ] Child 19
- [ ] Other

**A15. Caregivers outside the home:**
- [ ] None
- [ ] Father
- [ ] Mother
- [ ] Grandparent
- [ ] Other

**A16. Child safety dispute:**
- [ ] Yes
- [ ] No
- [ ] Unknown

**A17. Housing:**
- [ ] Own home
- [ ] Rented
- [ ] Public housing
- [ ] Rooming house
- [ ] Unknown
- [ ] Other

**A18. Home overcrowded:**
- [ ] Yes
- [ ] No
- [ ] Unknown

**A19. Number of moves in past year:**
- [ ] 0
- [ ] 1
- [ ] 2
- [ ] 3 or more
- [ ] Unknown

**26. Housing safety:**
- [ ] Accessible weapons
- [ ] Accessible drugs/paraphernalia
- [ ] Drug production
- [ ] Chemicals or solvents used in production
- [ ] Other home injury hazards
- [ ] Other home health hazards

**27. Household frequently runs out of money:**
- [ ] Yes
- [ ] No
- [ ] Unknown

**28. Case previously opened:**
- [ ] Yes
- [ ] No
- [ ] Unknown

**29. Case previously closed:**
- [ ] Yes
- [ ] No
- [ ] Unknown

**30. Case closed:**
- [ ] Yes
- [ ] No
- [ ] Unknown

**31. Case referred:**
- [ ] Yes
- [ ] No
- [ ] Unknown

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**Statistical code:**
- [ ] 38112

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**Note:**
- [ ] Yes
- [ ] No
- [ ] Unknown

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**23. Case was closed:**
- [ ] Yes
- [ ] No
- [ ] Unknown

**24. Referrals:**
- [ ] Yes
- [ ] No
- [ ] Unknown
Appendix B

THE ONTARIO INCIDENCE STUDY
OF REPORTED CHILD ABUSE AND NEGLECT (OIS)

OIS-2013 Guidebook

BACKGROUND
The Ontario Incidence Study of Reported Child Abuse and Neglect 2013 (OIS-2013) is the fifth provincial study of reported child abuse and neglect investigations in Ontario. Results from the previous four cycles of the OIS have been widely disseminated in conferences, reports, books and journal articles (see Canadian Child Welfare Research Portal, http://cwrp.ca).

The OIS-2013 is funded by the Ministry of Children and Youth Services of Ontario. Significant in-kind support is provided by child welfare agency managers, supervisors, front-line workers, information technology personnel, and other staff. The project is led by Professor Barbara Fallon and managed by a team of researchers at the University of Toronto’s Factor-Inwentash Faculty of Social Work.

If you ever have any questions or comments about the study, please do not hesitate to contact your Site Researcher (see http://cwrp.ca/OIS2013_hub for Site Researcher contact information).

OBJECTIVES
The primary objective of the OIS-2013 is to provide reliable estimates of the scope and characteristics of reported child abuse and neglect in Ontario, in 2013. Specifically, the study is designed to:

- determine rates of investigated and substantiated physical abuse, sexual abuse, neglect, emotional maltreatment, exposure to intimate partner violence and risk of maltreatment, as well as multiple forms of maltreatment;
- investigate the severity of maltreatment as measured by forms of maltreatment, duration, and physical and emotional harm;
- examine selected determinants of health that may be associated with maltreatment;
- monitor short-term investigation outcomes, including substantiation rates, out-of-home placements, use of child welfare court and criminal prosecution;

SAMPLE
In smaller agencies, information will be collected on all child maltreatment-related investigations opened during the three-month period between October 1, 2013, and December 31, 2013. In larger agencies, a random sample of 250 investigations will be selected for inclusion in the study.

ONTARIO INCIDENCE STUDY-OIS-2013 1
OIS MALTREATMENT ASSESSMENT FORM

The OIS Maltreatment Assessment Form was designed to capture standardized information from child welfare investigators on the results of their investigations. It consists of four yellow legal-sized pages with “Ontario Incidence Study of Reported Child Abuse and Neglect 2013” marked on the top of the front sheet.

The OIS Maltreatment Assessment Form comprises four sheets: an Intake Face Sheet, a Comment Sheet (which is on the back of the Intake Face Sheet), a Household Information Sheet, and two Child Information Sheets. One Child Information Sheet must be completed for each investigated child and extra child sheets can be added for cases involving more than two investigated children. Children living in the household, who are not the subject of an investigation, should be listed on the Intake Face Sheet, although Child Information Sheets should not be completed for them. The form takes ten to fifteen minutes to complete, depending on the number of children investigated in the household.

The OIS Maltreatment Assessment Form examines a range of family, child, and case status variables. These variables include source of referral, caregiver demographics, household composition, key caregiver functioning issues, housing and home safety. It also includes outcomes of the investigation on a child-specific basis (including up to three forms of maltreatment), nature of harm, duration of maltreatment, identity of alleged perpetrator, placement in care, and child welfare court involvement.

DATA COLLECTION

Three models of data collection will be offered to participating agencies: the Site Researcher Training Model, the Agency Support Model and the Combination Model. In addition to these models, the research team is flexible and can determine a unique data collection plan based on specific agency needs.

1) For agencies that select the Site Researcher Training Model, a training session will be held in October 2013 for all workers involved in the study. With this model, the Site Researcher will visit the agency/office prior to the data collection period to administer training and will continue to make regular visits during the data collection process, although workers will complete the OIS Maltreatment Assessment Form independently. On-site visits will allow the Site Researcher to collect forms and resolve any issues that may arise.

2) For agencies that select the Agency Support Model, the Site Researcher will visit the agency/office regularly during the data collection period in order to provide face-to-face assistance to workers in completing the OIS Maltreatment Assessment Form in addition to verifying and collecting forms and attending to issues that may arise.

3) For agencies that select the Combination Model, both training and face-to-face support to workers in completing the OIS Maltreatment Assessment Form will be provided.

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CONFIDENTIALITY

Confidentiality will be maintained at all times during data collection and analysis.

To guarantee client confidentiality, all near-identifying information (located at the bottom of the Intake Face Sheet) will be coded at your agency/office. Near-identifying information is data that could potentially identify a household (e.g., agency/office case file number, the first two letters of the primary caregiver’s surname and the first names of the children in the household). This information is required for purposes of data verification only. This tear-off portion of the Intake Face Sheet will be stored in a locked area at your agency/office until the study is completed, and then be destroyed.

