

Best Possible Start Infant Mental Health and Workforce Development

NHS Lanarkshire

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Final Report

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BPS Infant Mental Health and Workforce Development

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1. Executive Summary

The key aim of the work undertaken for NHS Lanarkshire's BPS Universal Services was to inform a workforce development programme for Public Health Nurses, Neonatal Nurses and Midwives which prioritises positive promotion of parent-child attachment and seeks to uphold effective intervention strategies that promote positive infant mental health outcomes.

Scottish early years policy across health, social care and education emphasises the shift in the balance from intervention to prevention in order to promote positive infant mental health. Infant mental health is seen primarily as relational with the mother-infant dyad at the centre. Understandings of the role of the practitioner are derived from policy, research and practice. To be effective in fostering infant mental health it is necessary to adopt an holistic view and to recognise the many influences upon the mother and child. An ecological model is used to show this connection and to inform the training framework.

Interrogating systematic reviews of the infant mental health interventions literature showed the success of 'model interventions' and the challenges of implementation fidelity when interventions were scaled up. The reviews concluded that while effectiveness in the longer term is uncertain and more research is needed, the absence of conclusive evidence does not imply ineffectiveness. The importance of family and professional aspiration is emphasised.

Current knowledge, practices, issues, concerns and intervention strategies used to promote positive IMH in NHS Lanarkshire have been explored through survey and focus groups. The outcomes of this enquiry have informed the training framework which builds on existing strengths.

Ten recommendations are made for training, which translate to three main themes:

1. A Tiered Training System for NHSL PHN/HV, Midwives, and Neonatal Nurses, based on a universal approach leading to increasing specialism
2. Shared Understanding, Goals, and Language across Levels and Agencies and
3. Improved Accountability and Management

The recommended training framework for workforce development in infant mental health prioritises the achievement of the following outcomes:

- Improved mother-infant emotional and psychological attunement and attachment.
- Improved maternal confidence, emotional well-being, and mental health
- Improved infant emotional well-being, social engagement, and learning.

The Report is presented in this Best Possible Start Final Report document is supported by four supplements:

1. Supplement 1 - Survey Report
2. Supplement 2 - Focus Group Report
3. Supplement 3 - Best Possible Start IMH Training Framework Supplement
4. Supplement 4 - Cochrane Review Summary of available evidence on effectiveness of interventions

2. Introduction

Infant mental health is the study of mental health as it applies to infants and their families. The field investigates optimal social and emotional development of infants and their families in the first three years of life (Association for Infant Mental Health UK - AIMH UK).

Infant mental health is one of the most exciting and rapidly developing areas in the whole field of mental health. Research has shown that support for parents during their baby's first year can significantly increase the proportion of babies who form secure relationships with their parents, and this has lasting benefits for their subsequent development. A good beginning for young families is a protective factor in coping with life's inevitable stresses. Early intervention when there are difficulties can often prevent the development of mental health problems in later years (AIMH UK).

The key aim of the work undertaken for NHS Lanarkshire's BPS Universal Services is to inform a workforce development programme for Public Health Nurses, Neonatal Nurses and Midwives which prioritises positive promotion of parent/child attachment and seeks to uphold effective intervention strategies that promote positive infant mental health outcomes.

The Scottish Child Health Programme places a high level of importance on the new 27-30 month review for all children and emphasises the role of the Public Health Nurses - Health Visitors (PHN-HVs) and their managers in particular in terms of appropriate approaches with families and the training needs of staff (Scottish Government, 2012). It is well understood that while universal child health reviews are a core element of the Child Health Programme, review at this time can be complicated due to the relatively high degree of variability in younger children's development (Scottish Government, 2012).

The way in which people make the transition to parenthood can have a significant effect on their children's experiences (Cowan & Cowan, 1992, 2002; Borkowski, Ramey, & Bristol-Powers, (Eds.), 2002). One in ten children aged 5-16 years has a clinically diagnosable mental health problem and, of adults with long-term mental health problems, half will have experienced their first symptoms before the age of 14 and three quarters before their mid-20s. Intervening early for children with mental health problems has been shown not only to reduce health costs but also to realise larger savings through, for example, improved educational outcomes and reduced unemployment and crime.

Consultation with the workforce has been achieved through a survey of health professionals which aimed to audit training histories, perceptions of the impact of previous training and to consider the content of a new CPD framework to support Infant Mental Health and the benefits it might bring. The audit aims to facilitate responsive planning to the strengths and felt needs of professionals working with expectant families, their newborns, infants and very young children, and will lead to greater clarity on how to develop this.

The Best Possible Start (BPS) initiative is about creating the necessary foundations to give children in Scotland the very best start in life (see <http://www.shiftingthebalance.scot.nhs.uk/initiatives/scottish-initiatives/children-and-families/>). An essential component within this policy focus is an awareness of the importance of infant mental health (IMH) practice and an understanding of the role of the practitioner in promoting IMH.

This report, which draws on survey and focus group responses conducted with Public Health Nurses, Midwives, and Neonatal Nurses, has been able to assess awareness of the field of infant mental health and identify the training needs of practitioners and works from a strengths based model.

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First, we show the approach to the task, then we examine some principles and features of IMH to better understand its nature and consider how best to position it within general health provision. An overview of IMH interventions identifies a number of key approaches and discusses their relevance to NHS Lanarkshire's practitioner context.

The online audit survey, focus group process and results are fully reported in two supplements to this report and inform the discussion and recommendations for a Framework and Pathway for Workforce Development, exemplified in a third supplement: The Best Possible Start IMH Training Framework. A fourth supplement presents key findings from a set of relevant Cochrane Systematic Reviews, showing the nature of existing evidence of interventions and the need for further research.

3. Approach to the Task

The planned approach to the task was in four parts (1-4 below), each contributing to the main outcome of a robust workforce development framework (5 below) leading to criteria and approaches to record keeping through which the effectiveness of approaches can be monitored and assessed.

- 1) An overview of the literature:
 - What babies and parents need in order to develop a ‘well-connected’ child.
 - The existing evidence base informing infant mental health intervention.
- 2) A review and summary of the national policy direction in early intervention with a particular focus on infant mental health.
- 3) An online survey to identify training undertaken, the focus of training in relation to the pathway of care, uptake by differently qualified staff, support and training they feel they need to provide the best service.
- 4) A small number of focus groups were undertaken and a proforma on four levels of training circulated to the Expert Focus Group participants.
- 5) Combining evidence from the four strands of the task to produce recommendations for IMH training for each specialist group (a number of selected approaches appropriate for each specialist group (midwives, neonatal nurses, PHNs).
- 6) An IMH Workforce Training Framework.

It is important when undertaking this type of research project to begin by evaluating the current literature and evidence base for using different approaches. In terms of data collection, combining focus groups with questionnaires can be a particularly effective research approach. Focus groups have the benefit of providing deeper, more thoughtful responses and allowing the researcher to follow up immediately on any interesting points raised. However, they also carry the risk of the participants being selected according more to availability and convenience than for their representativeness. They also, on their own, engage only small numbers (Wolff *et al.*, 1993). Combining both questionnaires and focus groups minimises the potential limitations of each of the research methods, allowing for a more quantitative analysis of the questionnaire response and qualitative analysis of the interview transcripts. Together, these four approaches to the task, as briefly described below, led to a deeper understanding that enabled us to form stronger conclusions and recommendations.

3.1 Overview of Literature

The first strand in this project was to conduct a review of the literature in the area of infant mental health, including a review of the evidence for different intervention approaches and the evidence of their effectiveness.

3.2 The National Policy Direction in Infant Mental Health

The second strand of work was to review national policy and training initiatives and the research evidence for a range of recommended approaches relevant to Infant Mental Health.

3.3 Survey

Insights from the Literature and Policy Reviews informed the design of a 29-question survey to audit practitioners’ current IMH understandings, the training undertaken and their perceptions of the workforce

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training strengths and needs. The survey was offered online for ease of access and completion (Qualtrics). The total of 585 possible audit respondents included all practitioners working with mothers and infants ante-, peri- and post-natally in the NHS North Lanarkshire geographical area.

Lead managers of these services were asked to inform their teams of aims of the Workforce Development Project and to encourage staff participation. Initially the online survey was made available until the end of June 2013, then extended until September 2013 to optimise response. The survey questions can be found in Appendix 2 of Supplement 1. A report on the first tranche of responses in June informed the development of the focus group discussion topics. A total of 145 returns were logged by the September cut-off date - of these, 91 were complete and form the basis of the analysis presented in Supplement 1 and the summary of recommendations presented in this report (see part 7 on page 26).

3.4 Focus Groups

Practitioner focus group interviews were arranged within the local hospitals to suit the focus group participants. The interviews were held at Coathill Hospital and Wishaw General Hospital on 3 July 2013 and Udston Hospital on 5 July 2013. The focus group questions were selected primarily to explore the practitioners' understanding of infant mental health, how confident they felt in addressing their understanding of infant mental health, what level of training they had, and what training they felt would help them to perform their role more effectively (Appendix 1 of Supplement 2).

A second set of focus group interviews were conducted with those in management, team leader or other senior roles. These focus groups, which will be referred to as *expert focus groups*, were conducted at the University of the West of Scotland campus in Hamilton on 9 August 2013. The questions were designed to explore the expert groups' understanding of infant mental health, what relationship this bears to maternal mental health, where professional responsibility for infant mental health rests, and whether the expert groups agreed with the proposed classification levels for IMH expertise. The recommendations presented in this report (see part 8 on page 27) come from the data analysed in more depth in Supplement 2.

3.5 Combining the Evidence into the IMH Workforce Training Framework

While every effort was made to increase the rate of return by extending the survey period, the BPS Coordinator seeking the support of clinical leads and flexibility of the research team in extending the run, the sample achieved was less than 20% of the workforce identified by NHSL. The focus groups were formed of invitees, but not all invited were able to attend and although overall the different practitioner roles were represented, a representative sample was not achieved. Although the focus groups and survey did not reach a representative sample they were nonetheless informative to the development of the framework.

The evidence from the literature, policy interpretation, survey and focus groups responses were drawn together into a single model: their mutual influences are illustrated in an Infant Mental Health Ecological Framework to show the interrelated layers of experience and to assign level for training based firmly on the infant-mother dyadic child and attending to care, companionship and support.

The primary purpose of the current project undertaken for NHS Lanarkshire's BPS Universal Services was to develop an Infant Mental Health Training Framework workforce development programme for Public Health Nurses, Neonatal Nurses and Midwives which prioritises positive promotion of parent/child attachment and seeks to uphold effective intervention strategies that promote positive infant mental health outcomes informed by the combination of evidence described.

4. Principles of Infant Mental Health: Toward the Best Possible Start

Mental health is ‘a state of well-being in which every individual realises his or her own potential, can cope with the normal stresses of life, can work productively and fruitfully, and is able to make a contribution to her or his community’ (World Health Organisation, 2010).

Infant mental health refers to the developing capacity of the child from birth until three years old to manage and express his or her emotions, to form close and trusting relationships with others, and to explore and master his or her environment, including the world of both people, places, and objects. Infants and toddlers learn through safe, secure interpersonal relations with others, especially their parents and primary caregivers. Human infants are unique in the animal world for their prolonged dependence on parental- and allo-care, as well as the remarkable degree of learning achieved in these relations. It is this intense sociability most evident in early life that enables development of sophisticated cognitive and social skills that reflect and comprise human culture (Hrdy, 2009).

- 1. Emotional and Social Development is the Foundation for Infant Mental Health and Learning.** The first stage of an infant’s development and learning is emotional learning (Lazarus, 1991; Piaget, 1954). Infants and toddlers learn emotional regulation - the self-management of feelings - in the care of others. They ‘mirror’ the ways in which their caregivers express their own feelings and care for them (Gallese, 2004; Winnicott, 1960). In this way, infants see themselves reflected in the eyes of the other, and they learn these values (Bråten, 2009; Winnicott, 1971). Intimate interpersonal relationships establish an emotional foundation that will remain with the child for life, and on which advanced cognitive skills and future learning are based (Hobson, 2002). Thinking about infant development must always take account of the fact that infants vary considerably in temperament, and in their responses, in what they make of and what use they make of their experience of caregiver’ expressions of feelings. This means that what is ‘good enough’ and appropriate for one infant in a given relationship and set of circumstances may not be for another. This understanding is essential in order to avoid over-normative or ‘averaging’ judgments about an individual infant’s needs.
- 2. Parents, Caregivers, and Community Are Responsible for Infant Mental Health.** The most important person in the infant’s life is the mother, or primary caregiver. This relation will form the primary attachment relationship (Ainsworth, 1973) and set the social and emotional foundations for later lifelong outcome (Matas, Arend, & Sroufe, 1978). However, considerable psychological and physiological strain accompanies childbirth that cannot be met by the mother alone. Childbirth and early parenting require familial, social, and often medical support to achieve health. In particular, maternal mental health is strained and psychopathology during the post-natal period is not uncommon. This can adversely affect the mother-infant relation (Murray & Cooper, 2003) to affect the infant’s quality of attachment. Evidence indicates social, emotional, and cognitive development are impaired in children with mothers with maternal mental health concerns (Atkinson et al., 2000; Hay et al., 2001; Martins & Gaffan, 2000; Murray & Cooper, 2003; Murray & Cooper, 1997). Moreover, the effects of psychopathology are not limited to clinical diagnosis but may be evident in sub-threshold expressivity. It is the responsibility of family, friends, and society to ensure maternal-infant psychological and physiological needs are met to enable best parenting and the best possible start for each particular child (Barlow et al., 2008; Bronfenbrenner, 1994; Bronfenbrenner & Ceci, 1994; Department of Health, 2004, 2008).

