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Tackling the roots of disadvantage

Conception to age 2 - the age of opportunity



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Conception to age 2 – the age of opportunity

Addendum to the Government's vision for the Foundation Years:
'Supporting Families in the Foundation Years'

Contents of 2nd Edition (June 2013)

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John Spiers

It was John Spiers (Founder and former CEO of Bestinvest) who made possible the WAVE Trust work on both the Special Interest Group study and the Age of Opportunity report, by funding our labour and overhead costs on the year-long project.

Mere words are inadequate to express our gratitude for this wonderful support of our work to bring the importance of the 0-2 age group to the notice of policy-makers and practitioners.

Erach and Roshan Sadri Foundation

WAVE Trust is also extremely grateful to the Erach and Roshan Sadri Foundation for funding the printing costs of this report.

Erach and Roshan were special and extraordinary people who loved life, took everything in their stride and had a true pioneering spirit. Shortly after their marriage, they went to live in Afghanistan where Roshan taught in an international school in Kabul and Erach flew Dakotas – ‘old tin buckets’ – over some of the most dangerous terrains in the world.

Their Foundation was founded in August 2005, a year after the untimely death of Roshan, to fulfil her request to use her legacy for charitable purposes. The objects of the Charity are to provide financial assistance for education and welfare purposes; relieving poverty by alleviating homelessness; and assisting members of the Zoroastrian religious faith.

Foreword and introduction

Supporting Families in the Foundation Years stressed the vital importance of early life, both in its own right and for promoting future life chances.

'The Government's aim is to put in place a coherent framework of services for families, from pregnancy through to age five, which focus on promoting children's development and help with all aspects of family life'

The 0-2 Special Interest Group was set up as a time-limited task and finish group of expert practitioners supported by officials from the Departments for Education and Health. We explored and considered how best to promote effective implementation of the principles set out in *Supporting Families*, with specific emphasis on children under the age of 2 and their parents and families. The focus of our report is the period from conception to the child's second birthday. As well as drawing on the knowledge and experience of the Group, a major part of the work was drawing together external knowledge and research evidence of experience and investment in the earliest months of life.

This report highlights issues for 0-2s for the attention of two main groups: service commissioners and decision-makers. For these two key groups influencing services for young children and families, significant messages about effective parenting and evidenced practice with 0-2s are set out in supporting chapters 1 and 3. Other, more specific, messages are summarised in supporting chapter 2, which aims to influence those responsible for developing the future workforce to intervene early and effectively in families who have (or are expecting) really young children, and who need help.

The summary conclusions and recommendations provide an overview of our work. The commissioning framework aims to help commissioners in their thinking about how best to improve child development outcomes through better support in very early childhood.

The Special Interest Group was supported by eight separate sub-groups, seven of which produced reports on the sphere of their particular interest and task. These individual reports fed into this report; some are attached as appendices because they contain so much detailed knowledge and information. We have also called upon findings from other commissioned work and wider research.

While the views have been developed with input from DfE officials, they do not represent a summary of current government policy.

We are indebted to many experts and professionals who made this report possible, in particular the members of the eight sub-groups who gave so generously of their time over a period of many months: Cheryll Adams, Robin Balbernie, Christine Bidmead, Mitch Blair, Pat Branigan, Harry Burns, Chris Cuthbert, Sarah Darton, Hazel Douglas, Vivette Glover, Eileen Hayes, Amanda Jones, June O'Sullivan, Pamela Park, Gwynne Rayns, Sue Robb, Catherine Rushforth, P.O. Svanberg, and Ita Walsh.

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¹ From August 2012 Head of Programmes, Children & Adults at Local Government Association



I am delighted to be given the opportunity to write a foreword for this report, which I believe represents a very important step in achieving earlier intervention for families who need the most support.

As our understanding of the brain development of babies improves, so too must our policies, to reflect this critically important period of life.

If every single child is to benefit from the positive changes we are making to the early child care and education settings, then every single child has to receive ‘good enough’ parenting. The ‘Age of opportunity’ report provides many of those evidence-based answers as to how we can practically implement support for women and families, and promote a generation of improved infant mental health.

Elizabeth Truss MP
Parliamentary Under-Secretary of State for Education and Childcare



'We know the importance of strong loving relationships and also the power of early intervention for families in the earliest months and years of life. That is why we are investing in a substantial increase in health visitors and in the Family Nurse Partnership for the most vulnerable young parents.

The Age of Opportunity makes a further contribution to the challenges to all of us to improve the physical and mental health of our youngest children and I will be asking the independent Children and Young People's Health Outcomes Forum to study its recommendations carefully.'

Dr Daniel Poulter MP
Parliamentary Under-Secretary of State for Health Services

Executive summary

1. A wide range of research now shows that conception to age 2 is a crucial phase of human development and is the time when focused attention can reap great dividends for society.
2. How we treat 0-2 year-olds shapes their lives – and ultimately our society. Loving, secure and reliable relationships with parents, together with the quality of the home learning environment, foster a child's:
 - emotional wellbeing (sometimes referred to as infant mental health);
 - capacity to form and maintain positive relationships with others;
 - brain development (c.80% of brain cell development takes place by age 3);
 - language development, and
 - ability to learn (the 'soft' skills that equip a child to relate to others, thrive and then go on to learn the 'hard' cognitive skills needed to succeed academically are embedded in the earliest months of life. Poor support, particularly a failure to prevent abuse or neglect, at this stage can have a lifelong adverse impact on outcomes).
3. Because we now understand the importance of the 0-2 period in creating solid psychological and neurological foundations to optimise lifelong social, emotional and physical health, and educational and economic achievement, we believe policy emphasis needs to shift to reflect, in particular, that:
 - the nature of day-to-day relationship between the child and primary care giver is crucial;
 - parental mental health (before and after birth) is a key determinant of the quality of that relationship, and of the ability to provide a number of other conditions for foetal and child development; it is also a key factor in safeguarding children from abuse and neglect;
 - policy debates have not given enough emphasis to the impact of multiple risk factors on the likelihood of really poor outcomes for children. These factors impact both practical parenting and levels of secure attachment; *and to take account of*:
 - the numerous evidence-based approaches already in use, which support either improved early relationships or perinatal mental health.
4. Pregnancy is a particularly important period during which the physical and mental wellbeing of the mother can have lifelong impacts on the child. For example, during pregnancy, such factors as **maternal stress**, **diet** and **alcohol** or **drug misuse** can place a child's future development at risk.
5. In the first few months following birth, **adequate nutrition** is vital to a child's physical and intellectual development. Evidence cited in supporting chapter 1 suggests there can be particular **benefit from breastfeeding**. Good hygiene, home safety and immunisation are also important health promotion factors.
6. There is a clear case for prioritising earlier identification of need and provision of appropriate support for children in their families during this phase, and we have identified a number of helpful approaches, including:
 - Taking into consideration the role and methods of social and emotional assessment when revising health visitor and midwifery training;

- Practice guidance for early years' practitioners, revisions to the National Professional Qualification in Integrated Centre Leadership (NPQICL) and additional factors to consider in developing the response to the Nutbrown review;
 - Use by commissioners of best practice approaches;
 - Use of professional reflective supervision, including practice to ensure self-awareness and to ensure the supervisee has emotional intelligence.
7. Such studies as the Californian Adverse Childhood Experiences (ACE) Study show that young children having a difficult start to their lives can lead to unacceptably high and lifelong, personal, social and economic costs. Members of the 0-2 Group strongly emphasise that **it is crucial to intervene early to promote infant mental health and to reduce the risk of children's development being hampered by abuse, neglect or other early parent-child relationship difficulties, thereby reducing the risk of longer term poor outcomes which incur higher longer term costs.**

We need to do more to identify and address needs of those most at risk of poor outcomes

8. High quality assessment, early years' intervention and support are vital to giving children the best start in life and to tackling the underlying causes of ill health and poor wellbeing throughout people's lives.
9. The **most effective interventions are often those that are preventive instead of reactive** – preventive interventions address risk factors likely to result in future problems for particular families, without waiting for those problems to emerge. Such interventions are also less stigmatising, and can build on both universal screening and provision from midwives and health visitors.
10. Effective action to identify and address the needs of those expectant parents and very young children who are most at risk of poor outcomes can be taken through the **full delivery of the Healthy Child Programme and targeted work through children's centres, and by ensuring that midwives and health visitors are both resourced and trained to provide a level of support** that promotes sensitively responsive, loving, nurturing parenting and a good two-way relationship and communication between parents and children **to promote sound social and emotional development.**

The importance of promoting infant mental health and assessing young children's social and emotional development

11. Health visitors, midwives and other professionals who work with children and their families are key to better health in the foundation years. Health visitors' unique skills in assessing health needs at a population level, at a community level, and at individual child and family level, make them central players in ensuring children develop well and parents and families live happy and healthy lives.
12. Chapter 2 shows the importance of effective assessments of young children's social and emotional development. It reinforces the need to continue to reflect what is known about risk factors and times of development, so that health visitors can build on and develop the ways in which their practice:

- identifies risk factors in families as quickly as possible;
 - promotes infant mental health (emotional wellbeing) ;
 - assesses young children’s social and emotional development, so that those who appear to be developing sub-optimal attachments can be identified very early on, and the family’s potential need for targeted, evidence-based interventions is considered and addressed; and
 - supports parental psychological health and parenting capacity.
13. The group set out a range of factors which the Department of Health can consider when undertaking any future revision of guidance for health visitors and midwives on developmental reviews as part of the Healthy Child Programme.

The importance of high quality early years’ settings

14. Chapter 2 reviews how to get the most out of universal services to support effective early years’ intervention. Research outlined indicates that the quality of early years’ services and the settings that younger children and their families experience can have a significant impact on their outcomes. The quality of settings very much depends on the quality of training and development support available to, and undertaken by, those staff working in them. The chapter proposes priorities for training and development arrangements concerning workforce core skills, knowledge and models of effective supervision, to help inform how the Department for Education might respond to similar themes raised in the Nutbrown review.

The economic case for investing in the early years

15. Chapter 3 demonstrates that evidence-based and well implemented **preventive services** and early intervention in the foundation years **are likely to do more to reduce abuse and neglect than reactive services** and (in the long run) **deliver economic and social benefits**. Such services also have an important role in making sure all children reach school ready to learn and able to achieve to the best of their abilities.
16. A review was conducted of a wide range of published UK and international studies into the economic case for investment in the early years. The consensus from even the most cautious and circumspect non-UK randomised control trials suggested **returns on investment on well-designed early years’ interventions significantly exceed both their costs and stock market returns**, with rates of return ranging from \$1.26 to \$17.92 for every \$1 invested. UK studies showed a similar pattern of results: 9 Social Return on Investment studies showed returns of between £1.37 and £9.20 for every £1 invested.
17. Because of poor design or unsuccessful experiment, a small minority of both UK and non-UK early years’ programmes did not deliver a return.
18. In an econometric analysis, Nobel Laureate Professor James Heckman argues that structures (including knowledge and skills) are based on foundations and the stronger the foundations the more solid the structure, with the **highest returns at age 0-3**. He also points out that in both promoting **economic efficiency and reducing lifetime inequality, early years’ interventions provide policy makers with a rare ability to spend money in a way which simultaneously delivers substantial social and economic benefits**.

19. Scandinavian countries, such as Sweden and Norway, which have adopted whole country approaches to investment in early years' prevention, have achieved not only **financial returns but better health for the whole population**. The benefits span lower infant mortality through to reduced heart, liver and lung disease in middle-age.
20. While the Healthy Child Programme (HCP) and the commitment to provide early education for all disadvantaged 2-year-olds give the UK an existing platform for universal preventive services, there are **substantial gaps in early years' services**. Implementation of the HCP is patchy and there is evidence we are not getting early years' intervention right, as illustrated by numerous cases of child maltreatment, wide gaps in school outcomes, poor scores in international comparisons of child well-being, high youth crime and poor health outcomes, making a strong case for improving our investment in priority areas.
21. One step in this direction has already been achieved by the work of the Under 2s Special Interest Group: as part of their *A Better Start* initiative, **Big Lottery Fund (BIG) is to invest £165m in prevention-focused early years' intervention** projects in up to five local areas in England, over the coming decade. During the design and set-up of *A Better Start* the main Under 2s SIG **recommendations were discussed in depth with BIG, and played a significant part in the outline shape of the core part of their initiative** which is intended to promote babies' and children's social and emotional development, language development and nutrition.
22. Historically, there has been a dearth of really strong evaluation evidence for early years' interventions in the UK. A major step forward will come with BIG's *A Better Start* initiative, which has set aside **a significant sum for evaluation of the success of the 3-5 selected local areas**, both in improving outcomes for babies and children and in terms of their cost-benefit performance.
23. The key recommendations of the study follow in the next section. In addition, and building on other work on-going in Government, we have developed a framework to provide appropriate support to, and recommendations for, commissioners responsible for strategy, or early years, at local level (see Local commissioning framework, page 50).

Recommendations

It is suggested that the following actions could be taken by the noted people or organisations, as ways of building on and improving the promotion of infant mental health – and thereby reducing the long-term implications and costs arising from young children not developing secure attachment. The recommendations are aimed at Government departments and national organisations and structures. As noted above, a separate framework is set out for commissioners to use when thinking through the issues to consider in order to provide better support in very early childhood (see pages 50-68).

When responding to the final report from the Nutbrown Review, Department for Education and Department of Health are asked to consider:

- i Building modules on child development in pregnancy and early infancy into introductory and in-service training courses to help all practitioners develop awareness of how the first two years of life are critical to a child's development.
- ii Building on and developing in-service training courses to help all practitioners develop awareness of the key factors that promote – and those that can jeopardise – the positive development of young children, and to understand that behaviour is a form of communication. The importance of considering the emotional, social and health needs of the whole family is key, including the importance of the couple relationship, because these form the context within which the young child is developing. Ideally, this awareness should include:
 - key factors during pregnancy
 - key factors during the first years of life
 - those factors that promote or can jeopardise infant mental health (or emotional wellbeing) alongside other aspects of development,
 and the promotion of reflective video feedback or Video Interactive Guidance¹ as a valuable tool for training both parents and professionals.
- iii Encouraging early years' settings providing quality care for children under age 2 to have at least one member of staff with additional competence in infant mental health.
- iv Setting an expectation that those working in and/or managing early years' settings should engage in professional reflective supervision which supports them in dealing with the emotionally demanding aspects of their work and building positive, non-judgemental relationships with families. This should also help broaden practitioners' understanding of the need to demonstrate emotional intelligence in establishing and maintaining meaningful relationships with infants, parents and professional colleagues, even if they themselves come from abusive or neglectful backgrounds.

The Departments for Education and Health are also asked to consider:

- v Building on the existing Foundation Years and 4children websites (the EY strategic partner), to collate existing guidance, research and examples of effective and best practice in ways that are more practicable and accessible for practitioners. This would take account of the recent publication of the revised Early Years Foundation Stage Framework and the Nutbrown report on qualifications for those working in early

education and childcare, and the extension of free early education to 40% of two-year-old children. Consult EY sector as part of future reviews to ensure appropriate emphasis is given to the promotion of infant mental health in any further guidance.