The completed OIS Maltreatment Assessment Form (with all identifying information removed) will be sent to the University of Toronto site for data entry and will then be kept under double lock (a locked RCMP-approved filing cabinet in a locked office). Access to the forms for any additional verification purposes will be restricted to select research team members authorized by the Ministry of Children and Youth Services.

Published analyses will be conducted at the provincial level. No agency/office, worker or team-specific data will be made available to anyone, under any circumstances.

COMPLETING THE OIS MALTREATMENT ASSESSMENT FORM

The OIS Maltreatment Assessment Form should be completed by the investigating worker when he or she is writing the first major assessment of the investigation. In most jurisdictions this report is required within four weeks of the date the case was opened.

It is essential that all items on the OIS Maltreatment Assessment Form applicable to the specific investigation be completed. Use the “Unknown” response if you are unsure. If the categories provided do not adequately describe a case, provide additional information on the Comment Sheet. If you have any questions during the study, contact your Site Researcher.
FREQUENTLY ASKED QUESTIONS

1. FOR WHAT CASES SHOULD I COMPLETE AN OIS MALTREATMENT ASSESSMENT FORM?

The Site Researcher will establish a process in your agency/office to identify to workers the openings or investigations included in the sample for the OIS-2013. Workers will be informed if any of their investigations will be included in the OIS sample.

In smaller agencies, information will be collected on all child maltreatment-related investigations opened during the three-month period between October 1, 2013, and December 31, 2013. Generally, if your agency/office counts an investigation in its official opening statistics reported to the Ministry of Children and Youth Services, then the case is included in the sample and an OIS Maltreatment Assessment Form should be completed, unless your Site Researcher indicates otherwise.

In larger agencies, a random sample of 250 investigations will be selected for inclusion in the study. Workers in large agencies will be provided with a case list of all selected cases, and should complete an OIS Maltreatment Assessment Form for all cases selected through this random selection process.

2. SHOULD I COMPLETE A FORM FOR ONLY THOSE CASES WHERE ABUSE AND/OR NEGLECT ARE SUSPECTED?

Complete an Intake Face Sheet and the tear-off portion of the Intake Face Sheet for all cases opened during the case selection period at your agency/office (e.g., maltreatment investigations as well as prenatal counselling, child/youth behaviour problems, request for services from another agency/office, and, where applicable, brief service cases) or for all cases identified in the random selection process.

If maltreatment was alleged at any point during the investigation, complete the remainder of the OIS Maltreatment Assessment Form (both the Household Information and Child Information Sheets). Maltreatment may be alleged by the person(s) making the report, or by any other person(s), including yourself, during the investigation (e.g., complete an OIS Maltreatment Assessment Form if a case was initially referred for parent/adolescent conflict, but during the investigation the child made a disclosure of physical abuse or neglect). An event of child maltreatment refers to something that may have happened to a child whereas a risk of child maltreatment refers to something that probably will happen. Complete a Household Information Sheet and relevant items on the Child Information Sheet (questions 24 through 29, and Column B) for any child for whom you conducted a risk assessment. For risk assessments only, do not complete the questions regarding a specific event or incident of maltreatment (Column A).

3. SHOULD I COMPLETE AN OIS MALTREATMENT ASSESSMENT FORM ON SCREENED-OUT CASES?

For screened-out or brief service cases that are included in opening statistics reported to the Ministry of Children and Youth Services, please complete the Intake Face Sheet of the OIS Maltreatment Assessment Form.

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4. WHEN SHOULD I COMPLETE THE OIS MALTREATMENT ASSESSMENT FORM?
Complete the OIS Maltreatment Assessment Form at the same time that you prepare the report for your agency/office that documents the conclusions of the investigation (usually within four weeks of a case being opened for investigation). For some cases, a comprehensive assessment of the family or household and a detailed plan of service may not be complete yet. Even if this is the case, complete the form to the best of your abilities.

5. WHO SHOULD COMPLETE THE OIS MALTREATMENT ASSESSMENT FORM IF MORE THAN ONE PERSON WORKS ON THE INVESTIGATION?
The OIS Maltreatment Assessment Form should be completed by the worker who conducts the intake assessment and prepares the assessment or investigation report. If several workers investigate a case, the worker with primary responsibility for the case should complete the OIS Maltreatment Assessment Form.

6. WHAT SHOULD I DO IF MORE THAN ONE CHILD IS INVESTIGATED?
The OIS Maltreatment Assessment Form primarily focuses on the household; however, the Child Information Sheet is specific to the individual child being investigated. Complete one child sheet for each child investigated for an incident of maltreatment or for whom you assessed the risk of future maltreatment. If you had no maltreatment concern about a child in the home, and you did not conduct a risk assessment, then do not complete a Child Information Sheet for that child. Additional pads of Child Information Sheets are available at your agency.

7. WILL I RECEIVE TRAINING FOR THE OIS MALTREATMENT ASSESSMENT FORM?
Depending on the data collection method selected by your agency, all workers will either receive training prior to the start of the data collection period or will receive support by the research team in completing the OIS Maltreatment Assessment Form during the data collection period. If a worker is unable to attend the training session or agency support days or is hired after the start of the OIS-2013, he or she should contact the Site Researcher regarding any questions about the form (see http://cwp.ca/OIS2013_hub for Site Researcher contact information).

8. WHAT SHOULD I DO WITH THE COMPLETED FORMS?
Give the completed OIS Maltreatment Assessment Form to your Agency/Office Contact Person. All forms will be reviewed by the Site Researcher during a site visit, and should he or she have additional questions, he or she will contact you during this visit. If you do not know who your Agency/Office Contact Person is, contact your Site Researcher (see http://cwp.ca/OIS2013_hub for Site Researcher contact information).

9. IS THIS INFORMATION CONFIDENTIAL?
The information you provide is confidential, and no identifying information will leave your agency/office. Your Site Researcher will code any near-identifying information from the bottom portion of the Intake Sheet. Where a name has been asked for, the Site Researcher will black out the name prior to the form leaving your agency/office. Please refer to the section above on confidentiality.
DEFINITIONS: INTAKE FACE SHEET

QUESTION 1: DATE CASE OPENED
This refers to the date the case was opened. Please fill in date using dd/mm/yy format.

QUESTION 2: SOURCE OF ALLEGATION/REFERRAL
Fill in all sources of referral that are applicable for each case. This refers to separate and independent contacts with the child welfare agency/office. If a young person tells a school principal of abuse and/or neglect, and the school principal reports this to the child welfare authority, you would fill in the circle for this referral as “School.” There was only one contact and referral in this case. If a second source (neighbour) contacted the child welfare authority and also reported a concern for this child, then you would also fill in the circle for “Neighbour/friend.”