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- 3. Professional Parental Support for Infant Mental Health Gives the Best Possible Start.** The quality of infant caregiving relations must be professionally monitored and supported to achieve the best possible start for infants. Common infant regulatory problems can best be understood in a relational context (Skovgaard, 2010). Disturbances such as excessive crying, feeding, or sleeping problems are closely linked with the quality of the caregiver relationship (Papoušek & Von Hofacker, 1995) and are associated with adverse effects in later development (Degangi, Breinbauer, Roosevelt, Porges, & Greenspan, 2000). Yet, maternal mental health is challenged during the pre- and post-natal periods: post-natal depression is common, 10% of mothers are clinically depressed at 8 weeks (Evans, Heron, Francomb, Oke, & Golding, 2001) and this increases to 22% at their baby's first birthday (Gavin et al., 2005); 15% of mothers experience anxiety disorders (Heron, O'Connor, Evans, Golding, & Glover, 2004); and 3% to 6% develop post-traumatic stress disorder during the first 6 post-natal weeks (Olde, Van Der Hart, Kleber, & Van Son, 2006). Further, mental health concerns lie on a spectrum of severity where sub-threshold expression may nevertheless impact on infant care. Altogether, these data suggest supporting maternal and infant mental health through better early intervention, including the monitoring of risk and identification of need as early as possible will help enable optimal social and emotional development of infants and toddlers within caring, secure, and stable relations with caregivers (Department for Children Schools and Families, 2007; Zeanah & Zeanah, 2001).

4.1 Never Too Young for Mental Health - Infant Mental Health is Emotional and Social Health

Recent scientific advances in psychology, neuroscience, and psychiatry now recognise the mental lives of infants begins much earlier than previously thought, with evidence that their subjective experience even before birth has importance for health and learning (Brazelton, 1979; Delafield-Butt & Gangopadhyay, 2013; Merker, 2007; Panksepp & Northoff, 2009; Trevarthen, 2009; Trevarthen & Reddy, 2007). The Royal College of Obstetricians and Gynaecologists formally recognises moral and health implication of foetal experience and states that by 24 weeks gestation, the foetus is due the same standard of care as adults, including analgesics to reduce feelings of pain (Royal College of Obstetricians and Gynaecologists, 2010).

The earliest experiences of the foetus and infant are mediated by the core brainstem neural systems responsible for emotional processing and affective expressivity; they make up a core conscious system that is perceptually engaged with its environment from before birth to explore, learn, and manage itself in the world (Damásio, 2010; Merker, 2007; Panksepp, 2005; Panksepp & Northoff, 2009; Winn, 2012). At birth, autonomic regulations for core vital physiological systems, for example blood oxygenation, thermoregulation, energy distribution, *etc.* are met without conscious, psychological mediation within the uterine environment through the maternal-infant placental barrier. However, at birth this reliable physiological equation supporting vital physiological need is terminated, and all subsequent vital needs of must now be met through mutual, conscious, and co-regulatory psychological activity between the infant and mother (Trevarthen, Aitken, Nagy, Delafield-Butt, & Vandekerckhove, 2006). Unconscious provision must become consciously met through action, and the form and quality of this action will constitute the degree of affect attunement, the quality of attachment, and the psychological health of both infant and mother as they engage with each other to generate vital, shared meaning emotionally charged and essential for development (Trevarthen & Delafield-Butt, 2013; Tronick & Beeghly, 2011).

4.2 Infant-Mother Psychological Attunement and Attachment

The tight psycho-physiological relationship between mother and infant couples infant mental health to parental mental health. And while each affects the other through reciprocal processes of regulation, it is the adult who requires providing a safe, containing relationship in which the infant can feel secure in expressing and learning to overcome feelings of anxiety and distress (Douglas, 2007). The adult must be psychologically and affectively 'attuned' to the infant, and similarly the infant must be receptive and 'attuned' to the adult for effective intersubjective connection and development (Stern, 1985). This reciprocal dance of subjective experiences, generating 'inter-subjectivity', is necessary for the emotional and vital health of both infant and mother (Trevarthen & Aitken, 2001). It allows developmental progress and learning for both participants (Brazelton, 1974; Brazelton & Nugent, 1995; Tronick, 2005). However, if pathology or trauma on either side prevents, for example, emotional functioning, then the ensuing distress is shared by both and the result is delayed or thwarted infant psychological development (Murray, Fiori-Cowley, Hooper, & Cooper, 1996; Murray & Trevarthen, 1985).

Infant-adult dyads communicate shared psychological and vital needs through psycho-motor/emotional movements with gestural form (Reddy, 2008) perceived in different sensory modalities, but with common temporal dynamics of rhythm, timing, and quality (Malloch, 1999; Malloch & Trevarthen, 2009). Stern et al. (1985) recognised their essential 'affect attunement' in the reciprocal dynamic of behaviour shared between infant and mother given by an 'intermodal fluency' of body and voice that forms the basis of social meaning (Delafield-Butt & Trevarthen, 2013; Trevarthen & Delafield-Butt, 2013).

The degree of attunement during infant-mother interactions has been shown to be a strong predictor of the quality of attachment that will develop in their relationship (Beebe, Jaffe, Lachman, Feldstein, Crown, & Jasnow, 2000; Beebe, Jaffe, Markese, Buck, Chen, Cohen, *et al.*, 2010; Jaffe, Beebe, Feldstein, Crown, & Jasnow, 2001). A lack of attunement in the dyad suggests a general lack of sympathy, as with mothers in severe depression, suffering bipolar psychosis, or other problems that prevent the fluidity of inter-subjective relating, and developmental problems may ensue (Bettes, 1988; Murray, Fiori-Cowley, Hooper, & Cooper, 1996). Contingent, reciprocal developments of expressed movement between babies and their mothers gives vitality to health and learning, and failure of attachment is signalled by a loss of contingency (Stern, 1982, 2010; Trevarthen & Malloch 2002; Malloch and Trevarthen, 2009).

Reciprocal relations fundamental to the organisation of processes in biological systems may be lost and co-dependent physiological regulation necessary for growth and development compromised (Trevarthen, Aitken, Vandekerckhove, Delafield-Butt & Nagy, 2006). Thus, the quality of the caregiver relationship is particularly important for generating a secure attachment pattern (Hughes, 2004), which serves as a foundation for subsequent affective, social, cognitive and behavioral development throughout the life cycle (Cassidy & Shaver, 1999). Insecure and disorganised attachment in infancy is associated with poor outcomes in emotional, social, and behavioural adaptation as well as later educational attainment and also in peer-rated social status (Berlin, Cassidy, Appleyard, & Shaver, 2008; Granot & Mayseless, 2001; Sroufe, 2005a, 2005b), and disorganised attachment is a predictor of significant later psychopathology (Green & Goldwyn, 2002).

Once infants' emotional and affective needs for security and safety in trusting and reliable caregiving relations are met, their cerebral activities are released to focus on learning and responding to the social signals of their caregivers (Porges, 1997; Porges, 2003; Schore, 2000; Schore, 2001, 2003a, 2003b). The dyadic, reciprocal, interactions that arise within this relationship are central to young children's neuropsychological development.

4.3 Parent-Infant Relations are Supported by Wider Social Relations, Including Professional Care

How do we best support these relationships in professional practice? Seminal Harvard paediatrician Berry T. Brazelton recognised that the mental health of the infant could be supported simply by helping enable the parent-infant relationship to develop through attention to their care for each other (Brazelton, 2006; Brazelton & Nugent, 1995). He employed a sensitive technique drawing the mother's attention to the infant's subjective experience and capacity for social engagement during a routine paediatric assessment. By including the mother or father in the assessment and drawing their attention to their unique infant-parent relationship, for example in the infant's selective attention to the parent's voice, Brazelton helped to build affective attunement and emotional bonding between them. This, in turn, enabled more secure attachment and improved the likelihood for good infant mental health outcomes, a positive outcome shared by both parent and infant. Brazelton's method holds an important secret for professional practice: it is not difficult to promote infant-caregiver bonding, but it takes sensitivity, awareness, skill and confidence in the action.

There is now increasing recognition that the best route to IMH is through supporting and encouraging the parent-infant relationship (Department for Children, Schools and Family, 2007; Barlow et al, 2010). This can be achieved a number of different ways in professional practice (*e.g.*, see § Intervention Approaches), but all share the common goal of enabling parent-infant relations by supporting parent and infant psychologically and emotionally, as well as medically or through material social provision, to better enable positive affection, bonding, and care. Importantly and especially at the early infant age, psychological health and well-being are closely related to physiological health and well-being, and by three years of age will predict lifelong health and socio-economic success (Hertzman, 2000; Knudsen et al, 2006). Stresses from trauma, deprivation, health concerns, *etc.* in any one element necessarily affects the others. Concerns for infant mental health are closely related to concerns for maternal and familial health and well-being generally (Bronfenbrenner, 1994).

The quality of these early relations are largely affective and emotional in nature (Panksepp, 2005), and the close association of socioemotional development and developmental psychopathologies (Aksan, 2000) underpin the fact that mental health is closely related to socioemotional health.

4.4 What is Needed for the Best Possible Infant Mental Health?

Infant mental health is sensitive to attuned, responsive and reliable care from a trusted primary caregiver. Social mother-, parent-, and/or caregiver-infant relations form the core of mental health for both caregiver and infant, generating a strong attachment relationship and enabling the infant to engage with the world with a sense of security and confidence.

The mother or primary caregiver is situated within a society that can support her and that can also create stresses or strains within her. Therefore, our social provision of professional service, as well as our cultural values and expectations of men and women when they have children, and the resource (both emotional and psychological as well as material and monetary), are important determinants of their mental well-being and health, a state of health that efficiently and naturally becomes reflected in the mental health of their child.

The transition to parenthood is an especially challenging time in an individual's life (Cowan & Cowan, 1997; Doss, 2009). A systems approach to understanding these challenges is helpful (Cowan, 1997) as it embraces

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the understanding that childbirth and parenting places great emotional, financial, and physical strain on the mother, father, and intimate caregivers that requires family and friends to assist. These strains can be accommodated by parents' social support networks, both personal and professional, in order to allow the mother the time and resources she needs for her baby.

Of particular importance are emotional strains, because it is these that are readily reflected in the infant's first experiences and that begin to establish learned patterns of self-regulation. For example, a mother who is anxious and under stress because of the emotional trauma of childbirth, the new demands of motherhood including loss of time with friends, loss of identity as an independent adult, loss of sexual intimacy, *etc.* and who also has additional emotional, physiological, and financial demands placed on her by her infant in providing care, food and shelter, may not be able to cope. Should other strains also be present, such as background mental health, financial, or safety concerns, the balance between health and pathology can be tipped. Such a trial of demands and resources places great strain on the mother and caregivers, and these are professionally recognised and attended to within Infant Mental Health care to give each child the Best Possible Start.

4.5 Conclusion: Supporting Infant Mental Health

'I once said: 'There is no such thing as an infant', meaning, of course, that whenever one finds an infant one finds maternal care, and without maternal care there would be no infant.' (Winnicott, 1960)

In sum, Infant Mental Health recognises that infant subjectivity and the social and emotional relationships that construct these experiences are a significant concern needing attention. It recognises that care and attention given in the earliest months and years of a child's life establish that child's resilience and capacity for relationship, as well as learning core socioemotional expectations and patterns that last a lifetime. Infants learn social expectations in affectively attuned caregiving relations that attend to the infant's emotional, as well as physiological needs in 'containing' relationships. Clinical psychopathology is common in mothers and fathers. Birth and transition to parenthood is a stressful time for both parents and infant that can significantly affect quality of, and capacity for, care. Insecure or disorganised attachment can predict psychopathology in later life. In most cases, an infant's mental health is met by parenting or alternative caregiving that is 'good enough' and no professional intervention is required. However, professional care and attention to an infant's mental life can improve the psychological and emotional caregiver-infant relations to improve his or her neurobiological foundations for a thriving and confident life.