- vi Consider explicit use of social and emotional assessments when taking forward the commitment in *Families in the Foundation Years* to explore options for the integrated review at 2 to 2.5 years of age. Also to continue to consider the timing and frequency of assessments to follow closely the current NICE guidelines with:
 - potential modifications around the timing of the assessment immediately post-partum and the 2-2.5 year integrated review in order to increase validity of the assessment processes.
 - a universal assessment at 3-4 months to assess the quality of the parent/infant interaction and identify need for additional support to promote parental sensitive responsiveness.
 - an additional assessment at 12-15 months to assess attachment behaviour, but offered only to Universal Plus or Universal Partnership Plus.
- vii As part of the emerging commissioning frameworks, identifying key LA officers and GPs who are willing to act as champions for taking early action to promote infant mental health and address factors that can jeopardise young children’s development – to help provide models of good practice for the rest of the field.
- viii Ask Ofsted and Care Quality Commission to consider whether their inspection frameworks on children’s care and health settings are working to promote infant mental health sufficiently.

The Department for Education is also asked to consider:

- ix Opportunities to influence planning and content for any future parenting publicity campaign work, in which case we ask that the Department includes messages about the importance of promoting positive parent/child relationships during infancy.

The Department of Health is also asked to:

- x Take account of the detailed recommendations in chapter 2, on social and emotional assessments, when revising guidance for health visitors on developmental reviews, as part of the Healthy Child Programme.
- xi Include in any guidance to Health and Wellbeing Boards clear information about the importance of promoting infant mental health and addressing factors that can jeopardise the positive development of babies and young children.
- xii Consider the scope for on-going initial health visitor training to be developed so that it includes high quality modules on attachment, specialist pathways, parental and infant mental health, drug and alcohol use, domestic violence, relationships and links to pregnancy, birth and beyond, as core parts of the standardised curriculum.

The Group findings are relevant to a number of developing policies, particularly:

- xiii A key priority is full implementation of the Healthy Child Programme which, over time, would give us a world class programme to reduce the need for additional support for young children and families.
- xiv In respect of The New Children and Young People’s Health Outcomes Strategy, we would like to see:
- Very robust early measures, including social and emotional health, and maternal mental health;
 - The development of the new integrated review at 2-2.5 years;
 - New input and revisions to the training programmes for health visitors and midwives;
 - Trials of ICAN parenting classes;
 - NHS Information Service for Parents;
 - The revised National Professional Qualification for children’s centre leaders;
 - The Government’s response to the Nutbrown report;
 - Implementation of the new commitment to provide free early education for disadvantaged 2 year olds.
- xv We strongly endorse the Children and Young People’s Health Outcomes Forum recommendation that the Department of Health add a new outcome measure (the proportion of parents where parent-child interaction promotes secure attachment in children aged 0-2) to the Public Health Outcomes framework, and suggest our proposed 3-4 month universal assessment would fulfil the recommendation.

Supporting chapter 1

The importance of child development from conception to age 2

1. This chapter summarises some of the research evidence about factors that can help to promote – or hinder – children’s development before they are born, and then during the first two years of their lives. It will be demonstrated that child development in the earliest years of life is crucial and fundamental to later outcomes and life chances. In particular, evidence is summarised suggesting that the promotion of very young children’s emotional wellbeing (sometimes referred to as promoting infant mental health) can be an important foundation for their wider and longer term development.
2. Supporting chapter 2 explains that whilst these messages are fully reflected in the Healthy Child Programme (HCP), the full benefits of this work are reliant on complete implementation of the programme. Both the HCP and *Supporting Families in the Foundation Years* are clear that getting the start right is most likely to lead to better physical, social, emotional and educational outcomes – from children being school ready towards the end of the Early Years Foundation Stage through to their having improved life chances in the longer term.
3. In supporting chapter 3, we summarise evidence which suggests that the potential long term benefits of providing appropriate support to very young children who are least likely to achieve a good level of development can be high compared with the costs of delivering these interventions.

Pregnancy

Factors that encourage positive development during pregnancy

4. Evidence summarised below suggests that the best outcomes for both mother and baby, in the period after birth, are most probable in circumstances where mothers are:
 - enjoying a well-balanced diet
 - not experiencing stress or anxiety
 - in a supportive relationship – and not experiencing domestic violence
 - not smoking, consuming alcohol or misusing illegal substances
 - not in poor physical, mental or emotional health
 - not socio-economically disadvantaged
 - at least 20 years old
 - have a supportive birthing assistant at the birth itself²

Factors that can hamper development during pregnancy

Some causes and longer term effects of low birth weight

5. The Marmot Report on health inequalities³ cited evidence that development begins before birth and that the health of a baby is crucially affected by the health and well-being of the mother^{4,5}. **Low birth weight** in particular is associated with poorer long-term health and educational outcomes⁶.

6. Barker has shown that when human foetuses have to adapt to a limited supply of nutrients, they permanently change their structure and metabolism. These ‘programmed’ changes may be the origins of a number of diseases in later life, including coronary heart disease and the related disorders of stroke, diabetes and hypertension⁷. Evidence suggests that maternal health is related to socioeconomic status⁸, and that disadvantaged mothers are more likely to have babies of low birth weight⁹. Smoking, maternal stress, and a relative lack of pre-natal health care, maternal nutrition and maternal education have also been reported to be associated with low birth weight¹⁰.
7. In more than 50 published studies, Eriksson et al report that raised blood pressure in later life has been found to be associated with low birth weight and that this is due to retarded foetal growth rather than premature birth¹¹. Barker suggests that foetal under-nutrition in middle to late gestation can result in disproportionate foetal growth, later high blood pressure and coronary heart disease¹².
8. Low birth weight is also associated with reduced child development^{13,14} and educational attainment¹⁵. For example, using the British National Child Development Survey, Currie and Hyson¹⁶ found that children weighing less than 2,500 grams were more than 25% less likely than others to achieve what were then O-levels in English and Maths, and were less likely to be employed at age 33.
9. There can also be long-term difficulties associated with very high birth weight. Oken and Gillman¹⁷ report that babies born at the high end of the weight spectrum have higher Body Mass Indices as adults and are at higher risk for obesity and type 2 diabetes.

Smoking during pregnancy

10. Smoking during pregnancy is associated with a range of serious infant health problems, including lower birth weight (which itself is associated with poorer long term outcomes, as summarised above), and perinatal mortality¹⁸. In addition, smoking during pregnancy has been associated with poor child behaviour at age 5¹⁹.
11. Compared with other mothers, deprived mothers are more likely to smoke. However, babies from all backgrounds are at risk from problems that can arise if their mothers smoke during pregnancy.

Drug misuse in pregnancy

12. Maternal misuse of drugs during pregnancy increases the risk of low birth weight, premature delivery, perinatal mortality and cot death²⁰. The risks and dangers depend on the pharmacological make-up of the drug, the gestation of pregnancy and the route, amount and duration of drug misuse.
13. Structural damage to the foetus is most likely during 4-12 weeks of gestation; drugs taken later can affect growth or cause intoxication or withdrawal syndromes²¹.

Drinking alcohol during pregnancy

14. A number of risks are associated with drinking alcohol during pregnancy²², including:
 - Increased risk of miscarriage
 - Risk of Foetal Alcohol Syndrome (FAS) whose features include: growth deficiency for height and weight, a distinct pattern of facial features and physical characteristics and central nervous system dysfunction

- Risk of Foetal Alcohol Spectrum Disorders (FASD) – which do not show the full characteristics of Foetal Alcohol Syndrome and develop at lower levels of drinking
 - Increased risk of learning disability (without either of the above conditions)
15. Internationally, there is wide agreement on the diagnostic criteria for the full Foetal Alcohol Syndrome, but not on diagnostic criteria for FASD. A National Perinatal Epidemiology Unit (NPEU) review of evidence²³ on the effects of prenatal alcohol exposure discussed the difficulties of identifying accurately children with Foetal Alcohol Syndrome and alcohol-related neurodevelopmental disorders, and the resulting difficulties in estimating prevalence. The review considered the risks of foetal exposure to low to moderate alcohol consumption and to binge drinking during pregnancy. It found no consistent evidence of adverse effects from low-to-moderate prenatal alcohol consumption, although it was noted that the evidence base is limited.
16. Research by Abel²⁴ in USA suggests that while most women who drink heavily during pregnancy give birth to healthy babies, 4 per cent of them have babies with FASD. Prenatal alcohol exposure has also been associated with increased risk of conduct disorder in adolescence²⁵.

Maternal depression and stress during pregnancy

17. The emotional state of the mother during pregnancy – in combination with smoking, and misuse of alcohol and drugs while pregnant – has been reported to be associated with the child's later development of antisocial behaviour²⁶. For example, antenatal anxiety at 32 weeks' gestation has been linked to behavioural and emotional problems in the child at age 4 (even after a range of controls including postnatal anxiety)^{27,28} – compared to other children, those of mothers in the top 15% for anxiety were at double the risk for emotional or behavioural problems, including ADHD and conduct disorder. A factor potentially related to stress during pregnancy is that having a baby or experiencing a miscarriage can put extreme pressure on relationships²⁹.

Domestic violence

18. A number of studies suggest there can be an increased incidence of domestic violence during or shortly following pregnancy. For example, a survey of 1,207 women attending GP surgeries in Hackney found that pregnancy in the past year was associated with an increased risk of current violence³⁰.
19. Overall, it is important that those providing services to pregnant women are aware of potential risks to mothers' and babies' welfare and development, and identify where these risks are heightened. Some of the implications for service commissioning and practice are explored in Chapter 2 of this report.

Positive development

Factors that encourage positive development from birth to age 2

Overview

20. Evidence is clear that after a child has been born, physical health is promoted through good nutrition (breastfeeding is a particularly important factor) and immunisation, and that physical and emotional health are interlinked and interdependent. For very young children, secure relationships (i.e. parenting which initially is highly sensitive and responsive to the baby's signals and cues) promote emotional health (sometimes referred

to as positive infant mental health) and have a direct effect on later emotional, social and physical health, both in childhood and in the longer term. Secure relationships also have effects on cognitive development, language development and other learning.

21. Good quality relationships and secure attachment enable a growing brain to become socially efficient, so providing a basis for future self-control and cognitive development. Much of the baby's environment – from the baby's point of view – consists of relationships with his or her parents or carers. The quality of this environment influences the development of the brain and social behaviours in ways that form a foundation for the child's future experiences and his or her responses to them.
22. Evidence summarised below suggests that the quality of the parent/child relationship flows from the way in which parents are looking after, caring for and responding to their young child. As children become 3 years and older, the Effective Provision of Pre-School Education (EPPE) study demonstrates that those who experience a good early years home learning environment, a good quality pre-school and a more effective primary school are more likely to show improved cognitive and social outcomes compared with children who have two, one or none of these experiences^{31,32}.
23. In EPPE, the home learning environment was measured by the extent to which parents take part in learning activities with their children – including reading to them, playing with letters and numbers, taking them to the library, painting and drawing, teaching them nursery rhymes and songs, taking them on visits, and arranging for children to play with their friends at home^{33,34,35}. While these measures were devised for children aged three and over, other evidence (summarised later in this chapter) relating to language development demonstrates that a good home learning environment is important for children who are younger than this – as part of parents' overall care for their very young children.

Breastfeeding and nutrition

24. Optimal infant nutrition, especially breastfeeding, is a protective factor for the health of babies and mothers. It increases children's chances of leading a future healthy life. For both the mother and child, breastfeeding can reduce such potential health risks as gastroenteritis, respiratory disease, and obesity in later childhood^{36,37,38}.
25. The association between breastfeeding and child cognitive development in term and preterm children has been researched by analysing data on children from the Millennium Cohort Study. Children were grouped according to breastfeeding duration and British Ability Scales tests were administered when they were 5 years old. After adjusting for other variables (e.g. smoking, social class, maternal education), there was a significant difference between children who were breastfed and those who were never breastfed. Overall, breastfed children were one to six months ahead of those who were never breastfed³⁹.

Immunisation

26. There is a clear public health case for the Healthy Child Programme's recommended immunisations, and this underpins NICE's 2009 guidance entitled *Reducing differences in the uptake of immunisations (including targeted vaccines) among children and young people aged under 19 years*⁴⁰. The guidance cites evidence that differences in uptake persist and are associated with a range of social, demographic, maternal- and infant-

related factors. In particular, the guidance says that the following groups of children and young people are at risk of not being fully immunised:

- a. those who have missed previous vaccinations (whether as a result of parental choice or otherwise)
- b. looked after children
- c. those with physical or learning disabilities
- d. children of teenage or lone parents
- e. those not registered with a GP
- f. younger children from large families
- g. children who are hospitalised or who have a chronic illness
- h. those from some minority ethnic groups
- i. those from non-English speaking families
- j. vulnerable children, such as those whose families are travellers, asylum seekers or homeless.

27. The guidance also notes there are some groups of children who are less likely than others to have received certain vaccines, even though they have had some.

The importance of parenting and the parent-child relationship

28. Evidence suggests that parenting behaviour and the quality of the parent-child relationship are strongly associated with children's outcomes. For example, loving, authoritative and responsive parenting is important for building resilience and preventing children developing behaviour problems^{41,42,43,44}.

29. Effective loving and authoritative parenting gives children confidence, a sense of well-being and self worth. It also stimulates brain development and the capacity to learn. Parents who develop 'open, participative communication, problem-centred coping, non-punitive patterns of parenting and flexibility' tend to manage stress well and help their families to do the same⁴⁵.

30. In contrast, harsh, negative or inconsistent discipline, lack of emotional warmth or supervision and parental conflict all increase the risk of emotional and behavioural problems that can lead to anti-social behaviour, substance misuse and crime⁴⁶.

31. Higher levels of maternal depression are associated with such adverse outcomes in infancy and early childhood as language and cognitive deficits and behavioural problems^{47,48,49}. Maternal depression can diminish children's wellbeing, partly as a result of less nurturing and less engaged parenting (e.g. more use of harsher disciplinary practices, less play, less eye contact and less time reading). This has been linked with greater behavioural problems among children such as aggression, acting out, withdrawal and anxiety. It is also suggested that antenatal maternal depression is associated with an increased risk of offspring being subjected to childhood maltreatment. The association between antenatal depression and offspring psychopathology is due only to the high prevalence of depression and conduct disorder in children exposed to both antenatal depression and childhood maltreatment – not in those with either one or the other exposure⁵⁰.

The importance of the relationship between parents

32. Parenting is about fathers or other co-parents (such as partners who are not the child's father and other care givers such as grandparents) as well as mothers. It is therefore

important to look beyond those studies that focus only on the relationship between mothers and their young children, because these do not cover the whole picture. For example, the strength of the relationship between parents, as well as relationships between children and their parents, can have a significant impact on young children's development.

33. A review of evidence⁵¹ suggests that children raised by parents reporting a positive relationship quality and satisfaction tend to have high levels of wellbeing. Intense destructive conflict between parents has been shown to be more detrimental to children than the event of separation itself. A survey of school children found that family conflict had the strongest association with child unhappiness, and simple measures of how families were getting along were able to explain 20% of the variation in children's subjective well-being⁵².
34. Studies also identify a number of protective factors that can minimise the effects of children's adjustment to family breakdown. These include competent and warm parenting, parents' good mental health, low parental conflict, cooperative parenting post separation and social support⁵³.
35. Having a baby, experiencing a miscarriage, juggling the demands of work and childcare, ill health and money worries can put extreme pressure on relationships⁵⁴. Other factors that heighten the risk of relationship breakdown include parents being on a low income (especially if they are not married), couples where either or both partners have been married before or where either of them had childhood experience of parental divorce, and where couples marry at a relatively young age. It has also been found that parents of disabled children are at greater risk of relationship problems and divorce⁵⁵.