- Custodial parent: Includes parent(s) identified in Question 5. Caregiver(s) in the home.
- Non-custodial parent: Contact from an estranged spouse (e.g., individual reporting the parenting practices of his or her former spouse).
- Child (subject of referral): A self-referral by any child listed on the Intake Face Sheet of the OIS Maltreatment Assessment Form.
- Relative: Any relative of the child who is the subject of referral. If the child lives with foster parents, and a relative of the foster parents reports maltreatment, specify under “Other.”
- Neighbour/friend: Includes any neighbour or friend of the child(ren) or his or her family.
- Social assistance worker: Refers to a social assistance worker involved with the household.
- Crisis service/shelter: Includes any shelter or crisis service for domestic violence or homelessness.
- Community/recreation centre: Refers to any form of recreation and community activity programs (e.g., organized sports leagues or Boys and Girls Clubs).
- Hospital (any personnel): Referral originates from a hospital and is made by a doctor, nurse, or social worker rather than a family physician or nurse working in a family doctor’s office in the community.
- Community health nurse: Includes nurses involved in services such as family support, family visitation programs and community medical outreach.
- Community physician: A report from any family physician with a single or ongoing contact with the child and/or family.
- Community mental health professional: Includes family service agencies, mental health centres (other than hospital psychiatric wards), and private mental health practitioners (psychologists, social workers, other therapists) working outside a school/hospital/child welfare/Youth Criminal Justice Act (YCJA) setting.
- School: Any school personnel (teacher, principal, teacher’s aide, school social worker etc.).
- Other child welfare service: Includes referrals from mandated child welfare service providers from other jurisdictions or provinces.
- Day care centre: Refers to a child care or day care provider.
- Police: Any member of a police force, including municipal or provincial/territorial police, or RCMP.
- Community agency: Any other community agency/office or service.
- Anonymous: A referral source who does not identify him- or herself.
• Other: Specify the source of referral in the section provided (e.g., foster parent, store clerk, etc.).

QUESTION 3: PLEASE DESCRIBE REFERRAL, INCLUDING ALLEGED MALTREATMENT OR RISK OF MALTREATMENT (IF APPLICABLE) AND RESULTS OF INVESTIGATION

Provide a short description of the referral, including, as appropriate, the investigated maltreatment or the reason for a risk assessment, and major investigation results (e.g., type of maltreatment, substantiation, injuries). If the reason for the case opening was not for alleged or suspected maltreatment, describe the reason (e.g., adoption home assessment, request for information).

QUESTION 4: WHICH APPROACH TO THE INVESTIGATION WAS USED?

Identify the nature of the approach used during the course of the investigation:

• A customized or alternate response investigation refers to a less intrusive, more flexible assessment approach that focuses on identifying the strengths and needs of the family, and coordinating a range of both formal and informal supports to meet those needs. This approach is typically used for lower-risk cases.

• A traditional child protection investigation refers to the approach that most closely resembles a forensic child protection investigation, and often focuses on gathering evidence in a structured and legally defensible manner. It is typically used for higher-risk cases or those investigations conducted jointly with the police.

QUESTION 5: CAREGIVER(S) IN THE HOME

Describe up to two caregivers in the home. Only caregiver(s) in the child’s primary residence should be noted in this section. Provide each caregiver’s age and sex in the space indicated.

QUESTION 6: LIST ALL CHILDREN IN THE HOME (<16 YEARS)

Include biological, step-, adoptive and foster children.

a) List first names of all children (<16 years) in the home at time of referral: List the first name of each child who was living in the home at the time of the referral.

b) Age of child: Indicate the age of each child living in the home at the time of the referral. Use 00 for children younger than 1.

c) Sex of child: Indicate the sex of each child in the home.

d) Primary caregiver’s relationship to child: Describe the primary caregiver’s relationship to each child, using the codes provided.

e) Second caregiver’s relationship to child: Describe the second caregiver’s relationship to each child (if applicable), using the codes provided. Describe the second caregiver only if the caregiver is in the home.

f) Subject of referral: Indicate which children were noted in the initial referral.

g) Investigated incident of maltreatment: Indicate if the child was investigated because of an allegation of maltreatment. In jurisdictions that require that all children be routinely interviewed for an investigation, include only those children where, in your clinical opinion, maltreatment was alleged or you investigated an incident or event of maltreatment (e.g., include three siblings ages 5 to 12 in a situation of chronic neglect, but do not include the 3-year-old brother of a 12-year-old girl who was sexually abused by someone who does not live with the family and has not had access to the younger sibling).
h) Risk investigation only: Indicate if the child was investigated because of risk of maltreatment only. Include only situations in which no allegation of maltreatment was made, and no specific incident of maltreatment was suspected at any point during the investigation (e.g., include referrals for parent-teen conflict; child behaviour problems; parent behaviour such as substance abuse, where there is a risk of future maltreatment but no concurrent allegations of maltreatment). Investigations for risk may focus on risk of several types of maltreatment (e.g., parent’s drinking places child at risk for physical abuse and neglect, but no specific allegation has been made and no specific incident is suspected during the investigation).

QUESTION 7: OTHER ADULTS IN THE HOME
Fill in all categories that describe adults (excluding the primary and second caregivers) who lived in the house at the time of the referral to child welfare. Note that children (≤16 years of age) in the home have already been described on the Intake Face Sheet. If there have been recent changes in the household, describe the situation at the time of the referral. Fill in all that apply.

QUESTION 8: CAREGIVER(S) OUTSIDE THE HOME
Identify any other caregivers living outside the home who provide care to any of the children in the household, including a separated parent who has any access to the child(ren). Fill in all that apply.

TEAR-OFF PORTION OF INTAKE FACE SHEET
The near-identifying information on the tear-off section will be kept securely at your agency/office, for purposes of verification. It will be destroyed at the conclusion of the study.

WORKER’S NAME
This refers to the person completing the form. When more than one individual is involved in the investigation, the individual with overall case responsibility should complete the OIS Maltreatment Assessment Form.

FIRST TWO LETTERS OF PRIMARY CAREGIVER’S SURNAME
Use the reference name used for your agency/office filing system. In most cases this will be the primary caregiver’s last name. If another name is used in the agency/office, include it under “Other family surname” (e.g., if a parent’s surname is “Thompson,” and the two children have the surname of “Smith,” then put “TH” and “SM”). Use the first two letters of the family name only. Never fill in the complete name.