5. Evidence for Effectiveness of Interventions

5.1 What is the Evidence for Effectiveness of IMH Intervention Approaches?

This section considers what is known about infant mental health interventions. This review draws on a search of reviews in the Cochrane Library of Systematic Reviews, Pub Med, Government commissioned reviews, selected reviews from USA, Canada and Australia. A search of the available peer-reviewed literature using the specific interventions employed to date in NHSL as key search terms resulted in sourcing reviews of interventions, infant mental health training, parenting and IMH, IMH screening and competences and evidence-based practice papers. A further journal based search with the key terms 'infant mental health' and 'maternal mental health' generated papers which were themed as follows: parental interventions, attachment, professional collaboration in intervention, primary care interventions, universal and targeted approaches, home visiting approaches, and papers which addressed discourses of risk and power. A further source drawn upon to provide context is that of policy papers - including government-generated, research centre and third sector reports.

These varied sources demonstrate a high contemporary interest in shifting the balance from intervention to prevention in work with young children. The systematic reviews from different nations show that there is international interest and faith that appropriate relationally based intervention and prevention is the best chance of changing outcomes for children in high risk families and communities. The challenge is significant.

The topics reviewed in the 10 Cochrane Systematic Reviews identified with the search term 'infant mental health' included: perinatal mental health; parent-infant psychotherapy for improving parent and infant mental health; group based programmes for improving psycho-social outcomes for teenage parents; group based programmes for improving emotional and behavioural adjustment; massage for promoting mental and physical health in babies of under 6 months; psychosocial and psychological interventions for treating antenatal depression; financial benefits for child health and well-being in low income or socially disadvantaged families in developed world countries; home-based child development interventions for preschool children from socially disadvantaged families; home visits during pregnancy and after birth for women with an alcohol or drug problem and schedules for home visits in the early postpartum period. (See the Supplement 3, Cochrane Review for more detail). In nearly all cases these reviews showed there was either insufficient research, that research was not of a high quality or that it was inconclusive.

This suggests that interventions into infant and maternal mental health should have a rigorous research approach built in from the start, if the efficacy of interventions is to be established both in the short and longer term.

None of these reviews prioritises one approach over another, but the evidence base is stronger for certain models of intervention and so these are often considered more promising. For investment to be justified in the longer term, such evidence needs to be generated more widely. Selected interventions are described in section 12 of this report and their key components drawn out in the Best Possible Start IMH Training Supplement.

5.2 Adult Mental Health

This report recognises that mental illness may exist prior to a woman's pregnancy or have its onset antenatally, peri-natally or post-natally. Such situations may herald the need for integration of maternity

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services with specific mental health services (NICE, 2007). Risk awareness is needed at all levels of service in order to meet the needs of mother, child and family and in recognition of the potential implications for infant mental health of maternal mental illness. It is not the function of this report to consider mental health *per se*, but rather to focus on infant mental health as a relational concept which of necessity demands a focus on infant-mother together because of their close inter-relation in very early life. Preventive treatment in known cases of maternal mental illness linked to a stepped-care intervention model may be appropriate to such cases, but will not be reviewed here.

5.3 Impact of Early Caregiving

Much is written about the impact of early caregiving experiences on children's immediate experience and later development. This has generated a huge interest in interventions that support and influence the parent-infant relationship positively. Zeanah, Stafford and Zeanah (2005) found that a continuum of infant mental health services is needed. It is known that there is great variability in delivery of interventions in terms of site, provider and the degree of challenge. It is possible to identify clear purposes to interventions into IMH which focus on:

- 1) the ability of caregivers to nurture young children more effectively;
- 2) the ability of non-family caregivers to identify, address, and prevent social-emotional problems in early childhood;
- 3) the capacity to minimise harm and ensure that families in need of more intensive services can obtain them.

While the main focus in IMH interventions is the caregiver-infant relationship, this makes it challenging to evaluate effectiveness: evidence-based approaches are still in development and so the evidence for improved parent-infant relationships and how these are sustained over time is difficult to establish. The success with which practitioners may combine preventive work with focused intervention for higher risk groups may be dependent on the training and support they themselves can access.

5.4 Features of Successful Interventions

The significant features of successful interventions, based on evidence-based reviews and the wider literature include: attachment and positive parenting starting in pregnancy and continuing through the first years of life; recognition of the profound influence of both the mother's and father's contribution to the child's development (Jameson, 2012); and that the professional/parent partnership may be identified as being the single most important factor in delivering effective programmes (Barlow *et al.*, 2007). Barlow concludes that although effect sizes are modest, a variety of programmes have been shown to be effective. She makes a strong case for 'the preferential provision of early preventive programmes'. Day-to-day intervention approaches need to be considered with this information in mind.

While evaluations of intervention approaches are growing in number there is not yet a substantive evidence base that informs choice of any particular intervention approach being able to guarantee change. It is therefore helpful to identify the ingredients of an effective programme and to be able to use this 'menu' of interventions as a pathway (NICE, 2013) or framework to guide appropriate approaches. Both risk and protective factors are important in preventive work and anticipatory approaches are advocated.

Bagget *et al.* (2007) suggest there are 5 core risk indicator domains: inappropriate and harsh parenting beliefs, parent depression, parent substance abuse, domestic partner abuse and any identified child

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developmental delay. Further they add family history of child protection involvement, lack of parent self-sufficiency, low maternal education, maternal or child health concerns and teenage parenting as additional risk factors. Other studies emphasise the association of these factors (not exclusively) with economic and social disadvantage. Many families do not present such severe risk factors but benefit from support to maintain their profile of protective factors, particularly if they fall into a pattern of what has been described as 'just coping'.

Group-based child development and parenting programmes have the potential to reduce parental anxiety, stress and depression (Furlong, McGilloy, Bywater et al, 2012) so building the confidence and aspirations of parents and enhancing parent-child relations. The costs of such programmes are modest when compared to the costs over time of health, social, educational and legal costs associated with poor mental health and conduct problems.

5.5 The Challenges of Workforce Development in Infant Mental Health

The challenges of workforce development are defined by Zeanah, Stafford, Nagle & Rice (2005) who suggest this lies in adequate knowledge or the skills of practitioners to perform developmentally appropriate, relationship-based assessment and treatment for young children or their caregivers. They suggest that workforce development needs to address staff in paediatric, child care, and family support settings, with more focus on child development, a broader understanding of anticipatory guidance topics, awareness of validated and reliable screening tools, and available resources for referral.

Workforce development may also need to focus on not only the parent-child dyad but also on group interactions, and on multi-informant, multi-site assessment aimed at gaining a good understanding of the reciprocal parent-child behaviours and how the caregiver feels about their child's personality and relationship with the caregiver.

Workforce development needs also to address the values base of the practitioner and to provide supervision opportunities. Staff will also need guidance in appropriate training and expectations, supports, relationship building and resources.

Effective programmes for Infant Mental Health are likely, according to Zeanah *et al.* (2005) to:

- a) Integrate Infant Mental Health into all child and family service systems.
- b) Assure that mental health disorders in young children and their families are identified early.
- c) Expand system capacity through workforce development.
- d) Assure that young children of highest risk receive comprehensive health and mental health services.
- e) Provide access to mental health consultation and support to early childhood education providers.
- f) Raise public and professional awareness about the importance of early social and emotional development.
- g) Develop strategies for assessing outcomes and programme evaluation.

5.6 The Economic Case for Investment in Infant Mental Health Training and Provision

The connection between infant mental health, physiological health, and lifelong developmental outcome is clear, and the efficacy of early intervention practices is well established (Campbell *et al.*, 2014). Further, new economic modelling confirms that the best rate of return on investment into children's programmes, including education, is in the earliest, pre-school phase of life (Knudsen *et al.*, 2006; Cuhn, 2006). This work, spearheaded by Nobel Prize winning economist James Heckman, is at the foundation of new early years policy developments initiated by the Scottish Parliament's Preventative Spend Enquiry held in the autumn of 2011, and it has received wide political recognition as an essential principle for restructuring budgetary priority toward investment in the early years (Fig. 1).

Recent reviews of cost-benefit analyses based on Randomised Controlled Trials of early intervention programmes demonstrate overwhelming support for early intervention based approaches (Wave Trust, 2013). For example, within a large collection of Randomised Control Trials from the United States that measured health impact of early years' programmes and their cost-benefit "suggested returns on investment on well-designed early years' interventions significantly exceed both their costs and stock market returns. The rates of return ranged between \$1.26 and \$17.00 for every \$1 invested in the RAND studies; between \$4.05 and \$17.92 for every \$1 invested in the Reynolds Chicago studies; and between \$1.75 and \$10.32 for the Washington State Institute for Public Policy studies." (*ibid*, p. 38).

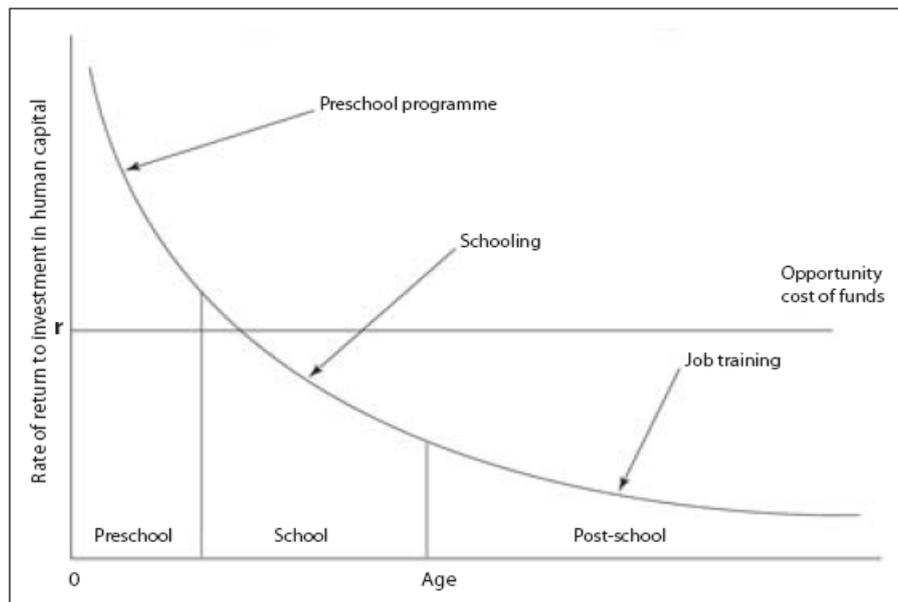
Further, analyses of studies of conducted in the UK demonstrate a similar pattern of result, "cost-benefit, predictive, and case study approaches showed clear indications of economic payback... nine Social Return on Investment studies showed returns of between £1.37 and £9.20 for every £1 invested... two cost-benefit studies (Croydon Total Place and an LSE study of parenting programmes for conduct disorder) predicted and produced returns of £10 and £8 per £1 invested respectively." (*ibid*, p. 38). While these studies were on early intervention programmes, rather than infant mental health programmes *per se*, they follow the same principle of early intervention to improve parent-child relations. According to Heckman's predication, rates of return on *infant mental health* programmes, due to their earlier intervention window when parental style and infant neurobiological development are both more plastic and amenable to positive change, ought to produce greater health benefit and therefore greater rates of return.

Within the logic of 'earliest is best' that recognises developmental change is most effective when neurobehavioural plasticity is greatest in the earliest phases of infancy (Scottish Government, 2008e), infant mental health training presents an obvious, compelling investment strategy. Infant mental health practice requires only improved practitioner knowledge and does not require addition capital expenditure, for example for equipment, drugs, or infrastructure.

Provision of continuing professional development in early years care is an area identified by the Scottish Government (see below) as a priority area for new investment. Further, recent studies indicate infant mental health practices generally - based on comparable relational developmental principles advances in the training programmes identified in this report, for example Solihull, Brazelton NBAS and NNBO, SIHR/HDS Infant Mental Health Course - are proven effective in improving parent and infant outcome in a variety of settings and trials, including with postnatal depression and with socioeconomic deprivation of which NHSL is particularly concerned (e.g. Bick & Dozier, 2013; Knoche *et al.*, 2012; Kohlhoff & Barnett, 2013; Sadler *et al.*, 2013; Troutman, Moran, Arndt, Johnson, & Chmielewski, 2012).

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Fig. 1. Rates of return on investment initially setting investment to be equal across all ages. The greatest rate of return is in the early pre-school years, with estimated returns at the age of 21 from £3 to £7 for each £1 invested, with benefits throughout life providing yet higher yield. From Knudsen *et al* (2006) and Cuhn *et al* (2006).



5.7 Linking the Scientific and Economic Evidence for Improved IMH Training and Provision

Infant mental health practice of working with the social, emotional, and cognitive domains of infant psychological development is developed from scientific study of human development. In recognition that the social and emotional life of an infant is important for developmental outcome, infant mental health practice attends to the baby, the parent, and the early developing parent-child relationship through provision of assistance, emotional support, and developmental guidance (Zeanah, 2009).