Three interlinked key areas of young children's development – brain, attachment and language

36. The brain is developing rapidly during the first few years of a child's life. Neurological research indicates that neurons and the connections between them change in response to external signals, enabling the brain to respond to new experiences and thus develop further^{56,57,58}. The developing brain of the baby adapts itself to the quality of the relationship with parents and the home learning environment, creating neural circuits that mirror his/her experiences^{59,60,61,62,63}.
37. The care-giving environment during the early years is also fundamental to children's development of secure emotional attachment. Bowlby⁶⁴ described how infants become securely attached to adults who are consistently sensitive and loving and predictable in social interactions with them. With the security of knowing that the primary caregiver is emotionally available, the child grows in confidence to explore the surrounding world, including the learning opportunities of nursery and school.
38. Ainsworth et al⁶⁵ reported that infants of mothers demonstrating higher levels of sensitivity were more likely to show secure attachment behaviour when a year old. High sensitivity was found to be associated with more acceptance, cooperation, and accessibility in mothers' interactions with their infants.
39. Some (but certainly not all) of the risk factors known to affect adversely the parent-baby relationship are: such problems intrinsic to the baby as low birth weight or disabilities; a

parent who lacks the ability to attune sensitively to the baby’s needs; a parent who does not interact with or who maltreats the infant; one or both parents struggling with a mental health or addiction problem, or with a background of abuse, neglect or loss in their own childhood; parents with inadequate income or sub-standard housing; family dysfunction and/or experiencing domestic violence; or being a single teenage mother without support^{66,67,68,69,70,71}.

40. Barlow and Svanberg⁷² cite a wealth of international research evidence^{73,74,75,76,77,78} that approximately 35-40% of all parent-infant attachments are sub-optimal.
41. Fearon et al⁷⁹ undertook a rigorous meta-analysis of over 60 studies (most of which were longitudinal) that had looked at associations between attachment and behaviour. Overall they concluded that:
 - a. attachment that is not secure in infancy – particularly for boys – is associated with externalising behaviour problems (e.g. aggression) later in childhood;
 - b. the association was found to be slightly higher for those with disorganised attachment – various studies following up infants with disorganised attachment have found elevated risks of aggressive behaviours, mental disorders, school behaviour problems and other psychopathologies^{80,81,82,83};
 - c. the studies included in Fearon et al’s analysis were judged to demonstrate associations between sub-optimal attachment and externalising behaviour problems, not causation;
 - d. socio-economic status did not strongly affect the link, suggesting that higher income is not protective if a child does not have secure attachment;
 - e. the association did not wash out over time – indeed there were indications it grew stronger;
 - f. the more rigorous and impartial the method used in a study (e.g. observed rather than reported behaviour), the stronger the association seemed to be.
42. There are also research findings indicating that the circumstances in which disorganised attachment is more likely to arise are also circumstances in which children are more likely to develop later difficulties. For example disorganised attachment is more likely to arise where:
 - a. parents have serious affective disorders, including depression⁸⁴ - and it is reported that the children of mothers with mental health issues are twice as likely to experience a childhood psychiatric disorder^{85,86,87};
 - b. parents are maltreating their children⁸⁸. It is reported that around 80 per cent of maltreated infants have disorganised attachment⁸⁹ – and there is considerable evidence of the long-term effects of maltreatment, summarised later in this Chapter. However, by no means have all children with disorganised attachment been maltreated;
 - c. parents are involved in domestic violence⁹⁰ - it is reported that around 25% of children witnessing domestic violence develop serious social and behavioural problems⁹¹;
 - d. parents are dependent on alcohol⁹² or are heavily misusing hard drugs⁹³. There is evidence that there is heightened risk of emotional unavailability and/or abuse and neglect in these circumstances^{94,95,96}.

43. Each circumstance cited above is an example of factors in families' lives that can impair the quality of the parent-child relationship. It can be seen from these examples that where there are difficulties in the parent-child relationship, it is more likely there will be attachment difficulties and poorer future life chances. It is where there is abuse or neglect that there is the greatest probability of poor outcomes for the child.
44. Good quality relationships and secure attachment enable a growing brain to become efficient and so provide a basis for future self-control and cognitive development, whereas a brain developing in the context of maltreatment will carry into later years what were once necessary responses to a hostile environment. A paper from Harvard University's National Scientific Council on the Developing Child⁹⁷ explains that completing most tasks requires the successful orchestration of working memory, inhibitory control, and cognitive or mental flexibility. The paper cites evidence that exposure to highly stressful early environments is associated with deficits in the development of these skills.
45. An earlier paper⁹⁸ cites studies indicating that, without access to support from caring adults, young children's responses to stressful events can have an adverse impact on brain architecture. Newborn babies have been found to respond to stress by producing high levels of the stress hormone cortisol but, where they are cared for sensitively and responsively, the levels usually lessen. It has been suggested that elevated levels of such stress hormones as cortisol can be harmful to brain development, especially during infancy⁹⁹.
46. The early years are also when language is being acquired, hence the importance of providing an environment rich in spoken language. Research^{100,101,102,103,104,105} shows that, from birth, children's learning results from their interaction with people and their environment. Children need a natural flow of affectionate, stimulating talk, to describe what is happening around them, to describe things that they can see, and to think about other people. This is critical for children's language and cognition, their general capacity to engage with new people and new situations, and their ability to learn new skills.
47. Children begin to recognise sounds, and associate them with objects and ideas, within six months of birth. The brain translates sounds into language, but to do so effectively it needs input from the social world, in the form of positive and warm interaction with adults.
48. Language development at age two is very strongly associated with later school readiness, with the early communication environment in the home providing the strongest influence on language at age two – stronger than social background. The number of books available to the child, frequency of visits to the library, being read to by a parent, parents teaching a range of activities, the number of toys available and attendance at pre-school are all important predictors of two-year-old children's vocabulary¹⁰⁶.
49. As children grow older, vocabulary at age five becomes the best predictor of later social mobility for children from deprived backgrounds¹⁰⁷. Evidence from the Millennium Cohort Study indicates that, at this age, children from the most advantaged groups were over a year ahead in vocabulary, compared to those from the most disadvantaged backgrounds¹⁰⁸. An earlier American study¹⁰⁹ found that, by the age of three, children from privileged backgrounds have heard around 30 million more words than children

from underprivileged backgrounds. The amount of time and energy that parents and carers invest in home learning varies greatly from family to family. For example, evidence shows that parents with lower qualifications engage less frequently than better educated parents in some home learning activities, such as reading^{110,111,112}.

50. The EPPE (Effective Provision of Pre-school Education) Project indicates that programmes which directly promote activities in which parents and children can engage together are likely to be beneficial for young children¹¹³. Children's centre stay and play or family learning sessions can be examples of such activities.
51. It can be seen that some groups of very young children are more likely than others to experience factors that promote or hamper their language development.

Some children are more likely than others to experience factors that hamper their development, and it is important to focus on the prevalence of this.

52. Poor maternal mental health and well-being at age nine months and/or at three years is strongly associated with poor child behaviour at age five. **10 per cent of mothers** are reported to experience post-natal depression¹¹⁴. As already noted above, it is reported that the children of mothers with mental health issues are twice as likely to experience a childhood psychiatric disorder^{115,116,117}.
53. Parental mental illness (including substance misuse), particularly in the mother, is also associated with: poor birth outcomes¹¹⁸, increased risk of sudden infant death¹¹⁹ and increased child mortality¹²⁰. Post-natal depression and other forms of mental illness are linked to an increase in insecure attachment in toddlers, behavioural disturbance at home, less creative play and greater levels of disturbed or disruptive behaviour at primary school, poor peer relationships, and a decrease in self-control with an increase in aggression^{121,122,123,124,125}.
54. Prolonged and/or regular exposure to domestic violence can have a very serious impact on children's safety and welfare and it rarely occurs in isolation. Parents may also misuse drugs or alcohol, experience poor physical or mental health or have a history of poor childhood experiences themselves. Domestic violence impacts on children in a number of ways¹²⁶: they are at risk of physical injury during an incident, they can experience serious anxiety and distress which can express itself in anti-social or criminal behaviour – and domestic violence can also impact on parenting capacity and attachment. There is also research evidence indicating that children who have been exposed to domestic violence are more likely to be abused themselves than those from non-violent households. Research shows that children who have been exposed to domestic violence are 158% more likely to be abused themselves than those from non-violent households. The risk is 115% higher for boys & 229% higher for girls¹²⁷.
55. Parental drug dependence is generally associated with some degree of child neglect and emotional abuse, parents having difficulty in organising their own or their children's lives, parents having difficulty meeting children's needs for safety and basic care, parents being emotionally unavailable, and/or parents having difficulty in controlling and disciplining their children^{128,129}. In England and Wales it is estimated that one per cent of babies are born each year to women who are misusing opiates or crack cocaine and that two to three per cent of children under 16 have parents who are doing so. Only about a

third of fathers and two-thirds of mothers who are misusing opiates or crack cocaine are still living with their own children¹³⁰.

56. The risks associated with parental alcohol misuse are more likely to be connected with violence and physical abuse if the father is misusing alcohol. If the mother is misusing alcohol, children in the family are more likely to experience neglect¹³¹. Adverse effects of parental alcohol misuse are most likely when there is violence, family discord or disorganisation.
57. Young children whose parents misuse alcohol can be at risk of significant harm, because parents may fail to notice, respond to or engage appropriately with their baby, which may result in insecure attachment; lack of concentration can lead to a mobile child not being kept safe from harm; parents may not notice when the baby is unwell; parents may not respond to children's need for food because alcohol consumption suppresses hunger; parents may be unable to respond to the child's emotional and cognitive needs and development; and there might be insufficient income and poor physical standards in the home¹³².
58. A recent 2012 report from the Royal College of Physicians quantifies the damage that can be experienced by children who are growing up in households where someone (usually a parent) is smoking. The report estimates that every year in the UK over 20,000 cases of lower respiratory tract infection, at least 22,000 new cases of wheeze and asthma and 120,000 cases of middle ear disease are caused by passive smoking in children; and that around 23,000 young people per year take up smoking before the age of 16 as a result of exposure to smoking by others in the household¹³³.
59. There is research evidence indicating that experiencing low socio-economic status at both 9 months and 3 years is associated with increased likelihood of poor behavioural, learning and health outcomes at age 5. These associations are stronger where the experience was persistent at both time points rather than being single episodic experiences¹³⁴. There is a two to three fold increased risk in the onset of emotional/conduct disorder in childhood if children have an unemployed parent¹³⁵ and a three-fold risk of mental health problems (15% compared to 5%) if children are in families with lower income levels¹³⁶. Further evidence on associations between socio-economic status and longer term outcomes has been summarised by the University of Sheffield in a series of evidence reviews commissioned by the National Institute for Health and Clinical Excellence (NICE) to support preparation of draft guidance on promoting social and emotional wellbeing in the early years¹³⁷.
60. DfE's Statistical First Release (SFR) 29/2011 – entitled *Early Years Foundation Stage Profile Attainment by Pupil Characteristics in England, 2010/11* – showed that the percentage of children achieving a good level of development in 2011 at age 5 was 59% (compared to 56% in 2010). However:
 - Girls outperformed boys with 68% of girls achieving a good level of development compared to 50% of boys.
 - A higher proportion (60%) whose first language is English achieved a good level of development compared with others (52%).
 - 44% of those eligible for free school meals (FSM) achieved a good level of development compared with 62% of others (either not eligible for FSM or unclassified).

61. These and similar research findings do not mean that every young child growing up in relatively advantaged circumstances will automatically experience positive development, or will never experience risks to their development, nor that children facing many disadvantages are prevented from achieving good outcomes. What the findings do mean, however, is that young children facing various disadvantages are less likely than others to experience positive development. Such disadvantages are sometimes called ‘risk factors’.
62. The association of poor development with several risk factors together can be stronger than its association with a single risk factor. For example, the Millennium Cohort Study (MCS) demonstrates correlations between income group and parenting with the likelihood of achieving good development by age five. The percentage of each of the following groups of five year olds in the MCS sample whose Foundation Stage Profile assessments showed good development were as follows¹³⁸:
- a. No Poverty and Positive Parenting 73%
 - b. No Poverty and Poor Parenting 42%
 - c. Persistent Poverty and Positive Parenting 58%
 - d. Persistent Poverty and Poor Parenting 19%

	No Poverty	Persistent Poverty	Impact of Persistent Poverty
Positive parenting	73%	58%	-15%
Poor parenting	42%	19%	-23%
Impact of poor Parenting	-31%	-39%	-19% -35%

63. The table above shows that, on average, poor parenting had nearly double the impact of persistent poverty. In the study, on average, good Foundation Stage development at age 5 was depressed by 19% by Persistent Poverty and by 35% by Poor Parenting.
64. It can be seen that the combination of persistent poverty and poor parenting had a stronger association with poor development (than either poverty or parenting in isolation).
65. However, risk factors often do not exist in isolation; they come together around individual families. Poverty, unemployment, lone parenting, having a large family, poor or overcrowded housing, having a difficult child, parental illness and substance misuse, can have a negative impact on parenting. In combination, the factors are linked and mutually reinforcing¹³⁹.
66. Children from families with multiple problems often have very poor life chances indeed, which becomes especially apparent when they are in their teens. Research evidence shows that children aged 13-14 who live in families with five or more problems are 36 times more likely to be excluded from school than children in families with no problems, and six times more likely to have been in care or to have contact with the police¹⁴⁰.
67. A report by Sabates and Dex¹⁴¹ quantifies the prevalence of multiple risks for families with very young children in the UK, including by ethnicity. It also examines the associations of multiple risks to deficits in developmental outcomes at three and five years of age. The ten risk factors considered were: living in overcrowded housing; having a teenage mother; having one or more parents with depression, a physical disability, or

low basic skills; substance misuse; excessive alcohol intake; and living in a family experiencing financial stress, worklessness or domestic violence.

68. Using MCS data, it was demonstrated that 28 per cent of families with young children across the UK in 2001 were facing two or more of these risks (an estimated 192,000 children under a year old). Less than two per cent of children were exposed to five or more risks. Just over four in ten children did not experience any of these risk factors in early childhood. A further three in ten faced only one.
69. Children facing two or more risk factors had poorer behavioural development scores at ages three and five than those experiencing one or no challenges. The vocabulary scores of the children with multiple challenges were also lower and they fell further behind between ages three and five. Children in families with both multiple risk factors and low income fared worst across most developmental outcomes. There was no dominant pattern of risks. For example, for families facing three risks, the most common combination was smoking during pregnancy, financial stress and teenage motherhood. However, this combination applied to only six per cent of families living with three risks. Parental depression was the most prevalent factor overall.
70. It follows that:
- The knowledge of risks enables commissioners and practitioners to consider targeting intervention to particular groups before something goes wrong (when it is preventive) rather than when it has occurred (when intervention is reactive).
 - Services need to be able to respond flexibly to a variety of risk patterns. **Sure Start Children's Centres have a crucial role to play** to ensure parents are able to parent well by helping them cope with or avoid other stresses. Following findings from the National Evaluation of Sure Start (NESS), children's centres should focus more keenly on this aspect of their role, and draw on evidence of what is effective much more rigorously.