CASE NUMBER
This refers to the case number used by your agency/office.

DEFINITIONS: COMMENT SHEET
The back of the Intake Face Sheet provides space for additional comments about an investigation and there is also space provided at the top for situations where an investigation or assessment was unable to be completed for children indicated in 6a).
DEFINITIONS: *HOUSEHOLD INFORMATION SHEET*

The *Household Information Sheet* focuses on the immediate household of the child(ren) who have been the subject of an investigation of an event or incident of maltreatment or for whom the risk of future maltreatment was assessed. The household is made up of all adults and children living at the address of the investigation at the time of the referral. Provide information for the primary caregiver and the second caregiver if there are two adults/caregivers living in the household (the same caregivers identified on the *Intake Face Sheet*).

If you have a unique circumstance that does not seem to fit the categories provided, write a note on the *Comment Sheet* under “Comments: Household information.”

Questions A9–A14 pertain to the primary caregiver in the household. If there was a second caregiver in the household at the time of referral, complete questions B9–B14 for the second caregiver. If both caregivers are equally engaged in parenting, identify the caregiver you have had most contact with as the primary caregiver. If there was only one caregiver in the home at the time of the referral, endorse “no other caregiver in the home” under “second caregiver in the home” at the top right of the *Household Information Sheet*.

**QUESTION 9: PRIMARY INCOME**

We are interested in estimating the primary source of the caregiver’s income. Choose the category that best describes the caregiver’s source of income. Note that this is a caregiver-specific question and does not refer to a combined income from the primary and second caregiver.

- Full time: Individual is employed in a permanent, full-time position.
- Part time (fewer than 30 hours/week): Refers to a single part-time position.
- Multiple jobs: Caregiver has more than one part-time or temporary position.
- Seasonal: This indicates that the caregiver works at either full- or part-time positions for temporary periods of the year.
- Employment insurance: Caregiver is temporarily unemployed and receiving employment insurance benefits.
- Social assistance: Caregiver is currently receiving social assistance benefits.
- Other benefit: Refers to other forms of benefits or pensions (e.g., family benefits, long-term disability insurance, child support payments).
- None: Caregiver has no source of legal income. If drugs, prostitution or other illegal activity are apparent, specify on *Comment Sheet* under “Comments: Household information.”
- Unknown: Check this box if you do not know the caregiver’s source of income.

**QUESTION 10: ETHNO-RACIAL GROUP**

Examining the ethno-racial background can provide valuable information regarding differential access to child welfare services. Given the sensitivity of this question, this information will never be published out of context. This section uses a checklist of ethno-racial categories used by Statistics Canada in the 2011 Census.

Endorse the ethno-racial category that best describes the caregiver. Select “Other” if you wish to identify two ethno-racial groups, and specify in the space provided.
QUESTION 11: IF ABORIGINAL
a) On or off reserve: Identify if the caregiver is residing “on” or “off” reserve.
b) Caregiver’s status: First Nations status (caregiver has formal Indian or treaty status, that is, registered with Aboriginal Affairs and Northern Development Canada [formerly INAC]), First Nations non-status, Métis, Inuit or Other (specify and use the Comment Sheet if necessary).

QUESTION 12: PRIMARY LANGUAGE
Identify the primary language of the caregiver: English, French, or Other. If Other, please specify in the space provided. If bilingual, choose the primary language spoken in the home.

QUESTION 13: CONTACT WITH CAREGIVER IN RESPONSE TO INVESTIGATION
Would you describe the caregiver as being overall cooperative or non-cooperative with the child welfare investigation? Check “Not contacted” in the case that you had no contact with the caregiver.

QUESTION 14: CAREGIVER RISK FACTORS
These questions pertain to the primary caregiver and/or the second caregiver, and are to be rated as “Confirmed,” “Suspected,” “No,” or “Unknown.” Fill in “Confirmed” if the risk factor has been diagnosed, observed by you or another worker or clinician (e.g., physician, mental health professional) or disclosed by the caregiver. Use the “Suspected” category if your suspicions are sufficient to include in a written assessment of the household or a transfer summary to a colleague. Fill in “No” if you do not believe there is a problem and “Unknown” if you are unsure or have not attempted to determine if there was such a caregiver risk factor. Where applicable, use the past six months as a reference point.

- Alcohol abuse: Caregiver abuses alcohol.
- Drug/solvent abuse: Abuse of prescription drugs, illegal drugs or solvents.
- Cognitive impairment: Caregiver has a cognitive impairment.
- Mental health issues: Any mental health diagnosis or problem.
- Physical health issues: Chronic illness, frequent hospitalizations or physical disability.
- Few social supports: Social isolation or lack of social supports.
- Victim of intimate partner violence: During the past six months the caregiver was a victim of intimate partner violence, including physical, sexual or verbal assault.
- Perpetrator of intimate partner violence: During the past six months the caregiver was a perpetrator of intimate partner violence.
- History of foster care/group home: Indicate if this caregiver was in foster care and/or group home care during his or her childhood.

QUESTION 15: CHILD CUSTODY DISPUTE
Specify if there is an ongoing child custody/access dispute at this time (court application has been made or is pending).

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QUESTION 16: HOUSING
Indicate the housing category that best describes the living situation of this household at the time of referral.

- Own home: A purchased house, condominium or townhouse.
- Rental: A private rental house, townhouse, or apartment.
- Public housing: A unit in a public rental-housing complex (i.e., rent subsidized, government-owned housing), or a house, townhouse or apartment on a military base. Exclude Band housing in a First Nations community.
- Band housing: Aboriginal housing built, managed and owned by the band.
- Living with friends/family: Living with a friend or family member.
- Hotel: An SRO (single room occupancy) hotel or motel accommodations.
- Shelter: A homeless or family shelter.
- Unknown: Housing accommodation is unknown.
- Other: Specify any other form of shelter.

QUESTION 17: HOME OVERCROWDED
Indicate if household is made up of multiple families and/or is overcrowded.

QUESTION 18: NUMBER OF MOVES IN PAST YEAR
Based on your knowledge of the household, indicate the number of household moves within the past twelve months.

QUESTION 19: IN THE LAST 6 MONTHS, HOUSEHOLD RAN OUT OF MONEY FOR:

a) Food: Indicate if the household ran out of money to purchase food at any time in the last 6 months.
b) Housing: Indicate if the household ran out of money to pay for housing at any time in the last 6 months.
c) Utilities: Indicate if the household ran out of money to pay for utilities at any time in the last 6 months (e.g., heating, electricity).