The social nature of human infancy and rapid brain growth pre-birth to three years of age ensures the patterns learned in early life experience become a template for all subsequent life experiences, a process that can entrench trauma and insecurity or establish a safe foundation for confidence and growth. This scientific position has a long lineage of evidence originating with psychiatrist René Spitz who observed that some infants, even when given the best medical care, failed to thrive in clinical settings (Spitz, 1945; Spitz, 1946). His work demonstrated that failure to thrive was due in significant part to lack of caregiver contact, demonstrating psycho-physiological effects of emotional social support. We now recognise that social and emotional support is vital for infant psychological as well as physiological health (for e.g. see Brazelton, 2006; Brazelton & Nugent, 1995). Seminal work by Spitz's contemporary John Bowlby further demonstrated the importance of the parent-infant relationship for establishing attachment pattern (Bowlby, 1969; 1973). It is now clear that early psychosocial experience in infancy establishes psychological health as well as physiological health and well-being in later life through non-verbal socioemotional caregiver-infant engagements (Ainsworth, 1973; Ainsworth, Blehar, Waters, & Wall, 1978; Brazelton, 1974, 2006; Murray & Cooper, 2003; Murray & Cooper, 1997; Murray, Fiori-Cowley, Hooper, & Cooper, 1996; Murray & Trevarthen,

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1985; Perry, 2001; Perry & Azad, 1999; Perry & Szalavitz, 2010; Rutter, 2002; Stern, 1971, 1977; Stern, Hofer, Haft, & Dore, 1985; Trevarthen, 1995, 1998; Trevarthen, Aitken, Nagy, Delafield-Butt, & Vandekerckhove, 2006; Tronick & Beeghly, 2011; Tronick, 1977; Tronick, 2005; Tronick & Weinberg, 1997; Zeedyk & Heimann, 2006).

Altogether, the scientific, economic, and medical efficacy data support recent Government initiatives to improve early years care for later developmental health and socioeconomic outcomes, and infant mental health practice in particular lies at the heart of these efforts. Our youngest children and their parents are at their most sensitive and vulnerable in early parenthood and infancy, and therefore are at their most receptive good quality, informed care.

5.8 Summary

As evidenced in Supplement 3 to this report (Cochrane Reviews), the evidence base for interventions is not universally robust. In many cases interventions are not yet supported with evidence that can guarantee their effectiveness beyond what we have called the Model Programme. However, lack of evidence is not the same as stating that an intervention is ineffective. Therefore, the way forward is for managers selecting and implementing interventions to be aware of implementation fidelity and the importance of gathering evidence systematically in order to understanding the longer term effects of their investment.

6. Scottish Policy Direction for Infant Mental Health

6.1 Introduction

There is an increasingly strong voice in public policy in Scotland that the balance needs to shift from early intervention to prevention and personalised service delivery with a clear focus on the delivery of outcomes (Christie Commission Report, Policy Memorandum, 2013; Putting the Baby IN the Bath Water Coalition, 2014; the Children and Young People (Scotland) Bill, 2014). This policy drive is supported by research evidence.

A cycle of deprivation and low aspiration has been allowed to persist because preventative measures have not been prioritised. It is estimated that as much as 40 per cent of all spending on public services is accounted for by interventions that could have been avoided by prioritising a preventative approach.

Christie Report- Key Messages, page viii

In this section we present some key messages from Scottish policy and their relationship to the Best Possible Start Infant Mental Health initiative. The review is not exhaustive but aims to highlight the policy context and the scope for taking action in the arena of Infant Mental Health and to set this in a national and international context.

6.2 Scottish Social Policy Pillars

In 2008 Scottish Government placed a huge importance on the early years of life when it published its flagship Early Years and Early Intervention Framework (Scottish Government 2008a), quickly following this with two other significant pillars of policy: Achieving our Potential (Scottish Government 2008b) and Equally Well (Scottish Government 2008c). A policy based functional analysis of the children's workforce (Dunlop et al, 2011) analysed more than 56 Scottish policy documents affecting children and their families and found the strong policy message that in tackling inequalities the quality of family relationships matter: this is interpreted in two aspirational ways:

1. that children live in families that are providing a strong nurturing environment, and
2. that service providers have quality relationships with families.

GIRFEC (2008d) was one of the policy approaches analysed in this study: it was the most comprehensive piece of work to date in that it engaged with the child's world, with what professionals need to know and with a strong values base of inclusive action: GIRFEC has an implicit commitment to person-centred practice and is targeted at all professions. However an understanding of what person centred encompasses is usefully summarised in the learning resource provided through *Developing a Health Inequalities Imagination* (NES-NHS, 2008), which focuses on the theme of equality: the ability to engage with young people, parents and communities requires an understanding of their needs and a commitment to ensuring their well-being. Active listening and meaningful dialogue will only be possible where the practitioner has a commitment to social justice and promoting participation. A successful communicator must also be able to reflect on the individual and their situation, necessitating a flexible, adaptable practitioner. 'Knowledge of a person's situation must extend to an awareness that inequality of outcome, for example, is associated with inequality of opportunities' (Dunlop et al, page 55). These different forms of knowledge and the development and recognition of values, skills and attitudes need to be considered in training approaches so

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that practitioners continue to build relationships with families in ways that take infant mental health approaches forward.

All practitioners need to be aware of the way the working context is shaped by policy in Scotland and to understand the opportunities created by what has become a national movement to change early experiences in Scotland for the better. Equally Well drew together the health priorities for Scotland and was reviewed in 2010 (Scottish Government, 2010a) when an emphasis was placed on collaboration across professions and services with a focus on early intervention and prevention. Equally Well has been followed by 'Towards a Mentally Flourishing Scotland' (2009), National Guidance for Child Protection in Scotland (2010), the Child Poverty Strategy (2011a) the Hall4 update (2011c), The National Parenting Strategy (2012), Guidance on the 27-30 month review (2012) which reinstates regular health practitioner contact at an early stage, and most recently the Child and Young People (Scotland) Bill which was passed by Scottish Parliament in February 2014. A single strong thread sustains through all of this documentation: that children's experiences matter and shape their futures, and that this process starts from conception, is affected by life circumstances and most fundamentally by the inter-relationship of 'mother-infant' and how together as a dyad and as individuals they are supported by family, friends, community and society.

6.3 Mental Health Guidelines

Internationally, the World Health Organisation's recently published Mental Health Action Plan (2013) asserts six cross-cutting principles, including universal health coverage, human rights, a multisectoral approach and empowerment through mental health advocacy: the two other principles strongly relevant to Best Possible Start are the importance of evidence-based practice and a life-course approach:

- Evidence-based practice: Mental health strategies and interventions for treatment, prevention and promotion need to be based on scientific evidence and/or best practice, taking cultural considerations into account.
- Life course approach: Policies, plans and services for mental health need to take account of health and social needs at all stages of the life course, including infancy, childhood, adolescence, adulthood and older age.

The World Health Organisation acknowledges a broad definition of mental health and makes it clear that consequently it is important to understand that many, apart from mental health specialists, contribute to enhanced mental health. They do however define the role of the mental health specialist to identify and point out areas where mental health is not optimal; to help develop measures of mental health to monitor the situation; to help (if asked) to devise interventions; to help with the training of those intervening; and to help monitor the effectiveness of interventions (World Health Organisation, 2005, page 59). All these roles are essential to the Best Possible Start Infant Mental Health priority.

Further they say that while considerable attention has focused on infant and child mental health and much is now known about good children-rearing practices, concepts of mental health need to be understood in their political, economic and social-cultural context: 'The promotion of mental health in infancy and childhood understandably has received great attention and today much is known about what constitutes good childrearing practices. Studying the differences in childrearing beliefs and practices in diverse cultures has always been of great interest to practitioners. It is suggested that understanding the function of these practices in their context is essential before any intervention is planned within a particular

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community, even if ultimately the goal of the practitioner might be to encourage change.’ (World Health Organisation, 2005, page 61).

The NICE Guidelines on Antenatal and Postnatal Mental Health (2007) draw attention to women with existing mental health conditions and stress the importance during pregnancy and in the post-natal period of healthcare professionals assessing the welfare of the infant and other family members and if need be acting upon that information. Generalised anxiety disorder is also recognised as causing distress to babies in utero and subsequently. The guidelines recommend the need for prompt treatment because of the potential impact of an untreated mental disorder on the foetus or infant. They recommend, because of the impact of sub-threshold symptoms of depression and anxiety on day-to-day life post-natally, that an RCT (randomised controlled trial) should be undertaken into the possible effectiveness of interventions. The potential impact of a maternal mental disorder upon the infant is well-evidenced: here the communication skills of the healthcare professional contribute enormously to their capacity to recognise emotional distress. Given the frequency of contact with healthcare professionals ante-, peri- and post-natally, their heightened awareness of mental health issues creates an important opportunity for preventative approaches and intervention.

Within these groups the evidence is unclear on the benefits of particular interventions (see following section). Understanding of risk factors is clearer for post-natal depression whereas understanding about risk factors for other mental-health conditions and supporting and sustaining well-being is much weaker.

Parkinson’s report on the development of mental health indicators for children and young people in Scotland emphasizes the challenge of creating a summary profile of children and young people’s mental health, but contributes to our understanding of the causes and consequences of mental health and its impact (Parkinson, 2012). Together these initiatives underline the importance of considering health foundations guidance in parallel with policy development.

6.4 National Child Cohort Studies

Evidence from national child cohort studies has also fed into/informed policy development- for example Growing Up in Scotland and the Millennium Cohort Study.

The Growing up in Scotland report, *The Circumstances of Persistently Poor Children* (Scottish Government, 2010b), drew out implications for policy and while recognizing the value of steady paid work for families, highlighted that ‘policy must recognise that work is not always possible for all parents at all times, particularly during periods of ill health and concentrated times of caring for young children. This implies that other types of support may be required. And given this research has shown links between persistent poverty and maternal health, low education and family composition, it may be that targeted and tailored support for families and mothers with specific circumstances may be appropriate’. (page viii).

Their Report on Maternal Mental Health (Scottish Government, 2010c) revealed that:

- Almost a third of all of the GUS mothers interviewed experienced poor mental health at some point in the four years after the survey baby’s birth
- At any one sweep, between 12 and 16% of the mothers was experiencing mental health difficulties
- One in 6 mothers had poor mental health recorded at one sweep only and 1 in 7 had poor mental well-being recorded on at least two occasions
- Poor mental health at the first sweep was a strong predictor of having poor mental health scores recorded at a subsequent sweep or sweeps: two-thirds (67%) who had poor mental health at Sweep

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1 went on to have mental health problems at subsequent sweeps

- Mental health difficulties were associated with a mother’s social circumstances: those who experienced poverty and those living in an area of deprivation were more likely to experience brief and repeated mental health problems
- Repeated mental health problems were additionally associated with reported relationship difficulties and with poor social support from friends, family or within the local community

(Growing up in Scotland Report, 2010c, page vi)

Drawing on analysis of the Millennium Cohort Study, Scott & Woodman (2012) reported risk and protective factors as mirror images of each other (as shown in Table 1). They found that ‘The *most prevalent risk factors* for children under the age of 5 in the UK are that of low income along with lone parent status and living in social housing’ (page 5, Executive Summary).

6.5 Risk and Protective Factors

A further challenge for universal services is therefore to understand the impact of child poverty on health, well-being and positive development (see Table 1).

Table 1 Risk and Protective Factors for Social, Emotional and Cognitive Development¹

Factors that increase risk of poorer social, emotional and cognitive development	Factors that protect children against social, emotional and cognitive development difficulties
<ul style="list-style-type: none"> • Being of low socio-economic status • Living in a low income or workless household • Living in rented or social housing or in an area of deprivation • Living with mothers who have specific issues, including mental health problems, alcohol misuse, mothers who smoked during pregnancy and / or mothers who themselves were living away from home before the age of 17 • Living with a lone parent or an unemployed lone parent; co-habiting parents; living with a stepfather; disagreement between parents about parenting issues, high level of parental conflict • Being from an ethnic minority background, (particularly Indian, Pakistani, Bangladeshi and Black African). 	<ul style="list-style-type: none"> • Being of high socio-economic status • Being from a high income family • Having early years education / childcare • Their parents’ relationship: being married; having a positive relationship at birth • Parenting factors: having a positive parenting style • Child factors, including gender (being a girl), being first born, having a higher birth weight, being older in the academic year, having higher British Ability Scale Scores, ethnicity (having a white mother and English being the only language spoken) • Maternal factors, including having a better education, being older at the time of pregnancy, having better self-rated health, ever having been in employment and feeling positive about their pregnancy.

¹ Adapted from Scott & Woodman, *Early Years Task Force Report* (2012).