Long-term effects of adverse experiences in children's early years

71. For some children, risk factors translate into catastrophic consequences very early on. The NSPCC's recent report *All Babies Count* emphasises that such risk factors as parental mental illness, substance misuse and domestic abuse are not determinants of child abuse; however, they elevate the likelihood that it might be occurring. The report cites evidence that:
- a. 45 per cent of serious case reviews in England relate to babies under 1 year old
 - b. in England and Wales, babies are more likely to be killed than older children
 - c. in the UK overall, an estimated 19,500 babies under a year old are living with a parent who has used Class A drugs in the last year
 - d. in the UK overall, 39,000 babies under a year old live in households affected by domestic violence in the last year
 - e. in the UK overall, 93,500 babies under a year old live with a parent who is alcohol dependent; and
 - f. in the UK overall, 144,000 babies under a year old live with a parent who has a common mental health problem.
72. In *Learning lessons from serious case reviews 2009–2010*, Ofsted looked at 147 reviews from April 2009 to March 2010. Over this period, 194 children were involved, 69 of

whom were under a year old, and of the 90 children who died, 36 were infants. The most common issues were mental ill-health, domestic violence and drug and alcohol misuse. Frequently more than one of these characteristics was present. Their follow-up report, published in 2011, *Ages of concern: learning lessons from serious case reviews*, reiterated that a large proportion of reviews concerned babies less than a year old (along with young people aged 14 and over). The report also summarised the following recurring messages about the handling of these babies' cases:

- a. there were shortcomings in the timeliness and quality of pre-birth assessments;
- b. the risks resulting from the parents' own needs were underestimated, particularly given the vulnerability of babies – parental needs often related to drug or alcohol misuse, a past history of being looked after, abuse they had suffered during their own childhoods, or being involved in domestic violence as an adult. Poor parental mental health and unstable lifestyles were also identified as key risk factors in some cases;
- c. there had been insufficient support for young parents;
- d. the role of fathers had been marginalised;
- e. there was a need for improved assessment of, and support for, parenting capacity;
- f. there were particular lessons for health agencies, whose practitioners had been the main or only agencies involved with the family in the early months – for example, ensuring sufficient communication about potential risks among various practitioners involved; and
- g. practitioners underestimated the fragility of the baby.

73. For young children who survive abuse or neglect, there can be longer term negative outcomes. For example, Read et al^{142,143,144} cite studies demonstrating that child abuse has a causal role in most mental health problems, including depression, anxiety disorders, eating disorders, substance misuse, personality disorders, and dissociative disorders.

74. Similar findings emerged from the Californian Adverse Childhood Experiences (ACE) Study¹⁴⁵ which looked at correlations between long-term health conditions and the following self-reported early adverse experiences:

- a. Physical abuse – beating
- b. Physical neglect
- c. Emotional neglect
- d. Contact sexual abuse
- e. Mother treated violently
- f. Household member was misusing alcohol or drugs
- g. Presence of mental illness
- h. Parental separation or divorce – not raised by both biological parents
- i. Incarcerated household member
- j. Emotional abuse – recurrent humiliation

75. It was found that the more of these adverse experiences were reported, the greater the later incidence of:

- Smoking, fractures, severe obesity, alcohol and drug misuse
- Ischaemic heart disease, stroke, chest diseases, cancer
- Diabetes, hepatitis, sexually transmitted diseases, and
- Depression, attempted suicide

76. Exposure to traumatic circumstances in early childhood has also been found to be associated with lower cognitive development. The Minnesota Longitudinal Study of Parents assessed the cognitive development of young children in a sample of participating families, alongside observations of mother-child interactions, interviews with the mother, and reviews of medical and child protection records. It was rated whether a child was being abused or neglected or had witnessed domestic violence, and their intellectual development was also assessed at the ages of 24, 64 and 96 months. Comparisons of the findings indicated that children who had been maltreated or who had witnessed domestic violence had lower scores on the cognitive measures at all time points, including when the analysis was controlled for socio-demographic factors, mother's IQ, weight at birth, birth complications, the quality of intellectual stimulation at home, and gender¹⁴⁶.

Concluding note

77. As Michael Marmot said in his report on health inequalities¹⁴⁷:

'The foundations for virtually every aspect of human development – physical, intellectual and emotional – are laid in early childhood. What happens during these early years (starting in the womb) has lifelong effects on many aspects of health and well-being.'

78. This supporting chapter has summarised some of the research available showing the wide ranging influences on very young children's development, both before they are born, and during the first two years of their lives. In particular, we have seen how very early child development can be fundamentally affected by the relationship between each child and his or her primary caregiver. In turn, that relationship is likely to be affected by factors in the caregiver's wider environment – especially (but certainly not only) if she or he is experiencing mental illness or domestic violence, and/or if she or he is misusing drugs or alcohol. It is vital that agencies work together as set out in the revised *Working Together to Safeguard Children*¹⁴⁸ in all circumstances where a child is considered to be at risk of abuse or neglect, including if there are concerns that a child's health or development might be at risk of being significantly impaired without the provision of additional services.

Supporting chapter 2

Making best use of resources for 0-2s

1. In this chapter, we review:
 - how to get the most out of universal services to support approaches to early intervention in ways that build on families’ strengths and involvement, while tackling the risk factors likely to hamper very young children’s development;
 - how we could get the most out of effective social and emotional assessments as part of the full HCP offer;
 - importance of training and qualifications in the Healthy Child Programme (HCP) and Early Years (EY) workforces.
2. The Marmot Report¹⁴⁹ called for ‘proportionate universalism’ to address health inequalities – actions that are universal, but with a scale and intensity proportionate to need. In practice, this involves making services available for everyone, with additional services for those with greater needs. Sure Start Children’s Centres explicitly take this approach in most areas, and this is reflected in their stated core purpose¹⁵⁰.
3. In their review of evidence on early intervention, Statham and Smith¹⁵¹ note that usually a distinction is made between services that are available to all – universal services, and those provided for groups which may need specific help or preventive support – targeted services. In addition, there can be specialist services for those individuals or families with the most complex needs.

Getting the most out of universal services

4. It is through universal services such as midwifery, GP surgeries, children’s centres, health visitor home visits, and childcare and early education settings, that practitioners see all families with young children from time to time. As suggested in *Supporting Families in the Foundation Years*, these services provide opportunities, when families are already in contact with professionals, to assess their needs and to offer further help where it’s needed and as early as possible to prevent or tackle emerging problems.
5. For instance:
 - midwives¹⁵² and health visitors can promote positive parenting and good parent/child relationships from the outset, and link families to wider resources through children’s centres;
 - family support workers and outreach teams based in Sure Start Children’s Centres can identify and support the most vulnerable families very early in a child’s life;
 - professionals in adults’ services including social care, the NHS, housing and Jobcentre Plus, can ‘think family’¹⁵³ and consider what support parents might need with fulfilling their parenting role when they are addressing such issues as parental mental illness, substance misuse, past maltreatment or domestic violence.
6. It is important that all practitioners have an awareness of the risk factors that can jeopardise child development, particularly infant mental health (i.e. the factors that can jeopardise early attachment and brain development). In particular, practitioners need to be aware of the need to consider the emotional, social and health needs of the whole family because these form the context within which the young child is developing¹⁵⁴. Early

identification enables those working in universal services to offer these families early help, either by offering additional help themselves, or by referring families to targeted or specialist services.

Making the most of children’s centres: integrated services

7. There are Sure Start Children’s Centres in every local authority area. They help families and expectant parents access universal services, and provide a welcoming environment for many families in need of extra support. They refer families to targeted or specialist services where appropriate and often provide them on site.
8. Children’s centres’ core purpose makes clear that they are for everyone, but they should be doing progressively more in a targeted way for those families who have the most needs – to improve wellbeing and reduce inequalities. They offer support for children and families who experience multiple risk factors, or children in need (section 17 of the Children Act 1989), plus they can model a child and family-centred approach to accessing wider specialist support. This requires children’s centres to make good links with specialist services (e.g. social workers and/or family intervention services) to identify families and to be part of an **integrated package of support**. It also requires local authorities to be clear about thresholds for using systems like the Common Assessment Framework or to refer to a family intervention service or to statutory social care services, so that centres can refer families appropriately.
9. This integrated one stop shop approach has proven popular with users. Research evidence indicates that parents value services that are co-ordinated, so that information is shared and does not have to be repeated several times¹⁵⁵. An integrated approach is also very important for the most vulnerable families suffering multiple risk factors and needing a range of different support – which chapter 1 showed are the groups who are extremely likely to suffer poor outcomes. Children’s centres are very well placed to bring together services around individual families in non-stigmatising ways that involve and empower the family.
10. Evidence suggests that early intervention by midwives or other health engagement at children’s centres can lead to a direct reduction in young children's risk of poor outcomes¹⁵⁶ including:
 - a. reduced incidence of low birth weight and of foetal and postnatal injury
 - b. improved uptake of preventive health care
 - c. a lower risk of poor bonding
 - d. reduced child neglect and abuse
11. There are already many examples of health visitors and children’s centres working together. Below are examples of integration¹⁵⁷ which illustrate the benefits of an integrated approach in delivery of better outcomes for those who access and use services at a local level and strategically across a local authority area.

Integrated working between a health visiting team and a children's centre: The Chai Centre, Burnley

In The Chai Centre the health visiting team and the children's centre team share an office and co-location makes communication easier. To step across an office and talk to someone is simple; leaving messages which are returned when you are out is a laborious process.

Sharing records was a major hurdle. It took time and training to get this right, but the team now have just one set of records for each child.

The teams developed an enhanced version of the Healthy Child Programme, with every family receiving 12 core home visits in the first three years of life. These are enhanced by bespoke packages of care being jointly delivered to families with assessed additional needs.

Health visitors and children's centre workers do some joint visits, particularly where the issues are more complex. Where children's centre workers provide family support, the health visitor is always fully informed and provides on-going guidance and support to the worker.

Outcomes:

- Safeguarding issues are less likely to fall through a gap and problems are spotted sooner for early intervention.
- CAFs are completed holistically and efficiently with 'team around the child and family' meetings being hosted jointly.
- Health visitors have helped children's centre staff develop their skills and the children's centre team has helped health visitors by delivering on-going support to families with lower levels of need and working effectively in an ethnically diverse area.
- The intensive outreach programme led to a dramatic increase in families accessing services at the centre and very high levels of engagement are maintained.
- Integrated working has allowed the teams to use the mix of skills effectively –
- families are supported by the worker with the right skills and knowledge for them, freeing health visitors to concentrate on the most complex issues.

Health visitor led children's centres: Brighton and Hove Children's Centres

In Brighton and Hove, children's centres are managed as a city-wide service, led by three Neighbourhood Sure Start Service Managers, two with health visitor backgrounds and one from social work. The entire health visiting service for the city has been seconded into the Council and works as an integral part of the Children's Centre service.

The integrated children's centre teams are led by health visitors who supervise outreach workers. Specialist city wide teams offer specific support, for example breastfeeding coordinators to encourage initiation and sustain breastfeeding in areas of the city where this is low. Traveller and asylum seeker families are supported by a specialist health visitor and early years' visitor. Teenage parents are supported by named health visitors at each children's centre and by early years' visitors.

Outcomes:

This model has delivered value for money and safe, evidenced-based health care delivery. The impact is seen in improved breastfeeding rates, obesity rates in reception and a sharp rise in the percentage of children living in the most disadvantaged areas who achieve a good Early Years Foundation Stage Profile score – from 33% in 2008 to 55% in 2011. Key developments include focusing support on the most disadvantaged families and increasing the use of evidence-based programmes, including Family Nurse Partnership. The most recent children’s centre to be inspected by Ofsted was judged to be outstanding in every area, and it noted that the health-led model plays a fundamental part in streamlining services and integrating provision. Ante-natal and post-natal services are delivered directly from the centre. As a result, the centre reaches 100% of children aged under five years living in the area. Highly effective intervention by the centre’s health partners has made an impressive impact on children’s welfare and family well-being.

12. Whilst most children’s centres already provide a range of evidence-based programmes¹⁵⁸, evaluation results from the earliest Sure Start programmes¹⁵⁹ suggest that centres need to approach the provision of evidence-based support very rigorously to drive measurable improvements in outcomes. This is reinforced by experiences of implementing evidence-based programmes which shows that rigour in implementation (and in particular ensuring ‘fidelity’ to the proven model) is essential to be confident in delivering results.

Full implementation of the Healthy Child Programme

13. The Government’s programme on health visiting forms one aspect of its wider commitment to improve the effectiveness and experience of services accessed by parents and families in the foundation years. While it is clear that health visitors are key to better health in the foundation years, their unique skills in assessing health needs at a population level, at a community level, and at individual child and family level, make them central players in ensuring children develop well and parents and families live well.
14. The White Paper *‘Healthy Lives, Healthy People: Our strategy for public health in England’*, sets out a bold vision for a reformed public health system in England. The Government is committed to growing, by 2015, the health visitor workforce by 4,200 and developing health visiting services to drive up health outcomes and reduce inequalities. So, as capacity in the workforce grows, we should see health visitors leading and contributing to:
- greater reach and influence in the wider community, promoting healthy lifestyles and social cohesion;
 - improved planning of local services to reduce health inequalities;
 - reduction in the variation in quality of service provision and coverage of the Healthy Child Programme and families reporting a high level of satisfaction with health visiting service provided;
 - families feeling supported and able to make positive changes to their health and wellbeing;

- children and families being offered preventive services tailored to their needs and all families can access evidence-based programmes;
 - improved maternal mental health and well-being and increased uptake of immunisations and breast-feeding;
 - early identification of need and appropriate response to meet need and early intervention safeguarding arrangements.
15. However, as the government targets for recruitment of 4,200 new health visitors are still underway, we have not yet seen a full implementation of the HCP programme. The HCP must be implemented fully in order to respond to those families where children are not being adequately supported /protected on a pathway to secure attachment by ensuring:
- HV and midwives are resourced and trained fully¹⁶⁰.
 - Adoption of a robust multi-disciplinary and integrated working approach. As Frank Field¹⁶¹, Dame Tickell and Lord Laming¹⁶² advised '*more needs to be done to ensure that services are as effective as possible at working together to achieve positive outcomes for children*'.

Making better use of social and emotional assessment

16. Effective assessment is a key tool for professionals to help them work out what support children and families need. This section of the report reviews age and frequency of social and emotional assessments (including assessment of emotional regulation) and training implications. The suggestions made here are intended to inform further reviews or on-going evaluation of the Healthy Child Programme (HCP) or NICE guidelines.
17. Existing guidelines already provide a solid, evidence-based platform of guidance and have been well received by the sector. The HCP includes a suite of guidance for practitioners on things to consider during reviews, screening, obesity, immunisation, injury prevention, speech communication and language, and social and emotional development. It has recently been supplemented by *Preparation for Birth and Beyond* and *PRE-view*¹⁶³.
18. The Health Visitor Implementation Plan 2011-15¹⁶⁴ sets out different levels of service from *Universal Services*, through *Universal Plus* (offering a rapid response in particular instances of need such as postnatal depression, sleeping problems, weaning or any parental concerns) to *Universal Partnership Plus* which offers on-going support from the health visitor team in partnership with other local services for more complex cases.