QUESTION 20: HOUSING SAFETY

a) Are there unsafe housing conditions? Indicate if there were unsafe housing conditions at the time of referral.
b) If yes, fill in all that apply. If there are unsafe housing conditions, fill in all conditions that apply.

- Mold: The presence of mold in the living environment poses a health risk to the child.
- Broken glass: The presence of broken glass in the living environment poses a risk of injury to the child.
- Inadequate heating: The absence of adequate heating in the living environment poses a health risk to the child.
- Accessible drugs or drug paraphernalia: Illegal or legal drugs stored in such a way that a child might access and ingest them, or needles stored in such a way that a child may access them.
- Poisons/chemicals: Poisons and/or chemicals stored in such a way that a child might access and ingest or touch them.

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• Fire/electrical hazards: The presence of fire and/or electrical hazards in the living environment (e.g., no smoke detector, frayed or worn electrical cords).
• Other: Specify any other unsafe housing condition(s).

QUESTION 21: CASE PREVIOUSLY OPENED FOR INVESTIGATION

Case previously opened for investigation: Has this family been previously investigated by a child welfare agency/office? Respond if there is documentation, or if you are aware that there has been a previous investigation. Estimate the number of previous investigations. This would relate to investigations for any of the children identified as living in the home (listed on the Intake Face Sheet).

a) If case was previously opened for investigation, how long since the case was closed
How many months between the date the case was last closed and this current investigation opening date? Please round the length of time to nearest month and select the appropriate category.

QUESTION 22: CASE WILL STAY OPEN FOR ON-GOING CHILD WELFARE SERVICES

At the time you are completing the OIS Maltreatment Assessment Form, do you plan to keep the case open to provide on-going child welfare services?

QUESTION 23: REFERRAL(S) FOR ANY FAMILY MEMBER

Indicate referrals that have been made to programs designed to offer services beyond the parameters of “on-going child welfare services.” Include referrals made internally to a special program provided by your agency/office as well as referrals made externally to other agencies/services. Note whether a referral was made and is part of the case plan, not whether the young person or family has actually started to receive services. Fill in all that apply.

• No referral made: No referral was made to any programs.
• Parent support group: Any group program designed to offer support or education (e.g., Parents Anonymous, Parenting Instruction Course, Parent Support Association).
• In-home family or parent counselling: Home-based services designed to support families, reduce risk of out-of-home placement, or reunify children in care with their families.
• Other family or parent counselling: Refers to any other type of family or parent support or counselling not identified as “parent support group” or “in-home family/parenting counselling” (e.g., couples or family therapy).
• Drug or alcohol counselling: Addiction program (any substance) for caregiver(s) or children.
• Welfare or social assistance: Referral for social assistance to address financial concerns of the household.
• Food bank: Referral to any food bank.
• Shelter services: Regarding domestic violence or homelessness.
• Domestic violence services: Referral for services/counselling regarding domestic violence, abusive relationships or the effects of witnessing violence.
• Housing: Referral to a social service organization that helps individuals access housing (e.g., housing help center).
• Legal: Referral to any legal services (e.g., police, legal aid, lawyer, family court).

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- Psychiatric or psychological services: Child or parent referral to psychological or psychiatric services (e.g., trauma, high risk behaviour or intervention).
- Special education placement: Any specialized school program to meet a child’s educational, emotional or behavioural needs.
- Recreational services: Referral to a community recreational program (e.g., organized sports leagues, community recreation, Boys and Girls Clubs).
- Victim support program: Referral to a victim support program (e.g., sexual abuse disclosure group).
- Medical or dental services: Any specialized service to address the child’s immediate medical or dental health needs.
- Child or day care: Any paid child or day care services, including staff-run and in-home services.
- Cultural services: Services to help children or families strengthen their cultural heritage.
- Speech/language: Referral to speech/language services (e.g., speech/language specialist).
- Other: Indicate and specify any other child- or family-focused referral.

DEFINITIONS: CHILD INFORMATION SHEET

QUESTION 24: CHILD NAME AND SEX
Indicate the first name and sex of the child for which the Child Information Sheet is being completed. Note this is for verification only.

QUESTION 25: AGE
Indicate the child’s age. Use 00 for children younger than one year of age.

QUESTION 26: CHILD ETHNO-RACIAL GROUP
Examining the ethno-racial background can provide valuable information regarding differential access to child welfare services. Given the sensitivity of this question, this information will never be published out of context. This section uses a checklist of ethno-racial categories used by Statistics Canada in the 2011 Census.

Select the ethno-racial category that best describes the child. Select “Other” if you wish to identify two ethno-racial groups, and specify in the space provided.

QUESTION 27: IF ABORIGINAL
Indicate the Aboriginal status of the child for which the OIS Maltreatment Assessment Form is being completed. First Nations status (child has formal Indian or treaty status, that is, is registered with Aboriginal Affairs and Northern Development Canada [formerly INAC]), First Nations non-status, Métis, Inuit or Other (specify and use the Comment Sheet if necessary).

QUESTION 28: CHILD FUNCTIONING
This section focuses on issues related to a child’s level of functioning. Fill in “Confirmed” if the problem has been diagnosed, observed by you or another worker or clinician (e.g., physician, mental health professional), or disclosed by the parent or child. Suspected means that, in your clinical opinion, there is reason to suspect that the condition may be present, but it has not been diagnosed, observed or disclosed. Fill in “No” if you do not believe there is a problem and

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“Unknown” if you are unsure or have not attempted to determine if there was such a child functioning issue. Where appropriate, use the past six months as a reference point.