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In this context practitioner knowledge and skills to identify mental health risks are essential. Further, interventions into infant and maternal mental health may be enhanced by the capacity of practitioners to establish and sustain continuity of relationships with women who are identified as vulnerable in pregnancy: it is a major challenge to sustain the engagement of such women in the universal services that begin in pregnancy in Scotland. Where this is achieved there is a chance of being able to assess risk and provide enhanced support where needed, though evidence of the capacity of enhanced ante-natal to promote specific outcomes for women vulnerable in pregnancy remains unclear (Early Years Task Force, 2012).

6.6 The National Parenting Strategy

As policy has continued to develop more is acknowledged and understood about the vital role that parents play in forming their children's future. The National Parenting Strategy (Scottish Government, 2012) states that "Valuing and supporting Scotland's parents is one of the single biggest ways of giving the nation's children the best start in life." To that end the National Parenting Strategy responds to the key issues facing families in Scotland today by committing to and financing the need to:

- Ensure all parents have easy access to clear, concise information on everything from pregnancy to the teenage years and beyond
- Offer informed, coordinated support to enable parents to develop their parenting skills, whatever their need, wherever they live, whether they live together or apart
- Take steps to improve the availability of - and access to - early learning, childcare and out-of-school care, taking into account parents in rural areas and those who work irregular hours
- Provide targeted support to families facing additional pressures that impact on day-to-day parenting
- Acknowledge and address the wider issues that can affect parents' abilities to provide a nurturing environment and care for their child.

(National Parenting Strategy, page 7)

This core commitment includes meeting additional challenges by exploring further what needs to be done to support the development of positive family relationships, include fathers more, address domestic abuse, increase the number of men in the children and families workforce, provide specific supports for teenage and lone parents and those with disabled children, measures to improve the quality of care for looked-after children and minimum standards to support children and families visiting relatives in prison. Key elements of positive parenting that are identified in the National Parenting Strategy are developing strong self-control and fostering resilience in children: both are seen as core "to our chances of reducing some of Scotland's key social problems in the future" (page 11). Taken in the context of understanding the challenges families face, the practitioners who work with the youngest children and their parents before, during and after birth play a critical part in this change agenda. Infant mental health and well-being sits alongside developing strong self-control and fostering resilience, and is a building block for the future.

In promoting attachment and parent support, the National Parenting Strategy commits to making basic infant mental health training more widely available to professionals; to developing practical ways to promote and encourage bonding and secure attachment between parents and their children through NHS Health Scotland; and to improving provision of child psychotherapy services by investing in a new cohort of trainees.

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The National Parenting Strategy also focuses on the role of public health nurses as part of Government commitment to parents: at the time of writing this report some of these changes are already underway.

- Public health nurses (health visitors) will undertake notification visits within 10 to 14 days after birth, offering a programme of screening, surveillance and health promotion checks while also ensuring that all children have a health plan indicator by the age of six months
- NHS Boards and public health nurses (health visitors) as Named Persons will work in partnership with midwives and maternity care staff to ensure pregnant women, children and parents who require additional support are quickly identified and the appropriate referrals, interventions and care plans are put in place
- By April 2013 we will introduce a 24-30 month review covering issues such as child development and physical health, parenting capacity and family matters including domestic abuse and parent-child relationships, along with wider parental health such as smoking, alcohol or drug abuse, and mental and physical health. We will also promote the role of fathers in their child's health and development
- As part of our Modernising Nursing in the Community programme, we will work with NHS Boards to set out plans for improving public health nursing services (health visitors and school nurses), including their contribution to the delivery of the parenting strategy.

(National Parenting Strategy, page 30)

This policy focus on providing parental education and professional training in positive parenting provides important context for NHS Lanarkshire's Best Possible Start approach to Infant Mental Health and the development of an Infant Mental Health Training Framework.

Importantly through the Children and Young People Bill (passed by Scottish Parliament in February 2014), Government intends to introduce a duty on services provided to adults - including drug, alcohol, mental health and justice- to notify the child's named person if there are concerns that a parent or carer's situation might get in the way of a child's well-being.

6.7 Themes in Scottish Policy

A recurrent thread in current Scottish health policy is the value placed on early recognition of common mental health problems: 'A mental health strategy for Scotland' states that over the period of 2012 - 2015, NHS Health Scotland will work with the NHS, local authorities and the voluntary sector to ensure staff are confident to use Steps for Stress as an early intervention approach to address common mental health problems [<http://www.wellscotland.info/priorities/addressing-common-mental-health-problems>].

At the same time as considering generic mental health issues in recent years a greater understanding is emerging about giving children the best possible start in life. It is now well-rehearsed in Scottish policy that children's mental well-being is about healthy development in nurturing environments starting in utero, and that central to the capacity to make emotional attachments and form relationships is a safe, strong and nurturing bond from infancy with primary caregivers.

Policy recognises that where any of these component parts is vulnerable (missing or met inadequately), there is risk to the longer-term well-being of any individual. Recognising risk and understanding protective factors is therefore a necessary part of all ante-, peri- and post-natal practitioners' repertoire of

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knowledge and skills. The understanding that the long-term impact of life-circumstances is not inevitable (Geddes, Haw & Frank, 2010) calls for a greater knowledge of the balance between risk and protective factors over time and how these come together in those who 'succeed against the odds'.

With particularly vulnerable groups, such as those identified above, an ecological approach encourages a view of the child and family in context, an understanding the resource challenges that the family/lone parent/young mother may be faced with and the way in which lack of resource adds to family stress, and is helpful towards collaborative approaches across agencies.

Health for all Children (Hall 4) is a surveillance, assessment and need identification programme which provides NHS Boards with the foundation for working with young children, and the means of access to more intensive support for those with greater needs. This guidance was supplemented in 2011 with the publication of 'A New Look at Hall4' which was aimed at front-line practitioners, clinical leaders and others involved in the planning and delivery of health services to children and their families. Although written principally for the NHS, it states the need for inter-professional and multi-agency working, if the best quality of care and support is to be achieved.

New work is emerging all the time that informs us better about the significance of various harms for the healthy development of the child. This helps to avoid known risks to health and well-being when prevention is both possible and proportionate. Higher implementation proficiency is more beneficial to families (Executive Summary Guidance on Interventions, Scott & Woodman, p14).

Skills in communicating knowledge about attachment may support new understanding that helps parents to relate to their child in ways that foster secure attachment. Group and on to one approaches have the potential to increase caregiver sensitivity to the child. As will be seen in the section on evidence of the effectiveness of interventions, we still need further evidence: we know there are "model" interventions that work; what we need is a roll out of such programmes that faithfully gather evidence so we know their effectiveness when they are more widely applied.

6.8 Summary

At no previous time has there been such a Scottish policy focus on meeting the challenge of child poverty, health inequalities, social inequalities, mental health and parental stress and their consequent impact on education, work and later life outcomes. The significant role played by secure nurturing environments and healthy attachment relations is understood much better. Understandings of the role of parenting and the difference that may be made through work with parents and families to reduce harms and respond positively to their children is now widely accepted.

In Scotland collectively we are no longer prepared to wait until things go wrong. Through the lens of infant mental health there is a focus on working with children and families pre-birth, with an increasing focus on parenthood as a choice not an inevitability. Through attention to the earliest expression of life, to the life circumstances of all children and to supporting and enabling the adults who surround children, practitioners in the field are at the heart of the Scottish endeavour to ensure mental health and well-being. For policy to become reality well prepared and knowledgeable professionals supported and supporting each other to use their skills effectively are a necessity.

7. Survey Outcomes and Recommendations

This online questionnaire aimed to gain a better understanding of parental and infant mental health within the NHS Lanarkshire workforce. The questions requested information about respondents' job roles with respect to ante-natal, peri-natal and post-natal care, with a particular focus on knowledge related to infant mental health, including training undertaken and required. The open-ended questions enabled the respondents to share, in their own words, their understanding of and responsibility for infant mental health within their job role. The initial responses to this survey in late June 2013 - particularly the answers to the open-ended questions - led to the development of topics and questions for the follow-up focus group sessions held with NHS Lanarkshire staff. The full online survey results are available in Supplement 1.

The breadth and depth of the respondents' experience was evident in their answers. The majority of respondents worked full-time and were in the older age brackets (41-65 years of age), and as one public health nurse put it, there is an '(...) ageing workforce...old and wise but also worn out...need enthusiasm of youthful workers'. A recurring theme in the responses was the wish for more time and staffing so they could fulfil their duties to the desired standard and eventually take time out to undertake training. The caseloads tended to be large, and many respondents mentioned that the growing amount of paperwork and computer-based documentation takes up valuable time that could otherwise be spent building relationships with patients. Several comments also mentioned the need for flexibility in follow-up, such as creating more locally based resources available and making home visits to vulnerable mothers or families for whom travel is a challenge, so that they receive the support they need, when they need it.

This theme relates to two key ante-natal challenges: a lack of continuity of care with patients, which makes it more difficult to notice a change in an expectant mother's mood, and a lack of time to build the trust and rapport required for them to disclose a sensitive issue. Another challenge was that many expectant mothers who work will continue working until their due date, which often means they do not engage as fully in the ante-natal or post-natal support available.

Many respondents felt that better communication and integration within and between different services and agencies was needed, and this was felt to be challenging at times, such as when different computer systems are used (e.g. in social work). Many respondents mentioned that it was important to take holistic approaches to care, considering the broader context or situation a mother or family is in, since this can lead to more timely referrals and follow-up by mental health specialists as appropriate.

Overall the respondents were aware of the importance of parental and infant mental health and of referring to specialists when needed, although some (39 of 91 total responses) did not wish to undertake specific IMH training - perhaps fitting in with the perception that sometimes people associate a negative stigma with the term mental health. A few respondents commented that they had previously received training that they were unable to use, due to time pressures and staffing shortages. Regret was expressed about specific programmes such as Baby Massage that was not seen as a practice priority - the systematic review on this topic highlights that further knowledge is needed about the benefits of infant massage for higher risk groups, duration and differences for babies according to whether a parent or professional is offering the massage (Bennett, Underdown & Barlow, 2013).

Despite the issues, many respondents wrote that although they had not yet undertaken any training, they would be interested in doing so, particularly if time for training were offered in a format and with up-to-date content that could be put into practice in their specific job role.

8. Insights from the Focus Groups and Recommendations

The questions for both the Practitioner and Expert Focus Groups were designed to target Infant Mental Health practice, with an overall aim to explore and improve IMH in NHS Lanarkshire. Supplement 2 reports the full focus group analysis. In all groups, there was broad agreement that IMH is critical and primarily about the mother/infant dyad. There were observations as well as concerns around fathers' lack of visibility and the additional challenges for them, echoing The National Parenting Strategy.

With regard to training issues, there were a number of common threads across all groups. There was universal enthusiasm for GIRFEC with the majority of participants saying that the common language across services had facilitated inter-agency working and improved the overall experience for families. There was also a collective appetite for the provision of more IMH training opportunities, with follow-up consolidation, to both maximise the benefits and reinforce understanding.

There was a call for more uniformity in training programmes and a plea for more time, both for undertaking training and also for working effectively with families. In the Practitioner Focus Groups, there was a feeling that management did not always understand the importance of front line staff having enough time to build relationships with families if they were to support them effectively. In other words, they would like *time for relationship-building* to be recognised as fundamental and not incidental.

Most practitioners were very positive about the level of support they received from colleagues, especially from within their own teams. They were, however, less convinced about the helpfulness of the CAMHS teams, as a number of practitioners believed there was no clear referral system and that often the CAMHS teams were not experienced, qualified or equipped to deal with children under five years of age.

Finally there were some words of caution from the Expert Focus Groups about the use of the term 'IMH' as they believe that for some practitioners, and many parents, there is a stigma, and that this could have an impact on the level of engagement.

9. Training Needs Summary

This summary of training needs for staff in NHS Lanarkshire is based on the findings of the online survey and focus group discussions.

- There is resounding agreement from all professions that IMH skills need improvement and coherence within and across agencies, including those not surveyed, for e.g. social work, the early year workforce.
- Training needs to take into account the significant time constraints placed on Public Health Nurses, Community Midwives and Neonatal Nurses.
- Infant Mental Health training needs to be consistent, focused, long term, and provide adequate assessment and follow-up.
- Plans need to be put in place to ensure that incoming staff receive the same training provided to existing staff, and *vice versa*.
- Training within the same system should be provided to a broad range of professionals including staff nurses and specialist nurses.
- PHNs and Community Midwives each listed a variety of training programmes that they have had access to and each programme mentioned - Solihull, Hall4, Brazelton NBO & NBAS, Triple P - has its strengths, weaknesses and complementary aspects. While there was some agreement that a combination of Solihull and Infant Observation might be the best route, they ideally wanted a programme (or complimentary combination of programmes) to be chosen, applied universally and followed through with ongoing networking, online support and face-to-face inputs so that training is maximised.
- There exists considerable discomfort with IT. As such, if the new programme is to include an online element such as a resource database it should be accompanied by training to use that IT resource.
- If an online policy and practice resource is created, it needs to be adequately maintained and be advertised to the practitioners effectively, or possibly be made mandatory.
- Information in an online resource needs to be curated and concise so that practitioners are not using their time hunting for the most up to date information.