Current assessment practice

19. We note that the Children and Young People's Health Outcomes Forum has recommended a new Public Health outcomes indicator measuring the proportion of mothers with mental health problems, including postnatal depression. We endorse this recommendation and suggest that this information could be routinely gathered through the Healthy Child Programme.
20. The table below compares the current HCP guidelines for screening for postnatal depression alongside the reality of current practice:

HCP states:	Current common practice	Comments
<p><i>1. A full health and social care assessment of needs, risk and choices by 12 weeks of pregnancy. Notification to HCP team of parents requiring additional early intervention and prevention</i></p>	<p>There is a massive amount to be included in this midwifery assessment and even if more time could be made for mental health promotion issues this would be heavily diluted amongst all the form filling and information giving.</p>	<p>There is a need to separate out this element for follow-up when women/families may be vulnerable. This would reflect the HCP ‘progressive’ requirements.</p> <p>Particularly important is the sharing of information with the rest of the HCP team when women are vulnerable e.g. due to troubled relationships or mental illness – this should be managed within current services by audit and training – it shouldn’t require extra resource, just extra emphasis</p>
<p><i>2. Preparation for parenthood classes to include: relationship issues and new roles and responsibilities; the parent-infant relationship; emotional and practical preparation for fatherhood</i></p>	<p>There has been disinvestment in parentcraft classes so they have often focused on the birth rather than these issues. There is a new impetus to improve the content of current classes with the publication of <i>Pregnancy, Birth and Beyond</i> (DH, 2012) and with sessions being run in conjunction with children’s centres. The real challenge comes from the fact that many of the most vulnerable don’t have the personal confidence to attend parentcraft classes so may be the least likely to receive this input through that channel.</p> <p>However, the health visitor antenatal contact at home is now being prioritised and there will be increased coverage as HV numbers come up. Health visitors are best placed to cover these issues and also make an assessment of vulnerabilities with the more vulnerable families through this contact. They can provide early interventions and anticipatory guidance to the mother and father if present.</p>	<p>We can expect these services to improve markedly over the next 18 months.</p>
<p><i>After 28 weeks: Focus on emotional preparation for birth, care-infant relationship, care of the baby, parenting and attachment,</i></p>	<p>See above</p>	

<p><i>using techniques such as promotional interviewing:</i></p> <ul style="list-style-type: none"> ○ <i>Identify those in need of further support during the postnatal period</i> ○ <i>Establish what support needs are</i> 		
<p><i>Birth to one week: Comprehensive newborn assessment within 72 hours by doctor or trained midwife – this focuses on physical issues</i></p> <p><i>Promoting sensitive parenting:</i></p> <ul style="list-style-type: none"> ○ <i>Introduce parents to the ‘social baby’ by providing them with information about the sensory and perceptual capabilities of their baby using a range of media or validated tools (e.g. Brazelton or NCAST)</i> 	<p>The midwife is involved here - it would seem according to the comment by a professor of midwifery below, who has also been involved in NICE guidance production, and has a good understanding of practice that it is unlikely that there is more than patchy delivery of this important requirement</p>	<p>A big issue is the priority given to different parts of their role by midwives. Clearly, the safety of the mother and baby at delivery is an absolute priority.</p> <p>Where midwives are trained in NBAS, or the Neonatal Behavioural Observation they are almost certainly more likely to use it but this is not universal training.</p> <p>There may be a gap in relation to the general understanding in midwifery of the emotional issues for infants as their professional focus is more on the mother</p>
<p><i>1-6 weeks By 14 days face to face review with mother and father by health professional to include:</i></p> <p><i>Introduce parents to the ‘social baby’ by providing them with information about the sensory and perceptual capabilities of their baby using a range of media or validated tools (e.g. Brazelton or NCAST)</i></p> <p><i>Assessment of maternal mental health (HCP and NICE)</i></p>	<p>These are the assessments most likely to have universal coverage by the health visitor service now. However, as with the midwife booking visit, there is a massive amount to fit in and currently this may be the only time some mothers see a health visitor in their home. It would be hard to introduce a video camera if the health visitor is only just establishing a relationship of trust with the mother.</p> <p>Health visitors should include an emotional assessment of the parents in her assessment, but most haven’t been trained to also assess the attachment relationship.</p> <p>There is the opportunity for follow-up assessment of parent-infant interaction by the health visitor in the clinic (attachment behaviour doesn’t develop until 11-12 months)</p> <p>With training health visitors could observe parent-infant interaction at</p>	<p>The increase in health visitor numbers should allow for the emotional elements of the HCP and the recommendations in this report to be fully implemented if not with the first cohort of new health visitors then after the second but the process could start immediately with respect to training and prioritising.</p>

	this visit and then follow up those clients where this seems poor as this is within their universal plus guidelines	
<i>6 weeks to 6 months</i> <i>Assessment of maternal mental health at 6-8 weeks and 3-4 months</i> (HCP and NICE)	Health visitors see this assessment as being a priority and try to fit it in now; some provide good services. NICE is reviewing the perinatal mental health guidance and will almost certainly reiterate its importance as the research base is ever strengthening for the early detection of depression. To introduce a video assessment here would be enthusiastically supported by the profession, though its value needs clear explanation to commissioners.	This could be introduced through a pilot in well-resourced services and preparing training that could be disseminated more widely to future cohorts of students and other areas. The Institute of Health Visiting would be very keen to support this process.

21. In addition to the HCP guidelines outlined in the table above, we note that plans are also in place to introduce an integrated health and early education review between age 2 and 2½ years. This builds on the Tickell recommendations and will help ensure early identification of any development delay, or additional needs a child might have, and will inform support from providers, parents and other practitioners, to address those needs.
22. We note that the Children and Young People’s Health Outcomes Forum has recommended a new Public Health outcomes indicator measuring the proportion of mothers with mental health problems, including postnatal depression. We endorse this recommendation and suggest that this information could be routinely gathered through the Healthy Child Programme.
23. Over time, as health visitor capacity increases, the coverage and quality of the HCP reviews in the foundation years should be able to increase. The HCP will offer a world-class service if fully implemented.
24. There is a significant task in explaining to commissioners the importance of investing in these interventions. Local Commissioning Boards and Health and Wellbeing Boards may wish to use the resources set out in the commissioning framework.

Recommendations on frequency and timing of social and emotional assessments

25. The 0-2 Special Interest Group proposed that timing and frequency of assessments should closely follow the current NICE guidelines with two variations:

- **Universal assessment at 3-4 months** to assess the quality of the parent/infant interaction and identify need for additional support to promote parental sensitive responsiveness.
- **Proposed additional assessment as part of targeted offer at 12-15 months** to assess the infant's attachment behaviour. At this age the infant will have developed clear attachment behaviours as well as strategies to regulate emotionally, or not. This age therefore offers the first opportunity to assess for risk and resilience in the infant and is also early enough for targeted or indicated interventions to help change a possible pathway towards insecure attachment and/or pathology. The assessment should be offered only to parents in the Universal Plus or Universal Partnership Programme. Once the proposed assessment method is established in England, it is proposed this additional assessment opportunity is added to the HCP at 12-15 months.
- **Review moving the 2/2.5 year assessment forward to 22-24 months.** As additional support is soon to become available to vulnerable children at age 2, it is logical to move the 2.5 years review to an earlier time. Any significant emotional and/or social problems for the baby will now be apparent and should emerge in a review/discussion between parents and practitioners. These would be such issues as sleep problems, eating problems or general behaviour problems and the practitioner can choose to rely on his or her professional judgements as to the severity of these problems or choose to use a more formal assessment. Of particular importance at this time is the assessment of early language development.

Social and emotional assessment methods and tools

1. Appendix 2 discusses a range of possible assessments and evaluation tools and their use. Some are for universal application, others only in the assessment of vulnerable or complex cases. Across the time period from early pregnancy to age two these assessments are complementary, each adding information to the whole picture of offering the right level of help and support at the right level of need ^{165,166,167,168}.
2. Some examples of possible assessment tools would be selective use of the Brazelton Neonatal Behavioural Assessment (NBAS) or Neonatal Behavioural Observation (NBO) scales during the first month of the baby's life. This establishes the baby's sensitivity to external stimulation and helps the parents to understand the baby's signals and cues. At 3-4 months, when the parent-infant interaction will have developed its own rhythm and patterns, an evaluation of the quality of the parent-infant interaction in terms of parental sensitive responsiveness is crucial. This can be done using tools like the Parent-Infant Interaction Observation Scale¹⁶⁹, The Keys to Interactive Parenting, the CARE Index or similar. An additional dimension for assessment to establish risk is provided by assessments of parental perceptions or attributions. This latter assessment could be done by something like the Ages and Stages Questionnaire (ASQ), the Maternal Attitude Scale¹⁷⁰ or the Mother's Object Relations Scale (MORS)¹⁷¹. The 3-4 month assessment would be universal.

Supporting the workforce

3. *Families in the Foundation Years* clearly positions a well-qualified and properly skilled workforce as a key factor in making a real difference to the quality of support that expectant parents and families with young children receive.

Health professionals

29. The Government is acting to strengthen the Healthy Child Programme through its commitment to increase the health visitor workforce by 50 per cent. This expansion is intended to provide the capacity to lead comprehensive delivery of the Healthy Child Programme, through the health-visiting model set out in the Health Visitor Implementation Programme¹⁷². In addition, the Government is doubling coverage of the Family Nurse Partnership over the same period.
30. As health professionals, all health visitors need to be competent and feel confident in order to assess effectively risk and resilience. Being able to analyse and understand parent-infant interaction is one of the most important skills a health visitor should have. At a universal level valid interactional assessment procedures are very valuable and could usefully be promoted as part of the HV transformational training programme. Health visitors should also be trained to administer appropriate tools for more vulnerable families as per the progressive universalism health visitor offer.
31. Effective training in assessment and understanding why certain tools might be more appropriate for certain situations is crucial. Using an assessment tool insensitively can produce negative outcomes¹⁷³. Studies of screening for dyslexia^{174,175} suggest that unless highly valid and reliable screening tools are available, it is better to rely on health visitors' and other practitioners' professional judgement to determine which young children do not appear to be developing in similar ways to their peers – which should trigger curiosity about what the differences are, and what the reasons might be. Initial consideration of those questions will help practitioners determine which more targeted or specialist services they should involve in undertaking more detailed assessments of the child and his/her family circumstances.
32. The skill of rapidly establishing and maintaining a trustworthy relationship is absolutely central to effective assessment as well as intervention. Approaches to support this include:
 - For community midwives: training in the Family Partnership Model, supported by access to good clinical consultation opportunities from an antenatal, perinatal and infant mental health team¹⁷⁶.
 - For health visitors: training in the Motivational Interviewing Model, again supported by good clinical supervision from their local antenatal, perinatal and infant mental health team.
33. Effective training in the use of specific approaches includes:
 - For midwives: training in the administration and scoring of the Hospital Anxiety and Depression Scale, as well as being able to enquire sensitively about risk and resilience aspects of the family.
 - For community midwives: training to undertake the Newborn Behavioural Observation.

Early years' professionals

34. Families in the Foundation Years demonstrated that high-quality pre-school programmes can significantly improve outcomes, especially for disadvantaged children, boys and

children with special educational needs¹⁷⁷. Evidence in the Families in the Foundation pack demonstrated that early education has the biggest impact when it is high-quality, and that the quality of the workforce is the most important factor¹⁷⁸.

35. The existing and revised standards for Early Years Professional Status (EYPS) are strong on child development and in particular on social and emotional development, communication and relationships. To achieve EYPS, practitioners now have to demonstrate practice and leadership of practice with children across the birth-to-5 age range. Many practitioners and training providers have a strong focus on practice with babies.
36. However, there has been a tradition and culture of having the least experienced and least well-qualified staff with some of the youngest children. There are some signs that this is changing and employers and practitioners need to continue to address this, and this is an issue that has been raised in the Nutbrown review.
37. For the youngest children, there are some specific needs, and the childcare sector needs to prioritise these. There is a rapid growth currently in the number of under-2s attending nurseries /early years' settings, and as the government implements its commitments to offer free early education for the most disadvantaged 2-year-olds, the number of very young children in these settings will increase rapidly. Ofsted have agreed to include in their revised inspection framework a greater focus on quality of settings for under-2s, but there is a great deal that providers and professionals can do to support the very youngest children more effectively.
38. The 'common core' set out by the Children's Workforce Development Council describes the skills and knowledge that everyone who works with children and young people (including volunteers) is expected to have in order to work most effectively. It was revised in 2010.
39. In the context of working with 0-2 year-olds the group felt that there are three **common core knowledge areas of focus**:
 - core knowledge that informs all interactions with infants and toddlers,
 - core knowledge of child development from pre-birth to three years, and
 - an effective working knowledge of the interface with safeguarding systems.
40. In the context of working with 0-2 year-olds, **three core skill areas** were highlighted as particularly important in order to build an emotionally intelligent workforce:
 - core skills around interactions with infants and toddlers,
 - skills to intervene in child development and
 - skills to form empathetic relationships with parents in a professional capacity.
41. Appendix 3 contains these core knowledge and skills sets and describes how this core knowledge might look when employed by a member of the workforce engaged with 0-2 year-olds and their families. It is recommended that the revised National Professional Qualification in Integrated Centre Leadership takes account of these.
42. Within this framework, our work suggests the following 4 important priorities for those working in childcare settings with 0-2 year-olds:

1. Understand attachment

It is generally accepted that infants can and do form secure attachments with a small number of key caregivers, including early years' practitioners. Attachment is an important feature of good early years practice in a number of respects:

- practitioners should have a good understanding of attachment as it relates to the child's key relationships and their own relationship with the child
- practitioners should be able to build warm, responsive and sustained relationships with young children confirmed by visual, auditory and physical contact
- continuity and consistency of primary care is important e.g. key person systems. The revised EYFS statutory framework for the early years' foundation stage requires providers to assign a key person to every child to ensure that every child's care is tailored to meet their own individual needs, to help the child become familiar with the setting, offer a settled relationship for the child and build a relationship with their parents.

2. Support effective parenting

It is critical that the workforce has the skills to offer evidence-based interventions, including parenting programmes, where appropriate.

3. Understand the importance of speech and language development

It is recognised that Personal, Social, and Emotional Development, Communication and Language, and Physical Development are prime areas of learning for our youngest children. Recent research has shown that language development at age two is very strongly associated with later school readiness, with the early communication environment in the home providing the strongest influence on language at age two – stronger than social background¹⁷⁹. High-quality support for speech, language and communication skills is essential for both effective parenting and good early years' provision. Much has been achieved around early communication and language with the ECaT programme¹⁸⁰, but more needs to be done to secure the next stage of the programme – Early Language Development Programme – across the country.

4. Develop practitioners and managers who are emotionally competent

Empirical evidence exists on the research evidence on the fundamental importance of emotional intelligence (or competence) of the Early Years' sector workforce^{181,182}. Guidance documentation produced as part of the selection process for health visitors outlines some of the personal and professional attributes that have been agreed as important to the successful delivery of the health visitor role. The guidance document (**Appendix 3**) demonstrates how, for health visitors, it has been possible to specify the personal as well as the professional attributes required for entry into training for the profession. This approach is helpful to see how it might be possible to select would-be early years' staff for their emotional resilience and emotional intelligence.

Keeping up to date with the evidence

43. The research and understanding of best practice focused on working with under-2s – particularly in the childcare sector – is evolving rapidly. There is a huge amount of evidence for practitioners to digest, and in order to disseminate key messages to inform practice, there is a case for regular updates to keep busy professionals well informed.
44. The publication of the revised EYFS and a re-modelled Development Matters in spring 2012 provides an excellent opportunity to refocus on the needs of under-2s. To support the Families in the Foundation Years, 4children is collating best practice examples of working with under-2s, highlights of research, and making available ‘Birth to Three Matters’¹⁸³, in response to the voice of the sector.