- Depression/anxiety/withdrawal: Feelings of depression or anxiety that persist for most of the day, every day for two weeks or longer, and interfere with the child’s ability to manage at home and at school.
- Suicidal thoughts: The child has expressed thoughts of suicide, ranging from fleeting thoughts to a detailed plan.
- Self-harming behaviour: Includes high-risk or life-threatening behaviour, suicide attempts, and physical mutilation or cutting.
- ADD/ADHD: ADD/ADHD is a persistent pattern of inattention and/or hyperactivity/impulsivity that occurs more frequently and more severely than is typically seen in children at comparable stages of development. Symptoms are frequent and severe enough to have a negative impact on the child’s life at home, at school or in the community.
- Attachment issues: The child does not have physical and emotional closeness to a mother or preferred caregiver. The child finds it difficult to seek comfort, support, nurturance or protection from the caregiver; the child’s distress is not ameliorated or is made worse by the caregiver’s presence.
- Aggression: Aggressive behaviour directed at other children or adults (e.g., hitting, kicking, biting, fighting, bullying) or violence to property at home, at school or in the community.
- Running (Multiple incidents): The child has run away from home (or other residence) on multiple occasions for at least one overnight period.
- Inappropriate sexual behaviour: Child displays inappropriate sexual behavior, including age-inappropriate play with toys, self or others; displaying explicit sexual acts; age-inappropriate sexually explicit drawing and/or descriptions; sophisticated or unusual sexual knowledge; prostitution or seductive behaviour.
- Youth Criminal Justice Act involvement: Charges, incarceration or alternative measures with the youth justice system.
- Intellectual/developmental disability: Characterized by delayed intellectual development, it is typically diagnosed when a child does not reach his or her developmental milestones at expected times. It includes speech and language, fine/gross motor skills, and/or personal and social skills (e.g., Down syndrome, Autism spectrum disorders).
- Failure to meet developmental milestones: Children who are not meeting their development milestones because of a non-organic reason.
- Academic difficulties: Includes learning disabilities that are usually identified in school, as well as any special education program for learning difficulties, special needs, or behaviour problems. Children with learning disabilities have normal or above-normal intelligence, but deficits in one or more areas of mental functioning (e.g., language usage, numbers, reading, work comprehension).
- FAS/FAE: Birth defects, ranging from mild intellectual and behavioural difficulties to more profound problems in these areas related to in utero exposure to alcohol abuse by the biological mother.
- Positive toxicology at birth: When a toxicology screen for a newborn tests positive for the presence of drugs or alcohol.
- Physical disability: Physical disability is the existence of a long-lasting condition that substantially limits one or more basic physical activities such as walking, climbing stairs, reaching, lifting or carrying. This includes sensory disability conditions such as blindness,
deafness, or a severe vision or hearing impairment that noticeably affects activities of daily living.

- Alcohol abuse: Problematic consumption of alcohol (consider age, frequency and severity).
- Drug/solvent abuse: Include prescription drugs, illegal drugs and solvents.
- Other: Specify any other conditions related to child functioning; your responses will be coded and aggregated.

**QUESTION 29: TYPE OF INVESTIGATION**

Indicate if the investigation was conducted for a specific incident of maltreatment, or if it was conducted to assess risk of maltreatment only. Refer to question 6 g) and h) for a detailed description of an “incident of maltreatment” versus a “risk investigation only”. If this is a risk investigation only, please complete column B only (questions 38 to 42).

Please note: All injury investigations are maltreatment investigations (complete column A and B).

**QUESTION 30: MALTREATMENT CODES**

The maltreatment typology in the OIS-2013 uses five major types of maltreatment: Physical Abuse, Sexual Abuse, Neglect, Emotional Maltreatment, and Exposure to Intimate Partner Violence. These categories are comparable to those used in the previous cycles of the Ontario Incidence Study. Rate cases on the basis of your clinical opinion, not on provincial or agency/office-specific definitions.

Select the applicable maltreatment codes from the list provided (1–32) on the tear off portion of the bottom of the Child Information Sheet, and write these numbers clearly in the boxes under Question 30. Enter in the first box the maltreatment code that best characterizes the investigated maltreatment. If there are multiple types of investigated maltreatment (e.g., physical abuse and neglect), choose one maltreatment code within each typology that best describes the investigated maltreatment. All major forms of alleged, suspected or investigated maltreatment should be noted in the maltreatment code box regardless of the outcome of the investigation.

**Physical Abuse**

The child was physically harmed or could have suffered physical harm as a result of the behaviour of the person looking after the child. Include any alleged physical assault, including abusive incidents involving some form of punishment. If several forms of physical abuse are involved, please identify the most harmful form.

- Shake, push, grab or throw: Include pulling or dragging a child as well as shaking an infant.
- Hit with hand: Include slapping and spanking, but not punching.
- Punch, kick or bite: Include as well any hitting with parts of the body other than the hand (e.g., elbow or head).
- Hit with object: Includes hitting with a stick, a belt or other object, throwing an object at a child, but does not include stabbing with a knife.
- Choking, poisoning, stabbing: Include any other form of physical abuse, including choking, strangling, stabbing, burning, shooting, poisoning and the abusive use of restraints.
- Other physical abuse: Other or unspecified physical abuse.
Sexual Abuse

The child has been sexually molested or sexually exploited. This includes oral, vaginal or anal sexual activity, attempted sexual activity, sexual touching or fondling, exposure, voyeurism, involvement in prostitution or pornography, and verbal sexual harassment. If several forms of sexual activity are involved, please identify the most intrusive form. Include both intra-familial and extra-familial sexual abuse, as well as sexual abuse involving an older child or youth perpetrator.

- **Penetration:** Penile, digital or object penetration of vagina or anus.
- **Attempted penetration:** Attempted penile, digital, or object penetration of vagina or anus.
- **Oral sex:** Oral contact with genitals either by perpetrator or by the child.
- **Fondling:** Touching or fondling genitals for sexual purposes.
- **Sex talk or images:** Verbal or written proposition, encouragement or suggestion of a sexual nature (include face to face, phone, written and Internet contact, as well as exposing the child to pornographic material).
- **Voyeurism:** Include activities where the alleged perpetrator observes the child for the perpetrator’s sexual gratification. Use the “Exploitation” code if voyeurism includes pornographic activities.
- **Exhibitionism:** Include activities where the perpetrator is alleged to have exhibited himself or herself for his or her own sexual gratification.
- **Exploitation:** Include situations where an adult sexually exploits a child for purposes of financial gain or other profit, including pornography and prostitution.
- **Other sexual abuse:** Other or unspecified sexual abuse.

Neglect

The child has suffered harm or the child’s safety or development has been endangered as a result of a failure to provide for or protect the child.

- **Failure to supervise: physical harm:** The child suffered physical harm or is at risk of suffering physical harm because of the caregiver’s failure to supervise or protect the child adequately. Failure to supervise includes situations where a child is harmed or endangered as a result of a caregiver’s actions (e.g., drunk driving with a child, or engaging in dangerous criminal activities with a child).
- **Failure to supervise: sexual abuse:** The child has been or is at substantial risk of being sexually molested or sexually exploited, and the caregiver knows or should have known of the possibility of sexual molestation and failed to protect the child adequately.
- **Permitting criminal behaviour:** A child has committed a criminal offence (e.g., theft, vandalism, or assault) because of the caregiver’s failure or inability to supervise the child adequately.
- **Physical neglect:** The child has suffered or is at substantial risk of suffering physical harm caused by the caregiver(s)’ failure to care and provide for the child adequately. This includes inadequate nutrition/clothing, and unhygienic, dangerous living conditions. There must be evidence or suspicion that the caregiver is at least partially responsible for the situation.
- **Medical neglect (includes dental):** The child requires medical treatment to cure, prevent, or alleviate physical harm or suffering and the child’s caregiver does not provide, or refuses, or is unavailable, or unable to consent to the treatment. This includes dental services when funding is available.