In sum, a coherent, well-supported, ongoing system of training in Infant Mental Health would be welcomed by the practitioners surveyed.

10. What Kind of Training Framework is Needed?

It is critical that local choices and pathways are recorded, training participation known and that training and ongoing support provided is designed in such a way to ensure that the training approaches that are invested in translate into practices that are sustained. The lack of evidence for any particular choice of approach means this local evidence is doubly important and that the infrastructure for intervention is thought through.

Accountability, mutual support and success go a long way to sustaining practitioner commitment. The management of intervention has to go far beyond the provision of training. In Scotland there are policies and guidelines that help. One single national approach to intervention may be a far off dream, but the capacity to view the world from the child's experience, to understand how to build capacity in others and to create a sound and accessible support structure are critical.

This is often about mobilising what already exists, not creating more bureaucracy: with clear pathways and a framework for action the efficacy of approaches will become clear as efforts become more focused on outcomes. The respondents in this study represent about a third of the available workforce. Overall, the nature of their response is positive and helpful. They can be the bedrock of NHS's approach. They have been clear, on the basis of their training and experience that *everyone* needs the same basic approach, and some need greater specialism.

In defining a Workforce Development Programme in Infant Mental Health for Public Health Nurses, Neonatal Nurses and Midwives, we refer to three useful frameworks from a range of disciplines. These are the core SCQF against which any workforce development or CPD framework can be benchmarked, the Scottish Autism Training Framework and the Promoting Excellence NHS Education Dementia Framework. SCQF provides for 12 levels of competence from experiential to doctoral levels, whereas the Autism Training Framework (MacKay and Dunlop, 2004) concentrates on 3 main levels: core, targeted and specialist, an approach also used in their work for NES (Dunlop & MacKay, 2004). Fig. 2 shows a template for planning training needs.

Participants need opportunities for discussion, exploration of values, the opportunity to position themselves as people who are informed by theory, apply this to experience and develop their working models. To achieve this continuing professional education and training includes these aims:

- To enhance the development of ante-, peri- and post-natal nurses as reflective and enquiring professionals
- To build the capacity of ante-, peri- and post-natal nurses, at various stages of their careers, to analyse and develop their practices, relationships with families, team working, supporting knowledge levels in a supportive environment (which provides opportunities for professional collaboration within teams and across services)
- To strengthen the ante-, peri- and post-natal nurses' investigations of theory through practice in order to support evidenced based changes to their working practices.

The training needs analysis undertaken through the survey and focus groups discussions highlighted a range of knowledge, skills, values and outcomes that participants understood to be important in ensuring mother-infant mental health and well-being. We highlight the inconsistencies in training that emerged from

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participants' responses, the strong desire to have relevant knowledge and the opportunity to apply it, along with optimism that appropriate training for all personnel would go some way to meet the gaps in service provision by ensuring a safety net of well-trained staff. We recognise the pressing need for appropriate training and suggest that in the absence of the ideal of being able to offer all staff specialist training, a workable solution is to focus on the level of knowledge and skills needed for staff to fulfill their role. A four-level framework has therefore been developed, underpinned by a given that universally all personnel including those whose roles mean low contact with families need to be aware of and alert to infant-maternal mental health and well-being so that services can work preventively. The universal foundation level therefore is to provide accessible self-study material online as a requirement for all personnel and to provide some access to underpinning IMH knowledge. This focus on role is important as it allows for a spectrum of relevant knowledge from raising awareness through to a high level of expertise in focused specialist professionals whose primary role is to work with diagnosed mental health cases.

We outline these four levels, now increasingly used in training frameworks (see Dementia Framework, 2011; NHS Education for Scotland (NES) Autism Training Framework, *forthcoming 2014*): IMH informed practice level, IMH skilled practice level; IMH Enhanced practice level; IMH Expert Practice level. As stated these levels are incremental and higher levels of expertise include and build on the knowledge held in more generic levels. All members of staff have a responsibility to periodically refresh their education through training as the evidence base is constantly developing.

An alternative argument is to claim that given new investment in Health Visiting announced in June 2014 by the Cabinet Secretary for Health and Wellbeing, all PCN/HV should have specialist IMH training to Level 3 so as to meet the IMH need within their case loads on a MECOSH-like model. About 25% of families in any HV Caseload need repeated and extra visits - planning this in to workloads for identified families and recognizing when families come into this category would allow every Public Health Nurse/Health Visitor the skills to support - would give a planned rather than a fire-fighting approach to IMH (mother-infant mental health, attachment; mother-infant developmental engagement etc.), would allow for planned work with such families in groups and for linking in community nurseries and social services to common goals.

The use of an ecological model provides such an environment for change. There is considerable evidence of an enthusiastic, committed workforce in NHSL: the systems in which these practitioners work can perpetuate inequalities, with refreshed training running alongside systems evaluation, this willing workforce could work in increasingly cohesive ways. All training should include a philosophy of reflection, should be developmental, should provide follow up as practitioners apply what they have learned: in these ways an environment is created that brings visibility to training outcomes and staff skilled to contribute to data building on implementation of an intervention and preventive work undertaken so evidencing the link between training and intervention outcome (Kemp, Harris, McMahon et al, 2012; National Institute for Occupational Safety and Health, (NIOSH), 1999)

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Fig. 2 Template for Planning Training Needs (adapted from MacKay & Dunlop, 2004)

Stage of training	Professional role	Level				
		Universal	1 Core skills	2 Targeted	3 Specialist	4 Expert
Initial/ Undergraduate training	All personnel who may have working contact in relation to infants, parents and young children	•				
Professional training	Universal services	•				
	General role in relation to infants, parents and young children		•			
	Periodic, non-specialist contact with infants, parents and young children			•		
	Regular or specialist contact with infants, parents and young children				•	
	Consulting specialist in direct practice and supporting other professionals					•
Continuing professional development/ Workforce training	Universal services	•				
	General role in relation to infants, parents and young children		•			
	Regular non-specialist contact with infants, parents and young children			•		
	Specialist contact with infants, parents and young children				•	
	Highly specialised clinical and psychiatric expertise					•
		Universal	Informed	Skilled	Enhanced	Expert

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In this report we focus on four levels of Promoting Excellence: informed practice, skilled practice, enhanced practice and expertise in practice. Each level of the framework model links levels of competence to training and illustrates how core skills and specialism may need to sit side by side in order to guarantee the parallel requirements of services for all, whilst catering more specifically for some. A translation of a number of other models would suggest four levels that in the case of Infant Mental Health might be described as follows:

1. The **'Informed IMH Practice Level'** provides the baseline knowledge and skills required by all staff working in health and social care settings including a person's own home. (Equates to Low Need.)
2. The **'Skilled IMH Practice Level'** describes the knowledge and skills required by all staff that have direct and/or substantial contact with infants and their families and carers. (Equates to Medium Need.)
3. The **'Enhanced IMH Practice Level'** outlines the knowledge and skills required by health and social services staff that have more regular and intense contact with young families ante-, peri-, post-natally and up to the age of three, provide specific interventions, and/or direct/manage care and services. (Equates to High Need.)
4. The **'Expertise in IMH Practice Level'** outlines the knowledge and skills required for health and social care staff who by virtue of their role and practice setting, play an expert specialist role in the care, treatment and support of infants and families around IMH (Equates to Specialist Services.)

The knowledge and skills outlined at each level in this framework are constructed in an incremental way, for example practitioners working at the 'IMH Enhanced Practice' level would also possess the knowledge and skills, attitudes and behaviours described at all preceding levels. Specific staff roles may be linked to the different levels, the desirability of so doing would have to be explored, and as in any workforce development approach there is a mutual responsibility between employer and participant to ensure the interpretation and implementation of the framework to their role in relation to working with IMH issues.

We recommend including IMH experts already within NHSL into regular annual or 6-monthly training sessions. This will facilitate dialogue between midwives and mental health experts and help to generate cohesion between levels of expertise in IMH and specialist roles, namely between psychotherapy/psychiatry and PHN/midwifery/neonatal nursing in this case. Coherence and consistency are clearly a key goal for any training plan.

11. A Training Framework Model

The close links between socio-economic health, maternal and familial health and well-being, and infant mental health and well-being is recognised in Urie Bronfenbrenner's ecological systems theory, the guiding framework behind the United States' Sure Start early intervention programme, as well as the new Scottish Early Years Collaborative policy on integrated and child-centred working practice for the health, social, and educational services. New Scottish policy such as the GIRFEC pan-agency policy and Curriculum for Excellence Educational policy recognise the inter-connectedness of physiological, social, and mental health, and they propose integrated, multi-agency working practice that support infants and children's well-being through system-wide support for their communities, families, and parents. Pan-agency work is necessary for the Best Possible Start.

This integration of services is well illustrated in the following Bio-ecological systems model which draws on Bronfenbrenner's ecological systems theory (Bronfenbrenner & Ceci, 1994) and shows the intersection of family life within its local community and with social and health supports, as a frame for a systems approach to workforce development in Infant Mental Health.

The focus here is on infant mental health development in context over time and influenced by the overlapping nature of immediate family contact with the wider family, friends, practitioners and local community. The model takes account of belief systems, agency (the capacity to act), and whether systems are developing or developmentally instigating.

Such a Bio-ecological model can be applied to both children and maturing adults, and is thus a lifespan approach to development. The framework emphasises the importance of understanding bidirectional influences between individuals' development and their surrounding environmental contexts by attending to four features - the process, the person, the context and time (known as the chronosystem in Bronfenbrenner's model) as an important component in the way that people and environments change. Influenced by a systems approach we see four levels of IMH training and practice influencing each other and developing over time.

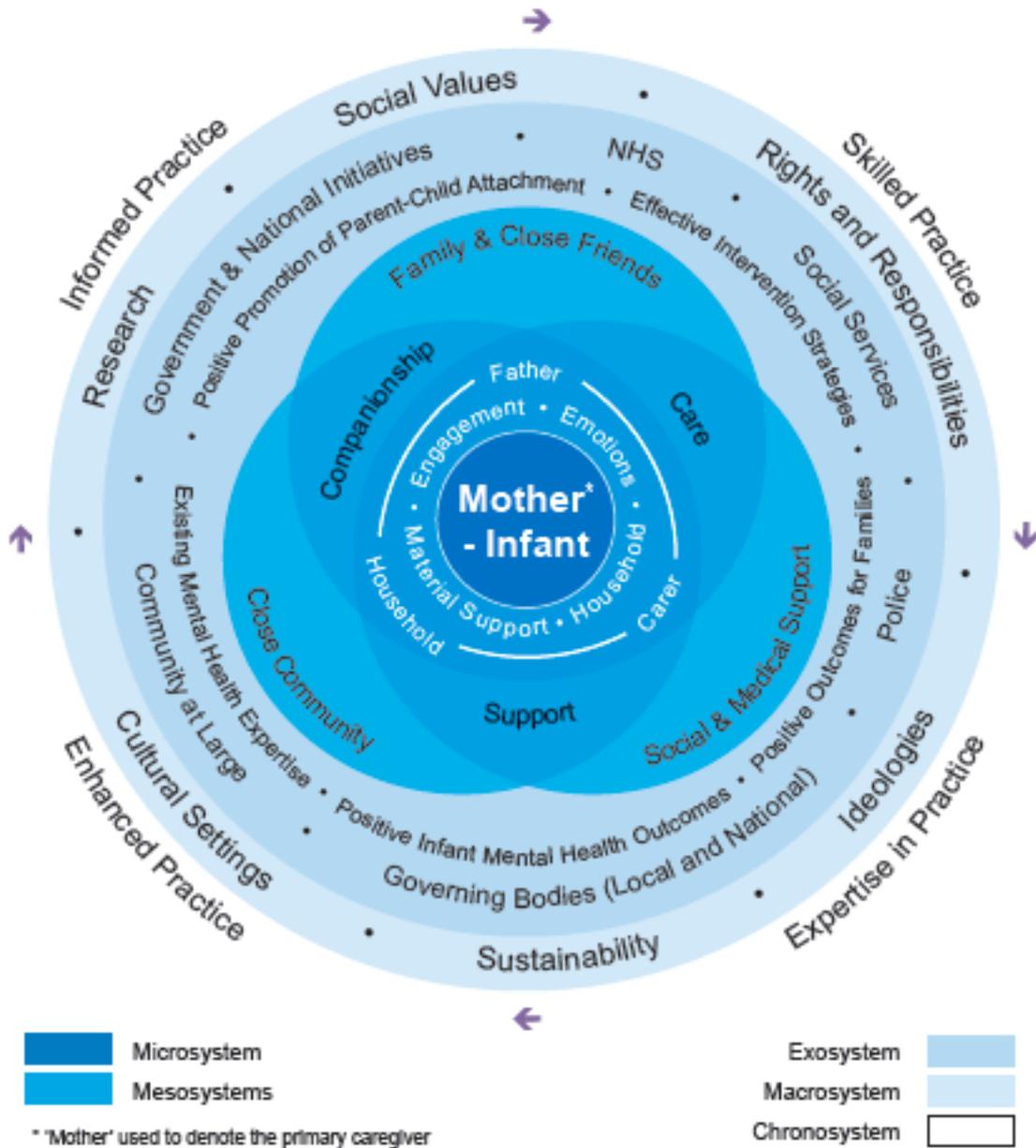
- **Microsystem** - This involves the day-to-day interactions of the infant with people in his/her immediate experiences of life, namely mother, father, primary caregivers, and household members. Initially, the microsystem is small, involving only care-giving interactions, family emotions and material support, usually at home. As the infant grows older, they do more, with more people, in more places.
- **Mesosystem** - This involves the supportive (or demanding) interactions of family and close friends, and professionals, who are intimately involved with the parents or primary caregivers. At first this is predominantly the home, then within safe spaces within the community, such as parks and streets, and other people's homes, nurseries, clinics, etc. Companionship, care and support are the positive features of these engagements.
- **Exosystem** - This involves the institutions in which the child does not directly participate, but which have a direct influence on the child through their workers or through provision (or demand) to parents, primary caregivers, friends and family of the infant-caregiver. In this space practitioners are concerned with positive promotion of parent-child attachment, effective intervention strategies where indicated, positive infant mental health outcomes closely linked to positive outcomes for families; all within a context of drawing on existing mental health expertise.