Supervision

45. Whatever their specialism, practitioners in the foundation years have a common commitment to children’s healthy growth and development and working with their families. Families in the Foundation Years outlined that in order to make this goal a reality there needed to be motivated, qualified, and confident leaders and professionals across health, early years and social care committed to working closely together in the interests of children and families.
46. In order to be most effective in the context of working with the 0-2s, the workforce needs not only to be highly skilled, but should also receive regular, effective supervision, and possibly access to specialised consultations. Effective supervision is one of the keys to delivering positive outcomes for everyone. It is important for all organisations to have an unambiguous commitment to a well-structured supervision system, provided in the context of a clear organisation approach/culture.
47. Professional reflective supervision provides the opportunity for facilitated in-depth reflection on issues affecting practice. It is a process whereby the supervisor can clarify the dynamics that operate between the family and the supervisee and can ensure that safe practice is maintained for both the family and the practitioner. Supervision includes discussion and problem solving for both administrative and clinical tasks.
48. The process includes devoted time to explore the thoughts and reactions of the practitioner to the intensity and specific focus of the work and provides the opportunity for both supervisor and supervisee to reflect on the practitioner’s work with infants, their parents, wider families and their joint work with other professional practitioners within the network.

Supporting chapter 3

Intervening early and the economic case for this approach

In this chapter, we:

- acknowledge the important contributions of the recent reviews in the early years;
- review the importance of holistic understanding and approaches to early years' intervention;
- review the economics of early years' investment and the implications for the UK.

Holistic and integrated approach to early years' intervention

1. *Supporting Families in the Foundation Years* states the case for early years' intervention is clear. Reviews conducted by Professor Sir Michael Marmot¹⁸⁴, The Rt Hon Frank Field MP¹⁸⁵, Graham Allen MP¹⁸⁶, Dame Clare Tickell¹⁸⁷ and Professor Eileen Munro¹⁸⁸ have all reinforced the importance of early intervention in the foundation years. *Supporting Families* also outlined how the Government is encouraging early intervention in the foundation years by:
 - helping professionals use their interactions with families as opportunities to identify additional needs and offer further help;
 - introducing an integrated child development review at around age two to two-and-a-half;
 - supporting professionals with their role in early help as part of the new arrangements following the Munro review of child protection;
 - encouraging evidence-based parenting programmes, and doubling the number of families benefiting from the Family Nurse Partnership; and,
 - setting out a new core purpose for Sure Start Children's Centres, with early intervention at its heart.
2. Policy thinking on early intervention has developed at a pace recently thanks to the positive contributions of Tickell, Allen, Field and Munro. These independent reviews all demonstrate the benefit of a holistic understanding of early years' intervention. As such, there is no single service which provides the 'frontline' of early years' intervention: children's centres, maternity services, health services including health visitors, GPs and A&E, schools, colleges, nurseries and childminders, are all well placed to recognise when a child or their family may need extra support or for a professional to step in quickly to protect a child.
3. Evidence-based and well-implemented preventive services and early intervention in the foundation years are likely to do more to reduce abuse and neglect than reactive services and (in the long run) deliver economic and social benefits. Prevention and early years' intervention are likely to be more cost-effective if very well targeted – the cost per child is lower but you need to 'treat' more children because you don't know which ones will need the intervention. Such services also have an important role in making sure all children reach school ready to learn and can achieve to the best of their abilities.

4. Chapter 1 concludes that **multiple needs** are linked to the biggest problems in young child development. It is important that services have a shared local understanding of how early years' intervention operates in practice locally. In both universal and targeted services, effective multi-agency working and coordination are needed so that each member of the workforce understands their role and takes responsibility to help identify issues and either refer or provide help. There continues to be a key role for Sure Start Children's Centres in this integrated working process.

The economics of early years' investment

5. As part of the work of the Special Interest Group, a review was conducted of a wide range of published UK and international studies that examined the economic case for investment in the early years. The approaches used by the researchers were diverse. They included 7 UK and 15 non-UK cost-benefit analyses, 14 non-UK assessments of internal rate of return, 10 UK social return on investment studies, together with a series of alternative approaches including breakeven analysis, odds ratios, case studies and econometrics. (See Appendix 4 for detail.)
6. The majority of the Randomised Control Trials that measured the impact of early years' programmes (and cost-benefit analyses based on them) were of American origin^{189,190,191}. The consensus among these American approaches and reviews, including even the most cautious and circumspect in its recommendations, 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. All the researchers found a small minority of early years' programmes which did not deliver a return, either because of poor design, or because an experimental intervention did not prove as successful as had been hoped.
7. The studies conducted in the UK lack the breadth and rigour of the American evaluations. Nonetheless, a similar pattern of results was found. Cost-benefit^{192,193,194}, predictive^{195,196,197} and case study^{198,199} approaches showed clear indications of economic payback. The nine Social Return on Investment studies^{200,201,202} showed returns of between £1.37 and £9.20 for every £1 invested (with an average return of £3.65). Two cost-benefit studies (Croydon Total Place²⁰³ and an LSE study of parenting programmes for conduct disorder²⁰⁴) predicted and produced returns of £10 and £8 per £1 invested respectively.
8. There have been two UK RCTs which assessed the economic benefit of early years' interventions. Both applied relatively weak interventions to very challenging circumstances, and their results were mixed.
9. The Social Support and Family Health Study²⁰⁵ provided a home visit listening service of almost 40 minutes per month to new mothers in deprived districts of Camden and Islington. The study was cost neutral, its small outcome benefits (in terms of reduced costs to health services) being annulled by the costs of training and delivery. This came as no surprise to the service providers, given the serious and complex nature of the challenge and relatively low level of support provided, which the providers did not believe adequate to counteract the effects of social and material disadvantage. One outcome was improved

(workplace) productivity for the recipients which could, over time, make a longer-term positive economic impact on society.

10. The other UK RCT, the Oxfordshire Home Visiting Study²⁰⁶, was inconclusive as to financial benefits. This was a brave study which did not select the more responsive first-time mothers which FNP recommends; it worked only with mothers who had five or more serious risk factors such as domestic violence, alcoholism or mental health problems; the mothers were supported for one year less than with FNP (18 rather than 30 months); and its training component was very light compared with FNP.
11. There were indications that the Oxfordshire trial did reduce child abuse and harm (possibly by identifying ‘at risk’ infants early). If so, it probably produced worthwhile economic returns (see Appendix 4). In this trial there were two suspicious child deaths within the control group and none in the trial group, which put more children on the Child Protection Register. It also produced a number of other subsidiary benefits.
12. The consensus among the American approaches and reviews, including even the most cautious and circumspect in its recommendations, suggested returns on investment on well-designed early years’ interventions significantly exceed their costs.
13. Across the approaches examined there was a range of benefits, with rates of return on investment significantly and repeatedly proposed to be higher than those obtained from most public and private investments²⁰⁷.
14. One approach to determining the value of investment in the early years is based on econometrics. Heckman²⁰⁸ in his economic analysis of the early years, argues that structures (including knowledge and skills) are based on foundations and the stronger the foundations the more solid the structure. Heckman argues that financial returns on early years’ investments are highest for age 0-3, and diminish progressively as children become older, and concludes that currently society is demonstrably under-investing in the early years.
15. Heckman also points out particular characteristics of early years’ investment, not found with investments in later years. Cunha and Heckman²⁰⁹ point out that because early years’ interventions both promote economic efficiency and reduce lifetime inequality, they provide policy makers with a rare ability to spend money in a way which delivers both social and economic benefits at the same time.
16. The countries of Scandinavia have consistently led international comparisons in terms of welfare²¹⁰. Recognising the value of prevention and early intervention programmes, in the last 20-30 years these countries have increased this type of investment²¹¹. Sweden and Norway provide examples of where whole countries have adopted a policy of investment in early years’ prevention and received not only financial returns but better health for the whole population. The benefits span lower infant mortality at birth through to reduced heart, liver and lung disease in middle-age²¹².
17. The Scandinavian results reflect the effects of a range of factors including a well-resourced and professional healthcare service with a strong focus on prevention, and widespread recognition of the value of focusing resources at the very beginning of life.

18. The logical links between the investments and benefits are described in the Adverse Childhood Experiences' (ACE) studies²¹³ which suggest that for every 100 cases of child abuse society can expect to pay in middle or old age for:
- one additional case of liver disease
 - two additional cases of lung disease
 - six additional cases of serious heart disease, and
 - 16% higher rate of anti-depressant prescriptions

None of these estimates takes account of the economic value of the inter-generational effects of breaking the cycle of disadvantage. Child abuse averted in one generation will itself result in a cumulative reduction in this dysfunction during future generations.

Implications for the UK

19. Although the international evidence is powerful and compelling, and has already influenced the Scottish Parliament²¹⁴, it cannot necessarily be translated to the UK directly. Unlike the United States, we are fortunate to have universal health provision and in particular the DH Healthy Child Programme (HCP), which aims to focus on the provision of a universal preventive service, providing families with a programme of screening, immunisation, health and development reviews, supplemented by advice around health, wellbeing and parenting. In addition, we have extensive publicly-provided early education, including in England the new commitment to provide early education for all disadvantaged 2-year-olds.
20. Nevertheless, there are substantial gaps in early intervention services. A recent review of local Health Boards found very patchy implementation of the Healthy Child Programme, with many areas not even knowing whether it was being implemented or not. There is a clear, demonstrable need to provide the right kind of support earlier to prevent and tackle child neglect and a range of risk factors more effectively. The economic case for this in the UK has been clearly set out in the Allen and Field Reviews and is borne out by the good economic returns from the significant majority of the UK studies.
21. Besides many studies illustrating the powerful case in principle to emphasise early investment in support for children, it is very clear that we are not getting early years' intervention right – as illustrated by numerous cases of child maltreatment, wide gaps in school outcomes, poor scores in international comparisons of child wellbeing, high youth crime and poor health outcomes. **There remains a strong case for improving our investment in priority areas.**
22. The Family Nurse Partnership (FNP) is a good example of an intensive support programme with proven long-term impacts, that is available to parents in some areas to help them overcome these difficulties and promote the well-being of their children. The FNP offers intensive, targeted support for the most vulnerable first-time young mothers. It is a licensed, preventive programme offering intensive and structured home visiting, delivered by specially trained nurses, from early pregnancy until the child is aged two. The nurses use practical activities and strength based methods that change behaviour and tackle the emotional problems that prevent some mothers and fathers caring well for their child.

23. Family nurses deliver the Healthy Child Programme for their clients, and share common goals with health visiting, but FNP works in a different way, including work at a deeper level on the emotional problems and behaviours that prevent some parents from giving their child the best start in life. The Group welcomes plans to double the number of places on the Family Nurse Partnership (FNP) programme, to at least 13,000 by 2015.

The Big Lottery project – Fulfilling Lives: A Better Start

24. The Under 2s Special Interest Group (SIG) work has already contributed to a significant development in the goal of improving the lives of the country's children. The Big Lottery Fund (BIG) is to invest £165m in prevention-focused early years' intervention projects in up to five local areas in England, over a period of up to ten years, as part of their *A Better Start* initiative.
25. This money will support systemic approaches to improve outcomes for children from pre-birth to age 3, through primary prevention, in areas of 50,000 population with high levels of disadvantage. £30-£50m will be allocated to consortia led by voluntary sector organisations in 3-5 local authority areas. The chosen areas will be announced in March 2014, following a development stage in 2013, during which BIG will support 10-15 local areas to create sustainable plans to bid for the cash.
26. During the design and set-up of this project the main Under 2s SIG recommendations were presented to and discussed in depth with the Big Lottery Fund, and played a significant part in the outline shape of the core part of the project which is intended to promote babies' and children's social and emotional development, language development and nutrition.

Need for better UK evaluation

27. Historically there has been a dearth of really strong evaluation evidence for early years' interventions in the UK, making it difficult for commissioners to understand which approaches are most cost-effective for them. As can be seen from Appendix 4, this shortfall is being bridged. However, it remains an imperative to become much better at properly evaluating programmes and to be clear which programmes or approaches offer the greatest improvement in outcomes and the best returns in a UK context. Monitoring data from Local Areas where investment is being reprioritised might be helpful, such as the Children's Improvement Board learning from the 18 development demonstrator sites, the evaluations of the Big Lottery and any future early years' evaluations by the Early Intervention Foundation.
28. A major step forward will come with the £165m Big Lottery Fund *A Better Start* initiative, which has set aside a significant sum for evaluation of the success of the 3-5 selected local areas, both in improving outcomes for babies and children and in terms of their cost-benefit performance.
29. The previous chapter considers how we can make best use of universal services, including new investment in health visitors and early years' workforce, to improve outcomes in pregnancy and for our youngest children. The framework for commissioners (see page 50) also identifies a range of resources to help commissioners identify specific programmes and approaches to assessment and support which they can use to improve early intervention services.

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Recommendations

¹ Reflective Video Feedback is the general approach whilst Video Interactive Guidance is a particular “school”.

Supporting chapter 1:

The importance of child development from conception to age 2

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Local commissioning for very early child development: A framework

This framework draws on work from the Special Interest Group for children from conception to age 2. It aims to provide a **framework for commissioners** to help guide thinking about issues to consider with the aim of improving child development outcomes through better local support in very early childhood.

A – PREVENTION

A1 – Pregnancy

- Evidence shows that development begins before birth and that the health of a baby is crucially affected by maternal health and well-being. Low birth weight in particular is associated with poorer long-term health and educational outcomes.
- Effective measures to reduce risky behaviours such as smoking, drug and alcohol consumption during pregnancy can reduce levels of foetal alcohol syndrome, improve child IQs and reduce levels of mental difficulty.
- Children born to mothers who experienced antenatal stress, anxiety or depression have more emotional difficulties, especially anxiety and depression, and symptoms of ADHD and conduct disorder than children born to non-stressed mothers. These children also perform at a lower cognitive level.
- Stress, anxiety and depression during pregnancy are frequently undetected and so not treated. Research indicates that about 10-20% of pregnant women suffer antenatal depression and anxiety, and that levels at 32 weeks of pregnancy are greater than postnatally.
- Ante-natal depression (AND) and anxiety pose a significant risk for the baby through the direct action of chemicals on the brain of the foetus; and the fact that AND is a strong indicator for the later development of post-natal depression (PND).
- Targeting those exhibiting the ‘warning’ signs for PND in the ante-natal period has been shown to reduce the incidence/seriousness of depression following birth.
- Up to 20% of pregnant women experience mental and/or emotional illness requiring referral for psychological therapies.

So in order to address issues of **maternal mental health in pregnancy** and **promote stronger maternal self-efficacy** it is helpful to consider the options below.

Specific options on Pregnancy

- ✓ Ensure health professionals are well equipped to detect stress, anxiety and depression during pregnancy.
- ✓ Provide referral to appropriate psychological or other interventions for antenatal anxiety and depression. Ensure there are enough trained professionals to provide this help.
- ✓ Target maternal stress during pregnancy, for instance by focusing on reducing domestic violence and supporting the quality of relationships during this stressful

time. These measures could reduce the risk of children having symptoms of ADHD or conduct disorder and showing later criminal behaviour.

- ✓ Consider whether ante-natal parent preparation classes could include a discussion on the emotional impact of becoming a parent and not just focus on the more practical elements of birth options and bathing a baby.

Resources

Chapter 1 page 10-12

From Chicago www.ounceofprevention.org gives examples of early intervention, including the highly successful Doula scheme that begins with the pregnant mother.
www.nmha.org

The Department of Health new information service for parents
<https://www.nhs.uk/InformationServiceForParents/pages/home.aspx>

For information on downloading a sign-up widget and adding it to your website email
support@informationserviceforparents.nhs.uk

Maternity Commissioning Resource Pack to support Clinical Commissioning Groups is available at:
<http://www.commissioningboard.nhs.uk/files/2012/07/comm-maternity-services.pdf>. By bringing together existing service specifications, benchmarking templates and other resources, the Pack aims to make it easier for CCGs to have informed discussions with providers about service design and delivery and to focus on matters that will make the most difference to women and families.