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• **Failure to provide psych. treatment:** The child is suffering from either emotional harm demonstrated by severe anxiety, depression, withdrawal, or self-destructive or aggressive behaviour, or a mental, emotional or developmental condition that could seriously impair the child’s development and the child’s caregiver does not provide, or refuses, or is unavailable, or unable to consent to treatment to remedy or alleviate the harm. This category includes failing to provide treatment for school-related problems such as learning and behaviour problems, as well as treatment for infant development problems such as non-organic failure to thrive. A parent awaiting service should not be included in this category.

• **Abandonment:** The child’s parent has died or is unable to exercise custodial rights and has not made adequate provisions for care and custody, or the child is in a placement and parent refuses/is unable to take custody.

• **Educational neglect:** Caregivers knowingly permit chronic truancy (5+ days a month), or fail to enroll the child, or repeatedly keep the child at home.

**Emotional Maltreatment**

The child has suffered, or is at substantial risk of suffering, emotional harm at the hands of the person looking after the child.

• **Terrorizing or threat of violence:** A climate of fear, placing the child in unpredictable or chaotic circumstances, bullying or frightening a child, threats of violence against the child or child’s loved ones or objects.

• **Verbal abuse or belittling:** Non-physical forms of overtly hostile or rejecting treatment. Shaming or ridiculing the child, or belittling and degrading the child.

• **Isolation/confinedment:** Adult cuts the child off from normal social experiences, prevents friendships or makes the child believe that he or she is alone in the world. Includes locking a child in a room, or isolating the child from the normal household routines.

• **Inadequate nurturing or affection:** Through acts of omission, does not provide adequate nurturing or affection. Being detached, uninvolved; failing to express affection, caring and love, and interacting only when absolutely necessary.

• **Exploiting or corrupting behaviour:** The adult permits or encourages the child to engage in destructive, criminal, antisocial, or deviant behaviour.

**Exposure to Intimate Partner Violence**

• **Direct witness to physical violence:** The child is physically present and witnesses the violence between intimate partners.

• **Indirect exposure to physical violence:** Includes situations where the child overhears but does not see the violence between intimate partners; or sees some of the immediate consequences of the assault (e.g., injuries to the mother); or the child is told or overhears conversations about the assault.

• **Exposure to emotional violence:** Includes situations in which the child is exposed directly or indirectly to emotional violence between intimate partners. Includes witnessing or overhearing emotional abuse of one partner by the other.

• **Exposure to non-partner physical violence:** A child has been exposed to violence occurring between a caregiver and another person who is not the spouse/partner of the caregiver (e.g., between a caregiver and a neighbour, grandparent, aunt or uncle).
QUESTION 31: ALLEGED PERPETRATOR

This section relates to the individual who is alleged, suspected or guilty of maltreatment toward the child. Fill in the appropriate perpetrator for each form of identified maltreatment as the primary caregiver, second caregiver or “Other.” If “Other” is selected, specify the relationship of the alleged perpetrator to the child (e.g., brother, uncle, grandmother, teacher, doctor, stranger, classmate, neighbour, family friend). If you select “Primary caregiver” or “Second caregiver,” write in a short descriptor (e.g., “mom,” “dad,” or “boyfriend”) to allow us to verify consistent use of the label between the Household Information and Child Information Sheets. Note that different people can be responsible for different forms of maltreatment (e.g., common-law partner abuses child, and primary caregiver neglects the child). If there are multiple perpetrators for one form of abuse or neglect, fill in all that apply (e.g., a mother and father may be alleged perpetrators of neglect). Identify the alleged perpetrator regardless of the level of substantiation at this point of the investigation.

If Other Perpetrator
If Other alleged perpetrator, identify

a) Age: If the alleged perpetrator is “Other,” indicate the age of this individual. Age is essential information used to distinguish between child, youth and adult perpetrators. If there are multiple alleged perpetrators, describe the perpetrator associated with the primary form of maltreatment.

b) Sex: Indicate the sex of the “Other” alleged perpetrator.

QUESTION 32: SUBSTANTIATION (fill in only one substantiation level per column)

Indicate the level of substantiation at this point in your investigation. Fill in only one level of substantiation per column; each column reflects a separate form of investigated maltreatment, and thus should include only one substantiation outcome.

- Substantiated: An allegation of maltreatment is considered substantiated if the balance of evidence indicates that abuse or neglect has occurred.
- Suspected: An allegation of maltreatment is suspected if you do not have enough evidence to substantiate maltreatment, but you also are not sure that maltreatment can be ruled out.
- Unfounded: An allegation of maltreatment is unfounded if the balance of evidence indicates that abuse or neglect has not occurred.

If the maltreatment was unfounded, answer 32 a).

a) Was the unfounded report a malicious referral? Identify if this case was intentionally reported while knowing the allegation was unfounded. This could apply to conflictual relationships (e.g., custody dispute between parents, disagreements between relatives, disputes between neighbours).

QUESTION 33: WAS MALTREATMENT A FORM OF PUNISHMENT?

Indicate if the alleged maltreatment was a form of punishment for the child.
QUESTION 34: DURATION OF MALTREATMENT

Check the duration of maltreatment as it is known at this point of time in your investigation. This can include a single incident or multiple incidents. If the maltreatment type is unfounded, then the duration needs to be listed as “Not Applicable (Unfounded).”

QUESTION 35: POLICE INVOLVEMENT

Indicate the level of police involvement for each maltreatment code listed. If a police investigation is ongoing and a decision to lay charges has not yet been made, select the investigation item.

QUESTION 36: IF ANY MALTREATMENT IS SUBSTANTIATED OR SUSPECTED, IS MENTAL OR EMOTIONAL HARM EVIDENT?

Indicate whether the child is showing signs of mental or emotional harm (e.g., nightmares, bed wetting or social withdrawal) following the maltreatment incident(s).

a) If yes, child requires therapeutic treatment: Indicate whether the child requires treatment to manage the symptoms of mental or emotional harm.