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- **Macrosystem** - This involves the interaction of all of the levels of the Bio-ecological system with the beliefs, values, expectations and lifestyles of their cultural settings. The whole enterprise is informed in a sustainable way by research, evidence, social values, rights and responsibilities, as well as the ideologies held.
- **Chronosystems** - This involves a lifespan or generational approach in which the parent-infant dyad develops together over time and supported by a workforce that is also developing over time, through levels of 'informed practice', 'skilled practice', 'expertise in practice' and 'enhanced practice'.

The Bio-ecological framework provided in Fig. 3 informed the design of this enquiry into workforce development and the training model subsequently developed.

Fig. 3 A Bio-Ecological Systems Approach to Workforce Development in Infant Mental Health



12. Training in Intervention Approaches

Judgments about the relative effectiveness of different intervention programmes can be problematic given as yet there is no universal, or indeed Scottish set of criteria used in every evaluation or review. In this report we have focused on the training interventions NHS Lanarkshire has invested in, and have only introduced one additional review - of MECSH - as it has one of the most robust evidence bases generated through randomised controls and building in record-keeping and evaluation mechanisms from the start. Although developed in Australia, Lynn Kemp has introduced the approach in England and the Essex project is generating equally interesting results. It is at the same time a preventive and an intervention approach, and it is sustained from the ante-natal period through to school and supports the most vulnerable families primarily through health professional home visiting. It is a targeted anticipatory approach.

12.1 Solihull

The Solihull Approach was first developed in Solihull in 1996 by joint working between Health Visitors and Psychotherapists. The Solihull Approach is based on the original work of Hazel Douglas who has led teams of practitioners and parents to develop the Solihull Approach. The sound and well-researched ideas that underpin the Approach are embedded in every aspect of their *Understanding your child's behaviour* groups and courses.

The Solihull Approach's *Understanding your child's behaviour* courses are a well-established and trusted way of understanding more about a child. Parents often say they feel calmer, more confident and have a better relationship with their child after taking part in one of these groups. The *Understanding your child's behaviour* group for parents has been developed with frontline practitioners and parents. Thousands of practitioners have received Solihull Approach training and are running courses throughout the country for parents and carers.

The approach was initially designed for Health Visitors to work with families where children were having feeding, sleeping, toileting and/or behaviour difficulties. It has since been developed further and is now used by a wide range of professionals from different agencies to work with families.

The Solihull Approach Model provides professionals with a framework for thinking about children's behaviour that develops practice to support effective and consistent approaches across agencies.

Research studies showed that there was a very significant reduction in parents' anxiety.

<http://www.solihullapproachparenting.com>

12.2 Brazelton

The Brazelton approaches offer both a sensitive means of access to support the parent-infant relation by facilitating bonding, parental affection and care, as well as provide a structured and reliable method of assessing infants' developmental progress.

- Brazelton NBO (Neonatal Behavioural Observations System)
- Brazelton NBAS (Neonatal Behavioural Assessment Scale)

In particular, the NBO system describes the newborn's capacities and behavioural adaptation from birth to the third month of life and in doing so provides parents with individualized information about their infant's

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behaviour, so that they can appreciate their baby's unique competencies and vulnerabilities and thereby understand and respond to their baby, in a way that meets her/his developmental needs.

www.brazelton-institute.com

12.3 Triple P

The Triple P - Positive Parenting Program is one of the most effective evidence-based parenting programmes in the world, backed up by more than 30 years of ongoing research. Triple P gives parents simple and practical strategies to help them confidently manage their children's behaviour, prevent problems developing and build strong, healthy relationships. Triple P is currently used in 25 countries and has been shown to work across cultures, socio-economic groups and in all kinds of family structures.

www.triplep.net/glo-en/home/

12.4 Infant Observation

Infant Observation in the context of this report refers to a 10-week course "Infant Mental Health & Early Intervention with Under Fives and their Parents" offered by Human Development Scotland (previously Scottish Institute for Human Relations) to raise professional awareness of infant behaviour and infant-adult relations within the home. It is based on the Tavistock Infant Observation method that forms the foundation for a range of psychiatric and psychodynamically-informed training. It is our understanding that this course currently offered on an *ad hoc* basis by NHSL child and adolescent psychotherapists and is delivered to a range of professional disciplines and agencies under locally organised provision. As such, it has the advantage of allowing locally-based expertise to be shared between levels of IMH expertise, facilitating professional community-building within NHSL. The course has been formally evaluated (North Lanarkshire Council, 2014).

www.hdscotland.org.uk

12.5 Mellow Parenting

Mellow Parenting is a family of programmes developed to support parents and their children in making good relationships. The foundation of all the programmes is attachment theory, with particular emphasis on the transmission of attachment and relationship styles across generations. So, if you have had poor relationships with carers in your early childhood, evidence shows that it is harder to make good relationships now, with services, partners and of course your children.

Mellow Programmes, based on principles from attachment theory adult education and behavioural psychology, combines support for parents and direct video feedback on the parents' own interactions with their children, a tool which has been shown to be extremely effective in helping parents to make change.

<http://mellowparenting.org/>

12.6 Family Nurse Partnership

Family Nurse Partnership was developed in America over a period of 30 years by Professor David Olds. It has a strong evidence base. The programme is currently being delivered in six NHS Board areas - Lothian,

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Tayside, Fife, Greater Glasgow and Clyde, Ayrshire and Arran and Highland. NHS Lanarkshire began implementing the programme during the course of 2013.

The programme's main aims are to improve maternal health, child health and development, and family economic self-sufficiency. It addresses elements of the three big key social policy areas - health inequalities, child poverty and early years.

Family Nurse Partnership aims to introduce a new approach to nursing, moving away from a doing to model to working with the parent to help them build up their own skills and resources to parent their child well, but also to think about their own future aspirations.

www.scotland.gov.uk/Topics/People/Young-People/early-years/parenting-early-learning/family-nurse-partnership

12.7 Maternal Early Childhood Sustained Home Visiting Program (MECSH)

The Maternal Early Childhood Sustained Home-visiting (MECSH) programme is a structured programme of sustained nurse home visiting for families at risk of poorer maternal and child health and development outcomes. It was developed as an effective intervention for vulnerable and at-risk mothers living in areas of socio-economic disadvantage. The MECSH programme draws together the best available evidence on the importance of the early years, children's health and development, the types of support parents need, parent-infant interaction and holistic, ecological approaches to supporting families to establish the foundations of a positive life trajectory for their children. The MECSH programme requires organisations, and practitioners to work differently with families, to truly act on the rhetoric of prevention and early intervention to improve outcomes for some of the most vulnerable families. The MECSH programme is delivered as part of a comprehensive, integrated approach to services for young children and their families. The programme is delivered by child and family health nurses who are embedded within universal child and family health nursing services. The programme is managed by universal child and family nursing services and embedded within the broader child and family health services system (see Appendix 10).

The MECSH programme uses a tiered service model, which encompasses the primary health care and more specialised services that families may need. There is a published evidence base.

Outcomes of a randomised trial of the MECSH programme demonstrated that children, mothers and their families who received the programme achieved a range of impacts and outcomes as outlined below.

New mothers:

- tended to be more likely to experience a normal, unassisted vaginal birth;
- felt significantly more enabled and confident to care for themselves and their baby;
- had significantly better self-rated health;
- could name two or more measures to reduce cot death risk.

Children:

- were breastfed for longer;
- had improved cognitive development, particularly for children of mothers who were recorded as having psychosocial distress ante-natally;
- were more engaged with their mother.

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Mothers of infants and toddlers:

- tended to have a better experience of being a mother, particularly for mothers who were recorded as having psychosocial distress ante-natally and mothers who were born overseas;
- provided a home environment that was supportive of their child's development through improved verbal and emotional responsiveness, providing a more organised environment, providing developmentally appropriate play materials and greater parental involvement.

http://www.earlychildhoodconnect.edu.au/index.php?option=com_content&view=article&id=2&Itemid=112

12.8 Infant Massage

A key principle behind each of the aforementioned approaches is facilitation of the mother-infant relationship. This can also be achieved through activities that allow sensitive focus on the baby shared by both practitioner and parent. Baby massage is one technique that affords this opportunity. The professional practitioner can facilitate mother-infant bonding, feelings of affections and care, deepening understanding of the baby's behaviour, body language, and crying, and parental confidence and competence during a baby massage session.

<http://www.iaim.org.uk/>

12.9 Incredible Years

The Incredible Years® is a series of interlocking, evidence-based programmes for parents, children, and teachers, supported by over 30 years of research. The goal is to prevent and treat young children's behaviour problems and promote their social, emotional, and academic competence. The programmes are used worldwide in schools and mental health centres, and have been shown to work across cultures and socioeconomic groups. For the past 33 years, Professor Emeritus Carolyn Webster-Stratton and her colleagues at the University of Washington's Parenting Clinic have worked to develop and evaluate parent, teacher and child training programmes for families with children with conduct problems and ADHD. She has also evaluated prevention versions of the parent, teacher and child programmes with high-risk families. Scottish Government Early Years Task Force have recommended Incredible Years as an evidence-based enhanced specialist group-based parenting programme, which has been shown to be effective for secondary and tertiary prevention of behaviour problems, but not as yet for use in primary preventions. Incredible Years focuses on emotional and behavioural problems in under-threes, and has been shown to effectively reduce behavioural problems in children over three.

<http://incredibleyears.com/>

12.10 Summary

Effect sizes for early years prevention and intervention give evidence of the good sense of investing in early years approaches, in their review of reviews conclusions, Barlow *et al.* (2007, p. 22) argued for 'preferential investment in home visiting, attachment based and early parenting programmes' to have the greatest impacts with limited resources. However in order to apply such approaches and ensure their success in what Baggett *et al.* (2007) call the 'relatively brief window of infancy' (p. 301), robust criteria to identify risk are needed.

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Even where a strong menu of interventions and highly trained staff are available, it will be essential to foster practitioner and service capacity to engage and sustain contact with high-risk families. The literature identifies home visits, drop in visits, the ability to have parents talk about their aspirations for their babies as well as their own needs, and using their aspirations as the basis for screening and interventions as steps in this process of engagement. Strong and sensitive communication skills, well-educated and well-trained staff and inter-agency collaboration are all indicated.

13. Recommendations

This report recommends development of a progressive, proportionate, and integrated training regimen for NHSL Public Health Nurses/Health Visitors, Midwives, and Neonatal Nurses that works with and develops the strengths of parents and their infants to foster their innate aspirations for infant health, vitality, and learning, and develops their skills in affectively and psychologically attuned parenting to improve parent-infant bonding, attachment, and psychological health and well-being. Strengths-based principles proven effective for improving maternal and infant mental health, for example the Brazelton and Solihull teams, recruit resources for health and learning and open barriers between infant and adult for bonding, attachment, and development with sensitive, low-intensity and cost-effective interventions.