A2 – Infant and parent mental health and assessment

A2.1 Secure attachment

- Secure children and adults are resilient, are able to regulate their emotions and experience empathy. Secure attachment relationships, although not a guarantee of future mental health, provide a protective factor, enabling children to develop ways to cope with such adversity as loss and trauma.
- Insecurely attached children are more vulnerable and they and their families need help. Without help, insecurely attached children begin to soak up statutory resources from an early age through such ‘externalising’ and ‘internalising’ behaviours as aggression, non-compliance, negativity and immaturity, compulsive compliance and pervasive low self-esteem.
- Research indicates that overall some 35-40% of all parent-infant attachments are insecure although this varies according to the stresses and vulnerabilities of the family.

The best time to introduce a universal assessment of the quality of interaction between mother and baby would be at age 3-4 months. Earlier would of course be better but is not practical

(without need for repeat visits) because of infant sleeping patterns. In order to **promote secure attachment** and to **assess** better **where attachment is** insecure in babies a range of options can be considered:

Specific options – secure attachment

The following measures could be considered in relation to mother-baby interaction:

- ✓ Review health visitor training to include session on evaluation of the interaction between the mother and baby (preferably via a short video clip). Ideally, this should be carried out at a universal level and used as a determinant for the need for additional services such as Universal Plus.
- ✓ In addition to the health visitor assessment carried out at age 6 weeks, add an assessment at 3-4 months, using the Parent Infant Interaction Observation Scale, The Keys to Interactive Parenting Scale (KIPS)²¹⁵, the CARE-Index²¹⁶ or similar.
- ✓ Introduce a reliable and valid assessment of attachment type at age 12 – 14 months. The gold standard of attachment assessment is The Strange Situation which unfortunately is too cumbersome and complex to be used in routine practice. An acceptable proxy measure is the TAS-45 measure, which could be adapted for routine use in England. Much of the necessary information can be collated and recorded via mobile devices such as tablets or laptops. A small investment would be required to ‘import’ the TAS-45 and develop the necessary training and data processing so it can be used in routine practice in England.
- ✓ Promote interventions locally to develop secure attachment i.e. identifying parent-infant pairs who would benefit from support to improve attunement, followed by either video interactive guidance or parent-infant psychotherapy (e.g. Video Interactive Guidance (University of Dundee); VIPP; Watch, Wait & Wonder, Circle of Security). Interaction Guidance has also been successfully used to improve sensitivity and decrease the amount of disrupted communication between mothers and babies with feeding problems²¹⁷; and a slightly modified version has been shown to help mothers with postnatal depression re-connect with their babies²¹⁸.
- ✓ These need to be supported by the Perinatal Mental Health Support Systems referred to in section A2.2 (below) as parents are unlikely to provide secure attachment while still struggling with issues of mental health or their relationship with the child.

A2.2 – Specialist parent-infant psychotherapy support

- Early intervention can promote infant mental health and reduce the risk of children’s development being hampered by abuse, neglect or other early parent-child relationship difficulties.
- Understanding of infant mental health is, at best, patchy outside the health sector, and few health professionals are trained in it.
- In the UK, 144,000 babies under one year of age live with a parent who has a common mental health problem.
- Children of mothers with mental health issues are twice as likely to experience a childhood psychiatric disorder. If both parents have a mental health problem this

doubles. And the disorder is likely to develop because of miscommunication within the attachment relationship even when the caregiving is otherwise fine.

- There is significant cross-over between mental health issues and alcohol/substance abuse.
- If allocated earlier to preventive interventions and specialist perinatal therapeutic and psychiatric services in the early years, investing early would reduce future drain on resources.
- Approximately 8% of pregnant women will subsequently be emotionally ill enough to warrant a referral to a specialist perinatal mental health service that focuses on restoring the mother’s mental and emotional health and the forming mother-baby relationship – 55,200 mothers and at least 55,200 babies annually (Antenatal & Postnatal MH Commissioning Benchmarking Tool, March 2010). The needs of fathers will add to this figure.
- Based on recognised genuine referrals to the North East London NHS Foundation Trust (NELFT), the national figure for England may be around 75,000 cases of genuine need for perinatal psychotherapeutic support per annum. The potential benefits of robustly commissioning effective perinatal mental health services like NELFT’s include:
 - Improving the mother-baby relationship and bonding with the aim of creating a securely attached baby by 12 months and preventing the baby becoming a child at risk of emotional disturbance;
 - Reducing the risk of relapse and/or recurrence of a psychological disorder or a psychiatric illness in the mother and/or father;
 - Reducing inappropriate referrals and readmissions to adult psychiatric wards and the length of inpatient stays, and offering alternatives to admission;
 - Reducing the risk of self-harm, suicide and infanticide;
 - Preventing avoidable separation of mother and baby and promoting early return if separated;
 - Facilitating admission to specialist Mother and Baby Psychiatric Units when indicated

So in order to address issues of **maternal mental health** and promote **stronger maternal self-efficacy** it is helpful to consider the options below.

Specific options for promoting infant mental health and parent psychological health

- ✓ At the universal level, promote at every opportunity, in multiple settings, and in particular through Children’s Centres, how families can support the development of emotional health in their babies and toddlers.
- ✓ At a universal level and across the early years workforce, promote an awareness of:
 - the importance of the parent/baby relationship and how this will influence the baby’s brain development, and

- how interventions aiming to promote positive and healthy care giving relationships need to be based on a positive relationship between worker and parent.
- ✓ As well as the routine 6-week of age assessment, screen for the factors putting infant mental health at risk:
 - during pregnancy and
 - at age 3-4 months (when the focus would be on the quality of parent-child interaction).
- ✓ When significant risk is identified, implement targeted preventive interventions, through the provision of well-resourced specialist NHS (or high quality alternative) Perinatal Parent Infant Mental Health Service support as well as access to regular and skilled supervision.

Resources

Chapter 1 pages 12-23

An excellent overview of Infant Mental Health programmes is available on:-

1. [www.healthychild.ucla.edu/PUBLICATIONS/IMH Evidence Review FINAL.pdf](http://www.healthychild.ucla.edu/PUBLICATIONS/IMH%20Evidence%20Review%20FINAL.pdf)

Also <http://www.IMHPromotion.ca/>

For adult mental health, useful both as information and handouts, this is a very good site: -

1. www.cmha.bc.ca/resources/primer

There are a number of specialist sites covering specific issues, e.g.:-

1. Autism - www.exploringautism.org
2. Infant massage - www.iaim.org.uk
3. www.brazelton.co.uk

In the U. K. the leaflets once produced by the Child Psychotherapy Trust are now available online to be downloaded.

1. www.understandingchildhood.net
2. www.docsfortots.org is also worth a look just for the name as well as being a source of ideas.

Again, the Department of Health new information service for parents provides information delivered direct to parents as well as via professionals, using website, e-mails and short video clips.

<https://www.nhs.uk/InformationServiceForParents/pages/home.aspx>

For information on downloading a sign-up widget and adding it to your website email support@informationserviceforparents.nhs.uk

A3 – Assessing social and emotional development

A3.1 – Identifying risk factors in families in pregnancy and 0-2

- The Healthy Child Programme mandates: ‘A full health and social care assessment of needs, risks and choices by 12 weeks of pregnancy by a midwife or maternity healthcare professional’. Risk factors identified include young parenthood; parents who are not in education, employment or training; families who are living in poverty; unstable partner relationships.

- There is some evidence that positive bonding between mother and foetus during pregnancy predicts the quality of bonding post-birth (Cremona 2008, Fonagy et al 1991), making poor maternal-foetus bonding a further risk factor.

There are opportunities for midwives to help parents prepare for the baby's arrival during pregnancy and to promote optimal bonding during and in the days after delivery. So in order to **identify better where early help and support** is needed in the most vulnerable families during pregnancy the following options might be considered in relation to updating midwifery and health visitor integration:

Some parents-to-be will fall under consultant- (obstetricians and paediatricians) rather than midwifery-led care and the corresponding care pathway will often involve medical procedures, lengthier hospital stays and potentially pre-term babies. It may be helpful to include these staff in understanding the neurology, attachment theory and developmental psychology for parent and infant as there could ultimately be greater risk in this group.

Specific options for Midwives in relation to social/emotional development

- ✓ Carry out a mental health risk assessment as early in pregnancy as possible, covering not only depression and anxiety but chaotic lifestyle, domestic violence, drugs, alcohol etc.
- ✓ As part of the risk factor assessment, the midwife enquires about the mother's perceived relationship with her family and her partner and the mother's 'bonding' with the foetus.
- ✓ Recommended assessment tools: Edinburgh Post-Natal Depression Scale or the Hospital Anxiety and Depression Schedule.
- ✓ Following appropriate training, both midwife and health visitor can carry out the short form of the Neonatal Behavioural Assessment Scale, called the Newborn Behavioural Observation, in the presence of the parents at post-natal home visits in the first 3 weeks after birth. This will help both parents and practitioners to be able to read a baby's signals and cues.
- ✓ The care pathway for those women identified as being at risk should ideally include:
 - an early referral by the midwife to the local health visiting team
 - a minimum of two promotional visits by the health visitor to the woman before the baby is born to create a continuous pre- and post-birth relationship between health visitor and 'at risk' mother, as in the Family Nurse Partnership *in addition* to the current handover from midwife to health visitor around 10-14 days after the birth.

It is important that all practitioners have an awareness of the **risk factors that can jeopardise infant mental health**. It is also crucial that the **Healthy Child Programme be implemented fully** in order to improve and deliver mental health promotion and respond to those families where children are not being adequately supported / protected on a pathway to secure attachment by ensuring that health visitors are resourced and trained fully in social/emotional assessment.

Specific options for health visitors in relation to social/emotional development

- ✓ Health visitors should be trained in the use of Motivational Interviewing for use from first contact onwards. This would help them to re-visit areas of risk outlined during the early pregnancy and discuss these areas of vulnerability with the mother and (if appropriate) her partner.
- ✓ Professionals such as health visitors should be trained to evaluate the interaction between the mother and baby (ideally by using a short video clip, which can also be used in reflective video feedback discussions with the parents).
- ✓ Health visitor assessment at 3-4 months could use the 'Parent Infant Interaction Observation Scale' (a 13 item scale used to guide the assessment and evaluation of a video of a brief parent-infant interaction). Currently the planned web-based training for this scale is not available although the group based training now is. Alternative scales would be assessment tools like 'Keys to Interactive Parenting Scale' and the 'CARE-Index'.
- ✓ Introduce an assessment of attachment behaviour at age 12-15 months using the TAS-45 measure as outlined in the Conclusions above.

Resources

Chapter 2 pages 28-32

See information on Toddler Attachment Sort - 45 (TAS-45),
http://www.acf.hhs.gov/programs/opre/ehs/perf_measures/reports/resources_measuring/res_meas_cdiqq.html

The Association of Infant Mental Health is open to anyone with a professional interest in very young children.
www.aimh.org.uk

Some websites to begin looking for information on how the quality of the early care giving relationship sculpts the brain, for good or ill, are:-

1. www.brainconnection.com
2. www.macbrain.org
3. www.zerotothree.org (www.zerotothree.org/baby-brain-map.html)
4. www.dana.org

Attachment theory has provided the basis for much research and clinical work in Infant Mental Health. Some informative websites to look at are:-

1. www.childandfamilystudies.leidenuniv.nl/index.php3?c=67
2. www.psychology.sunysb.edu/attachment
3. www.turnertoys.com/
4. www.attachmentnetwork.org
5. 128.121.62.12/Marvin_Evid_Tx.htm
6. <http://www.iasa-dmm.org/>

Young Minds have launched an Infancy Policy, and also a good leaflet on 'Tuning in to Our Babies' (2003).
www.youngminds.org.uk/infancypolicy/

Article

Science Does Not Speak for Itself: Translating Child Development Research for the Public and Its Policymakers, *Child Development*, January/February 2011, Volume 82, Number 1, Pages 17–32

A4 – Family violence and neglect

- It is reported that around 25% of children witnessing domestic violence develop serious social and behavioural problems.
- Being brought up in a home where parents are involved in domestic violence is among factors which make poor attachment more likely for infants.
- Children who witness domestic violence are at risk of physical injury during an incident, and will experience serious anxiety and distress which can later express itself in anti-social or criminal behaviour, or as psychological problems.
- Children in homes where there is domestic violence are at more than double the usual risk to suffer child abuse.
- In the past year 39,000 UK babies under a year of age lived in households affected by domestic violence.
- A number of studies suggest there can be an increased incidence of domestic violence during or shortly following pregnancy (e.g. a survey of 1207 women attending GP surgeries in Hackney found pregnancy in the past year associated with an increased risk of current violence).
- Domestic violence can seriously impact the parenting capacity of the victim.

So in order to ensure more action is taken to **prevent both domestic violence and children’s witnessing** of it, the following should be considered;

Specific options on domestic violence

- ✓ Make it a priority for midwives, GPs and other health professionals to identify and provide family support where domestic violence is identified as a risk in pregnancy.
- ✓ Ensure that local police forces have robust procedures in place not only to deal with individual incidences of domestic violence but also to have the intelligence and data systems to identify emerging patterns.
- ✓ Domestic violence support services for both victims and offenders should prioritise families where the woman is pregnant, or there is a baby under 2 years of age.

Resources

Chapter 1 pages 18-23

For an introduction to the long term neurological and psychological consequences of early trauma:-

1. www.childtrauma.org
2. www.trauma-pages.com
3. dynamic.uoregon.edu/~jjf/aaas04/PutnamAAAS%20.pdf

And for ideas on how to help:-

1. www.futureunlimited.org
2. www.nctsnet.org
3. www.nccev.org

A5 – Improve parenting capability

- Many proven early childhood programmes demonstrate substantial net economic benefits, including savings to the public purse, particularly through better long-term health and crime reduction. Some experts, e.g. Professor James Heckman, assert that the highest return come from interventions at the earliest ages. Evidence also suggests:
 - Best effects are delivered when support is provided to follow up the family longer term.
 - Most significant effects are found for groups with a large number of risk factors.

- Although non-UK evidence does not necessarily translate directly to the UK (because we already have universal maternity and perinatal health provision in the form of the Healthy Child Programme), where UK evaluations do exist (e.g. Croydon Total Place, the Millennium Cohort Study, the LSE evaluation of programmes to reduce conduct disorder, and others listed in the appendix on UK economics), they suggest very good economic returns, several times higher than costs, for early years' investment in a UK context.

So in order to intervene early to promote infant mental health and to reduce the risk of children's development being hampered by abuse, neglect or other early parent-child relationship difficulties, thereby reducing the risk of longer term poor outcomes which entail higher longer term costs, local investment needs to be **targeted at early investment in locally delivered evidence-based programmes:**

Specific options to improve parenting capability

- ✓ Invest in proven, effective (and cost-effective) programmes such as the Circle of Security; Family Nurse Partnership; First Steps in Parenting; models like the Sunderland Infant Project; and Watch, Wait & Wonder.
- ✓ A comprehensive review by Barlow et al²¹⁹ found that those parenting programmes which do not consider cultural factors risk poor engagement and drop-out of BME parents. The Policy Research Bureau²²⁰ concludes there needs to be an awareness and respect for different models of parenting that arise within different cultures, and the need to tailor programmes accordingly; while at the same time recognising the commonalities of parenting within different cultures.