QUESTION 37: PHYSICAL HARM

a) Is physical harm evident? Indicate if there is physical harm to the child. Identify physical harm even in accidental injury cases where maltreatment is unfounded, but the injury triggered the investigation.

If there is physical harm to the child, answer 37 b) and c).

b) Types of physical harm: Fill in all types of physical harm that apply.

- Bruises/cuts/scrapes: The child suffered various physical hurts visible for at least 48 hours.
- Broken bones: The child suffered fractured bones.
- Burns and scalds: The child suffered burns and scalds visible for at least 48 hours.
- Head trauma: The child was a victim of head trauma (note that in shaken-infant cases the major trauma is to the head, not to the neck).
- Fatal: Child has died; maltreatment was suspected during the investigation as the cause of death. Include cases where maltreatment was eventually unfounded.
- Health condition: Physical health conditions, such as untreated asthma, failure to thrive or sexually transmitted infections (STIs).

c) Was medical treatment required? In order to help us rate the severity of any documented physical harm, indicate whether medical treatment was required as a result of the physical injury or harm.

QUESTION 38: IS THERE A SIGNIFICANT RISK OF FUTURE MALTREATMENT?

Indicate, based on your clinical judgment, if there is a significant risk of future maltreatment.

QUESTION 39: PREVIOUS INVESTIGATIONS

Child previously investigated by child welfare for alleged maltreatment: This section collects information on previous Child Welfare investigations for the individual child in question. Report
if the child has been previously investigated by Child Welfare authorities because of alleged maltreatment. Use “Unknown” if you are aware of an investigation but cannot confirm this. Note that this is a child-specific question as opposed question 21 (case previously opened for investigation) on the Household Information Sheet.

a) If yes, was the maltreatment substantiated? Indicate if the maltreatment was substantiated with regard to this previous investigation.

QUESTION 40: PLACEMENT

a) Placement during investigation. Indicate whether an out-of-home placement was made during the investigation.

b) If yes, placement type: Check one category related to the placement of the child. If the child is already living in an alternative living situation (emergency foster home, receiving home), indicate the setting where the child has spent the most time.

- Kinship out of care: An informal placement has been arranged within the family support network; the child welfare authority does not have temporary custody.
- Customary care: Customary care is a model of Aboriginal child welfare service that is culturally relevant and incorporates the unique traditions and customs of each First Nation.
- Kinship in care: A formal placement has been arranged within the family support network; the child welfare authority has temporary or full custody and is paying for the placement.
- Foster care (non-kinship): Include any family-based care, including foster homes, specialized treatment foster homes and assessment homes.
- Group home: Out-of-home placement required in a structured group living setting.
- Residential/secure treatment: Placement required in a therapeutic residential treatment centre to address the needs of the child.
- Other: Specify any other placement type.

QUESTION 41: CHILD WELFARE COURT APPLICATION

Indicate whether a child welfare court application has been made. If investigation is not completed, answer to the best of your knowledge at this time. Select one category only.

a) Referral to mediation/alternative response: Indicate whether a referral was made to mediation, family group conferencing, an Aboriginal circle, or any other alternative dispute resolution (ADR) process designed to avoid adversarial court proceedings.

QUESTION 42: CAREGIVER(S) USED SPANKING IN THE LAST 6 MONTHS

Indicate if caregiver(s) used spanking in the last 6 months. Use “Suspected” if spanking could not be confirmed or ruled out. Use “Unknown” if you are unaware of caregiver(s) using spanking.
Appendix C

Weighing procedure descriptions

The data collected for the OIS-2013 were weighted to derive provincial annual incidence estimates (Fallon et al., 2015; Trocmé, Sinha, Fallon, MacLaurin, 2012). This section describes the procedures used to derive these estimates. The full weight was used to derive provincial annual estimates, called WRa. It is an agency specific weight that is the product of the regionalization weight multiplied by the annualization weight. More specifically, a composition regional weight was applied, followed by the application of an annulization weight. Both regionalization weight and annualization weight are described below.

Full weight (WRA). The full weight is used to derive provincial annual estimates and is the agency specific weight.

\[ W_{RA} = W_s \times W_{ss} \times PS_r \times PS_a \]

Regionalization weight

In order to estimate the number of child welfare investigations within a three-month data collection period, a regionalization weight was applied. The regionalization weight consists of three factors: (1) the sample weight, (2) the subsampling weight addresses the random subsampling of investigations in agencies where more than 250 cases were investigated during the period of data collection, and (3) an agency size correction to adjust for agency size variations.

Sample weight (Ws)—represents the ratio of the total number of agencies in Ontario to the number of agencies sampled from in the province. Four sites were not randomly sampled in order to ensure that representing a large metropolitan centre and were given a sample weight of 1. First Nations agencies were also given a sample weight of 1.

\[ W_s = \frac{\# \text{ agencies in stratum (Ontario)}}{\# \text{ of agencies sampled in stratum (Ontario)}} \]

Subsampling weight (Wss)- In the majority of agencies, data was collected from all new, maltreatment-related investigations that were opened during the three-month data collection period. In order to reduce the burden on workers, the sample size was limited to 250 randomly
selected investigations in very large agencies. This weight accounts for the random subsampling of investigations within the data collection period. The subsampling weight is represented by the number of investigations opened by an agency during the data collection period to the number of investigations from that agency that were included in the OIS sample.

\[ W_{ss} = \frac{\text{# of investigations Oct 1 to Dec 31}}{\text{# of investigations sampled}} \]

**Agency size correction (PS}_r).** The agency size correction adjusts for variations in the size of agencies across the province. Child welfare agencies across the province vary in the number of children served and the number of investigations conducted. This correction represents the ratio of the average child population for all agencies in Ontario to the average child population served by the sampled agencies.

\[ PS_r = \frac{\text{average child population in Ontario}}{\text{average child population in sampled agencies in Ontario}} \]

Together, these three factors create the regionalization weight \( W_s \times W_{ss} \times PS_r \) that is used to estimate the number of investigations completed during the three-month data collection period by all child welfare organizations in Ontario.

**Annualization weight (PS}_a)\)**

Given that the OIS collects data during a three-month data collection period, an annualization weight was used to estimate the number of investigations conducted by sampled agencies during the entire year. All data were multiplied by an annualization weight which is represented by the ratio of all investigations conducted by a sampled agency during 2013 to all investigations opened by the sampled agency during the three-month case selection period of October 1-December 31 2013.

\[ PS_a = \frac{\text{# of investigations in 2013}}{\text{# of investigations October 1 to December 31}} \]