This report proposes a comprehensive system of IMH training to develop a local, integrated training and support structure to facilitate professional community between levels of expertise, enable *ad hoc* sharing of expertise, and personal professional development, to include the following features:

1. A common language referring to IMH concepts and knowledge shared between parents, medical professionals, and other service providers.
2. A universal e-learning module introducing core IMH concepts, integrated into service systems and accessible to all health, social care and education staff to support (1).
3. An established professional infrastructure of shared levels of expertise for both IMH intervention and training, allowing invested training to become sustained practice.
4. A common theoretical and conceptual foundation with progressively more advanced and skilled expertise for higher-tier practitioners.
5. Accountability for individual cases and actions, with mutual support within and between levels of expertise.
6. Facilitated communication channels and an accessible professional support structure to afford access to IMH expertise on an *ad hoc* basis that is unthreatening - this can be facilitated by generation of close working relations during locally-organised and led training sessions.
7. Highly skilled, observant professionals sensitive to the emotional expression and affective relations able to take both the child's and adult's perspective.
8. Time-friendly, relevant, non-trivial record-keeping across levels of expertise.
9. Integrated options with time allowance for CPD events, Early Years Collaborative, or similar professional enhancement and citizenship, including for mixed professional groups.
10. The building of an evidence map to show how interventions and preventions align to achieve IMH outcomes and evidence of what parenting behaviours make a difference.

Translated into action, this means:

1. A Tiered Training System for NHSL PHN/HV, Midwives, and Neonatal Nurses

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- a. Establish a professional training infrastructure based on levels of expertise for IMH intervention.
 - b. Invested training that is organised to become sustained practice.
 - c. A universal e-learning module introducing core IMH concepts, integrated into service systems and accessible to all health, social care and education staff.
 - d. Highly skilled, observant professionals sensitive to the emotional expression and affective relations able to take both the child's and adult's perspective.
2. Shared Understanding, Goals, and Language Across Levels and Agencies
- a. A common theoretical and conceptual foundation with progressively more advanced and skilled expertise for higher-tier practitioners.
 - b. A common language referring to IMH concepts and knowledge shared between parents, medical professionals, and other service providers.
 - c. Facilitated communication channels and an accessible professional support structure to afford access to IMH expertise on an *ad hoc* basis that is unthreatening - this can be facilitated by generation of close working relations during locally-organised and led training sessions.
3. Improved Accountability and Management
- a. Accountability for individual cases and actions, with mutual support within and between levels of expertise.
 - b. Time-friendly, relevant, non-trivial record-keeping across levels of expertise.
 - c. Integrated options with time allowance for CPD events, Early Years Collaborative, or similar professional enhancement and citizenship, including for mixed professional groups
 - d. The building of an evidence map to show how interventions and preventions align to achieve IMH outcomes and evidence of what parenting behaviours make a difference

A Tiered Training Framework

The Best Possible Start IMH Training Framework is therefore based on a four level model. As this report has shown, there are many approaches to fostering infant-maternal mental health available: this Framework embeds elements of the best evidenced approaches as well as those for which NHS Lanarkshire has already a strong track record of investment. The underpinning principle is to build on existing strengths at the same time as ensuring systems where staff are all prepared for the task through training at an appropriate level.

The Four Level Framework is underpinned by a Universal basic level. This Universal basic level, if offered to all those involved in work with children and families across health, education and social services, potentially provides the common understandings that will foster collaborative working and preventive approaches. All practitioners should be able to access this Universal basic level. It will also provide an entry to the four main levels of Best Possible Start IMH Training Framework for NHS Lanarkshire staff.

At a Universal IMH Level practitioners need to be able to recognise the basic socio-emotional needs of the infant, primary caregiver(s), and close family/friends, recognising the community in which they belong as an essentially important system (see the ecological model in the main report). They are also expected to support, best working practice by working with parental concerns, challenges and strains where they can to support the system around the baby as much as possible. At this level clear descriptions of key terms and what they mean for day-to-day practices are introduced.

The Informed IMH Practice Level 1 expands from this base to include more detailed knowledge of concerns, with an improved understanding of IMH needs and where they are challenged, with some skills including

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appropriate record-keeping to accommodate this. Many relevant topics are introduced, including CPD-level knowledge for existing practitioners. This level includes a handful of these elements: Promotion of IMH, Knowledge of clinical treatment/therapy, Social and Emotional Needs of Babies and Families, Attachment and Understanding Secure and Insecure Attachment, Attunement and Intersubjectivity, Parental Sensitivity, Infant-Caregiver Relationships, Infant Observation, Learning Patterns of Social and Emotional Regulation, Observation and Case Study Discussion, Building and Sustaining Relationships. Newly qualified staff should have such elements integrated IMH training into current training programmes and degree courses.

The Skilled IMH Practice Level 2 and Expertise IMH Practice Level 3 build on the introduction of concepts at previous levels with more specialist training, data gathering and support for staff working at preceding levels. At these levels more formal training schemes that expand over days, weeks, or months to give more comprehensive expertise in the areas above, in addition to the CPD training above. Including now Identification, supporting Intervention, building on skills and at Expertise IMH Practice Level 3 some light Practice in Clinical Treatment/Therapy. The Expertise IMH Practice Level 3 is a leadership level which carries training responsibilities.

The final level, Enhanced Expertise IMH Practice Level 4 is a highly specialist level where expert, doctoral level skills are required. This level of practice seeks and responds to referrals of complex cases. The enhanced expertise at this level feeds back through training to other levels of the IMH Training (eg *Infant Mental Health Course, NHSL, 2014*).

Outcomes

The recommended training framework for workforce development prioritises the achievement of the following outcomes:

1. Improved mother-infant emotional and psychological attunement and attachment.
2. Improved maternal confidence, emotional well-being, and mental health
3. Improved infant emotional well-being, social engagement, and learning.

Altogether, establishing this best possible start is known to lead to improved emotional, social, cognitive development and learning across childhood, reduction in incidence of psychopathology and greater scholastic and economic attainment in later life.

Attention to each of the identified features will support preventive approaches and allow early identification of infants and families at risk of poor mental health. It will expand system capacity through workforce development in order to:

- a) Integrate Infant Mental Health into all child and family service systems.
- b) Assure that mental health disorders in young children and their families are identified early.
- c) Expand system capacity and fidelity of implementation through workforce development.
- d) Assure that young children of highest risk receive comprehensive health and mental health services.
- e) Provide access to mental health consultation and support to early childhood education providers.
- f) Raise public and professional awareness about the importance of early social and emotional development.
- g) Develop strategies for assessing outcomes and programme evaluation.

(Adapted and expanded from Zeanah *et al.*, 2005)

14. Conclusions

We conclude on a basis of the combined evidence of the importance of infant mental health to future life outcomes that there is a preference for early preventive work, strong practitioner-parent relationships and the use of focused interventions. We have drawn out the key elements of education and training and applied them to a foundation of universal awareness training, complemented by four levels of training matched to the role demand for staff at different levels. We see the consistent application of a child- and family-centred training model populated by evidence-based content and approaches as the best hope for achievement of change in family outcomes. Having more professionals trained in IMH means a better system of care with an increased range of services and better outcomes for children and their families.

15. Infant Mental Health Training Framework

Fig. 4 Infant Mental Health Training Framework

Principles of a strengths based model for staff and families including continuing professional update, progression through the framework and continuity and collaboration across roles and disciplines

Level	Content	SUSTAINABLE NETWORKS		Approaches	Who
IMH specialist roles in psychotherapy/psychiatry					
ENHANCED PRACTICE ↓	Sharing of expertise CPD role	HIGH	RISK	Consultancy for wider staff	HIGHLY SPECIALISED PROFESSION BASED
	↙ ↘			↙ ↘	↙ ↘
↑ EXPERTISE IN PRACTICE ↓	HOLISTIC	LOW	RISK	↑ FNP MECSH	STAFF WITH LEAD OR SPECIALISED ROLES
	Intervention Prevention Leadership			MECSH ↓	↑ OPT IN FOR THIS LEVEL
↑ SKILLED PRACTICE ↓	Risk Awareness	LOW	RISK	INTENSIVE INFANT OBSERVATION PROGRAMME	↓ ALL TEAM LEADERS
	Strengths based Focus parental aspirations Culturally sensitive			NBO NBAS	↑ ALL NHSL NURSING STAFF
↑ INFORMED PRACTICE	Care support Companionship Containment Risk awareness	LOW	RISK	SOLIHULL INFANT-MOTHER	EY CENTRE BASED & HOME VISITING & SW
	Relational Approaches			GROUP/CENTRE SOLIHULL INFANT-MOTHER	↑ ALL NURSING STAFF ACROSS NHSL
UNIVERSAL TRAINING FOR UNIVERSAL SERVICES					
All staff have GIRFEC, HALL 4, EYC		IT	IT	& Child Protection training updated	

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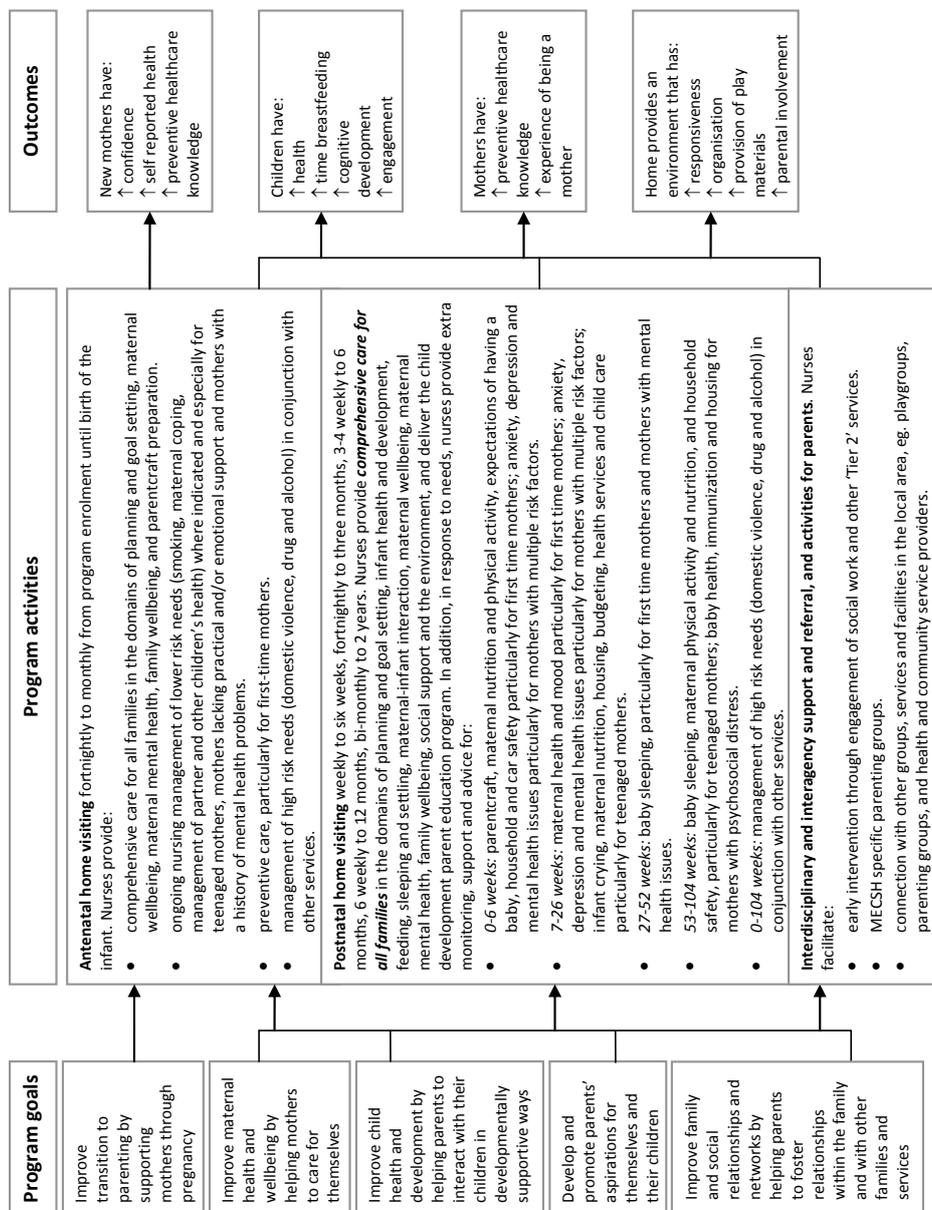
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Appendix 1. The MECSH Approach: Programme Summary

MECSH Program Summary



Appendix 2. A Menu of IMH Interventions and Training Offered

A Menu of IMH Interventions and Training Offered

Features of interventions ↗ Type of intervention ↘	Mother-Infant dyad	Home based or including home visits	Group or centre based	Relational including father in early parenting	Containment	Reciprocity	Behaviour focus	Emotion	Engagement	Attachment based	Attention to mother's mental health
Solihull											
Ten week Infant Observation programme											
Brazelton (NBO and NBAS)											
Mellow Parenting											
Triple P											
Incredible Years											
Family-Nurse Partnership											
MECSH											
Interactive online staff forum											

Note: Training in policy areas such as Hall 4, GIRFEC, Child Protection training and the 27-30 month check provide context for more specific approaches.