Some examples of parenting programmes

Programme	Description
Incredible years	The Incredible Years are research-based, proven effective programmes for reducing children's aggression and behaviour problems and increasing social competence at home and at school.
Infant Behavioural Assessment Intervention Programme	A home-based programme offering support for parents of very preterm infants.
Family Links Nurturing Programme	The Nurturing Programme provides simple, effective tools to help adults and children understand and manage feelings and behaviour, improve relationships at home and in school, improve emotional health and wellbeing, develop self-confidence and self-esteem. The parenting programme is a 10 week course of 2 hours per week, for children from birth to 18.
Mellow Parenting	Offers evidence based parenting programmes which have been shown to be effective in improving mother child interaction, child behaviour problems, mother's well-being and mother's effectiveness and confidence in parenting.
Triple P	Triple P is a parenting and family support strategy that aims to prevent severe behavioural, emotional and developmental problems in children by enhancing the knowledge, skills and confidence of parents.
Healthy Eating and Nutrition for the Really Young (HENRY)	Parenting and Relationship issues are tackled as part of an award-winning programme focused on obesity.
The Family Partnership Model	The Family Partnership Model is an innovative approach based upon an explicit model of the helping process that demonstrates how specific helper qualities and skills, when used in partnership, enable parents and families to overcome their difficulties, build strengths and resilience and fulfil their goals more effectively.
The Solihull Approach	The Solihull Approach is based on the Solihull Approach Model of Containment, Reciprocity and Behaviour Management. It is intended for parents and carers who want to know more about sensitive and effective parenting.

Resources

Chapter 1 pages 14-23

Universal parenting classes: the DfE CANparent Trial is seeking to stimulate a market in universal classes so that over time any parent could access such a class. It is through stimulation of a national market, drawing on various funding models, including parents paying for the full or partial cost of classes, that this vision could be achieved. Evaluation of the trial, 2012-14, will provide learning on the feasibility of this. Providers in the trial were required to demonstrate that their work conformed to evidence-based principles.

The commissioning toolkit of parenting programmes is a searchable database of parenting interventions designed to provide information and guidance for commissioners, service managers and programme developers on the quality and effectiveness of parenting programmes/approaches.

https://www.education.gov.uk/publications/eOrderingDownload/Commissioning_Toolkit_user_guide.pdf

Preparation for Birth and Beyond (PBB) is an antenatal education programme based on a systematic review of the evidence of what works in antenatal education carried out by the University of Warwick, and extensive interviews with a broad cross-section of mothers and fathers-to-be and new parents. Some of the learning from the Family Nurse Partnership programme has fed into the design of this work.

<http://www.nct.org.uk/professional/antenatal-services/preparation-birth-and-beyond-antenatal-education-programme>

This aims to help the NHS, local authorities and the voluntary sector in planning or running groups for expectant and new parents. It is a practical tool that aims to improve outcomes for babies and parents and covers the physiological aspects of pregnancy and birth, and also addresses the emotional transition to parenthood, child development, the roles and experiences of both parents and relationship issues in greater depth.

<http://www.dh.gov.uk/health/2011/10/preparation-for-birth-and-beyond-resource-pack-to-help-parenthood-groups/>

DH Birth to Five /NHS Choices - Some useful advice relevant to difficult behaviours e.g. tantrums etc.

<http://www.nhs.uk/Planners/birthtofive/Pages/Understandingdifficultbehaviour.aspx>

KidCareCanada Society translates current research and applies technology to produce educational resources relevant to the 21st Century new parent. The accessibility of these resources enables all children to have equal opportunity to the best possible start in life, and promotes the health, happiness and well-being of future generations. <http://kidcarecanada.org/>

Attachment Parenting International - Attachment Parenting International (API) promote parenting practices that create strong emotional bonds between child and parent. API believe that Attachment Parenting (AP) practices fulfill a child's need for trust, empathy, and affection, providing the foundations for lifelong healthy relationships. Attachment Parenting has been studied extensively for over 60 years. Studies revealed that infants are born 'hardwired' with strong needs to be nurtured and to remain physically close to the primary caregiver. These needs can be summarized as proximity, protection, and predictability.

<http://www.attachmentparenting.org/principles/intro.php>

Best Beginnings - Video clips for parents re bonding, Infant communication and play videos and commentary from clinical psychologist Dr Liz Kirk. <http://www.bestbeginnings.org.uk/bonding-before-birth>

Parenting UK - Excellent search engine which lists 36 resources on attachment and 9 on infant mental health. Professionals' and parents' materials.

World Association for Infant Mental Health (WAIMH) - promotes education, research and study of the effects of mental, emotional and social development during infancy on later development through international and interdisciplinary cooperation, publications, affiliate associations, and through regional and biennial congresses. www.waimh.org

The Mindful Policy Group - dedicated to a more humane, caring, and psychologically aware society. www.mindfulpolicygroup.com

Begin Before Birth - What happens in the womb can last a lifetime. The influence of the environment begins in the womb, this environment can have a lasting effect on development. www.beginbeforebirth.org

What About The Children? - 'Raising Awareness about the Emotional Needs of Under 3s'.

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

'Talk to Your Baby' run by The Literacy Trust encourages parents to talk more to children from birth to 3 years. www.literacytrust.org.uk/talktoyourbaby

The Communication Trust - highlights the importance of speech, language and communication across the children's workforce. www.thecommunicationtrust.org.uk

Mellow Parenting - delivering quality training in evidence based parenting programmes multi-nationally. Training is delivered to local authority and NHS Staff as well as voluntary agencies working with the most vulnerable families in society. www.mellowparenting.org

I CAN - The Children's Communication Charity www.ican.org.uk

Parent Infant Clinic - Emotional screening of all babies under 1 year; training professionals in signs of autism in infants and treatment; to help pay for treatments of babies that have serious signs of autism. www.infantmentalhealth.com

International Pre-Autistic Network (ipan) - group of psychoanalytically informed clinicians and researchers who come together for ideas, opinions and insights www.ipan-babies-autism.org

Center On The Developing Child - Harvard University - Drawing on the full breadth of intellectual resources available across Harvard University's schools and hospitals, the Center generates, translates and applies knowledge in the service of improving life outcomes for children in the United States and worldwide.

<http://developingchild.harvard.edu/>

The Marce Society - An international society for the understanding, prevention and treatment of mental illness related to childbearing www.marcesociety.com

Children in Scotland - The national agency for voluntary, statutory and professional organisations and individuals working with children and their families in Scotland. www.childreninscotland.org.uk

Zero to Three – American website for general information on development from the ante-natal period to 3 years. It includes details of different ways of offering early intervention, both home and centre based. Their bi-monthly journal is essential reading. www.zerotothree.org

And for general research-based information on this period:-

www.isisweb.org

<http://www.dad.info/>

<http://www.infantstoteens.com>

Links to parenting interventions outlining how they should be tailored in such a way as to respect and not undermine the cultural values, aspirations, traditions and needs of different minority ethnic groups.

http://www.rbkc.gov.uk/pdf/parenting_literature_review.pdf

<http://www.jrf.org.uk/sites/files/jrf/barriers-inclusion-parents.pdf>

<http://www.prb.org.uk/wwiparenting/RR574.pdf>

<http://ethnos.co.uk/DCSF-Engaging%20effectively%20with%20BME%20parents.pdf>

<http://www.prb.org.uk/wwiparenting/RR574.pdf>

B – QUALITY OF EARLY YEARS' SERVICES

B1 – Multi-agency working

- The Marmot Review indicated that effective multi-agency practice to address a range of social determinants of poor health was key to improving outcomes, and to giving children the best start.
- Children in families which suffer a number of different disadvantages or risk factors are disproportionately likely to suffer long term poor outcomes. The patterns of their problems or disadvantages vary a great deal, so services need to be flexible enough to support families whatever their varied circumstances and sets of issues, without passing them to lots of different agencies.
- Children's centres provide access to a wide range of services including family and employment support, and help with housing and financial problems. Evidence also suggests that early intervention by midwives or other health engagement at children's centres can lead to a direct reduction in young children's risk of poor outcomes including:
 - reduced incidence of low birth weight and of foetal and postnatal injury
 - improved uptake of preventive health care
 - a lower risk of poor bonding and attachment
 - reduced child neglect and abuse
- There are some examples of excellent multi-agency working, such as the Integrated Services model in Highland Region of Scotland²²¹ and some of the health visitor, children centres and school nurse local integrated partnerships (Warwickshire, Brighton and Hove, East Lancashire health coordinator team, Bowthorpe, West Earlham and Costessey children's centres).

So in order to build on and develop **effective multi-agency, integrated working and delivery** to ensure that services are working together, sharing information and communicating with each other and with parents and carers, to achieve positive outcomes for children, local areas might consider:

Options

- ✓ Developing effective multi-agency working and delivery through identifying and following the principles of such highly successful multi-agency practices as the Highland Region Streamlined Rapid Reaction system, and case studies from the LGA knowledge hub and DH early implementer sites.
- ✓ Accessing Children's Improvement Board support materials to promote integrated working and learn from the 18 development demonstrator sites using whole system approaches to effective integrated working.
- ✓ Explore the potential of linking in with local interventions around the Troubled Families initiative, especially where the focus is on working through a single key worker and dealing with problems in a more holistic way.

Resources

Chapter 2 pages 24–28 and 32-36

Children's centres and health visitors: unlocking the potential to improve local services for families: A report from the HV partnership delivery group task and finish group 2012

HandsOnScotland - The website provides practical information and techniques on how to respond helpfully to children and young people's troubling behaviour, build up their self-esteem and promote their positive mental wellbeing. www.handsonscotland.co.uk

1. www.touchpoints.org
2. www.childdevelopmentinfo.com
3. www.educarer.com
4. www.familyresourcecentre.com
5. www.indiaparenting.com
6. www.fnih.investinkids.ca/
7. www.kidshealth.org
8. www.incredibleyears.com

Harvard USA

http://developingchild.harvard.edu/index.php/resources/multimedia/interactive_features/biodevelopmental-framework/

B.1.1 Children's Centres

Recent evaluations show that Sure Start Local Programmes (SSLPs) have successfully engaged the most vulnerable groups in the most deprived areas, though it often takes considerable time to encourage vulnerable families to engage with services. The early SSLPs had beneficial effects on parenting which persisted until the children were age 7. The benefits of SSLPs appear to apply to all areas regardless of level of deprivation, and to all children and families regardless of family deprivation. However, there was no evidence of sustained beneficial impact on child outcomes – reinforcing the need to ensure that all provision in children's centres is evidence based.

Children's Centres provide integrated services that can support the most disadvantaged children and families. The challenge is to make the most of this in a way that measurably narrows the gaps in outcomes between less and more advantaged children. So in order to **ensure that the national network of Sure Start Children's Centres is well placed to engage** the most vulnerable groups and support them effectively, local commissioners might consider:

Specific Options for Children's Centres

- ✓ Prioritise high quality outreach and family support to work with the most vulnerable families suffering multiple risk factors, who may need long-term work to get them to the point of accessing other services.
- ✓ Clearly defined roles for health visitors in leading services and/or teams within children's centres (where capacity allows)

- Explore the potential for health visitors to act as team leaders, supervisors, and/or mentors, building capacity and skills within the children’s centre team and contributing to better integrated delivery and improved information sharing
- ✓ Explore the potential for shared local targets to help drive and incentivise integrated delivery
 - Develop local measures of success for children’s centres (not necessarily for payment by results) which link to those in the Children and Young People’s Public Health Outcomes framework and the Healthy Child Programme
 - Develop truly integrated assessments and reviews (two year/two and half year integrated review)

In order to have a greater direct impact on outcomes:

- Give greater emphasis to services that will improve child outcomes, including proven evidence based parenting programmes and support for social and emotional and language development;
- Focus more directly on improvements to what young children experience in their daily lives: at home and in children’s centre settings.

Resources

Chapter 2 pages 24-27

The outreach system leaders report on evidence-based outreach programmes. National College.

DH Health Visitor partnership delivery group report- Children centres and health visitors: unlocking the potential to improve local services for families.

Specific Options for other early years settings

- ✓ ***Understand attachment***
 - practitioners should have a good understanding of attachment as it relates to the child’s key relationships and their own relationship with the child
 - practitioners should be able to build warm, responsive and sustained relationships with young children confirmed by visual, auditory and physical contact
 - continuity and consistency of primary care is important e.g. key person systems. The revised EYFS statutory framework for the early years’ foundation stage requires providers to assign a key person to every child to ensure that every child’s care is tailored to meet their own individual needs, to help the child become familiar with the setting, offer a settled relationship for the child and build a relationship with their parents.

B2 – Workforce

A good understanding of child development from pre-birth to age 3 can help early years practitioners to work more effectively with young children and their families This is likely to include an understanding of:

- Social and emotional development;
- Age-appropriate expectations;
- Early brain development;
- Cultural, social and emotional factors that contribute to common behavioural problems in young children;
- The importance of a preventive approach (recognising the need to intervene early to prevent escalation of concerns and/or maltreatment).

For early years practitioners dealing with vulnerable families or babies, emotional intelligence is important to enable them to build resilience to:

- deal with the emotionally demanding aspects of their work and
- create positive, non-judgmental relationships with the members of the family involved.

Practitioners working with infants and their families can be supported through appropriate training and support, which good practice from the FNP work suggests should include a reflective space with a supervisor, coach or mentor, to understand and process their work. Whatever the training option selected, the central focus of the work is upon the quality of the relationship between the practitioner and the family.

Specific Options on Workforce

- ✓ Consider recruitment processes for early years practitioners which assess:
 - Emotional intelligence;
 - Knowledge and skills on interactions with infants and toddlers;
 - Knowledge and skills of child development from pre-birth to 3 years;
 - Interface with Safeguarding knowledge;
 - Skills to form empathic relationships with parents.
- ✓ Consider providing personal support programmes for workers which recognises the emotional impact of the work and the impact of personal issues for the supervisee and ensuring that the supervisee has emotional intelligence.
- ✓ Consider whether staff in all early childcare and other early years' settings have a good understanding of child development and how to spot and tackle problems appropriately and quickly.
- ✓ Support effective parenting. It is critical that the workforce has the skills to offer evidence-based interventions, including parenting programmes, where appropriate.
- ✓ Understand the importance of speech and language development. It is recognised that Personal, Social, and Emotional Development, Communication and Language, and Physical Development are prime areas of learning for our youngest children.

Resources

Chapter 2 pages 32-36

For more information on EYFS two web links are helpful:

<http://www.education.gov.uk/schools/teachingandlearning/curriculum/a0068102/early-years-foundation-stage-eyfs> (which is the EYFS section of the DfE site and includes, in addition to the EYFS, Development Matters (covering 0-5 development)

and

<http://www.foundationyears.org.uk/early-years-foundation-stage-2012/> (which links to the 4Children-run Foundation Years website also full of relevant resources for 0-2).

<http://www.education.gov.uk/childrenandyoungpeople/earlylearningandchildcare/delivery/b00201475/working>

DfE has contracted the Early Language Consortium, led by I-CAN, the children's communication charity, to deliver a 3 year Early Language Development training Programme through children's centres for people working with young children. This builds on the Every Child a Talker programme which ended in March 2011. It will provide a suite of training, resources, tool kit and strategies targeted at practitioners to support children and parents.

<http://www.education.gov.uk/childrenandyoungpeople/earlylearningandchildcare/delivery/education/a00212432/eldp>

DH is currently working with The Centre for Workforce Intelligence (CfWI) to look at the issue of the competencies required by the psychological workforce (esp IAPT and including also psychotherapists, counsellors and GPs)

<http://www.cfwi.org.uk/workforce-planning-news-and-review/psychological-therapies-workforce-review>

Much of the evidence is enduring,

http://www.longtermventilation.nhs.uk/_Rainbow/Documents/Children%27s%20national%20workforce%20competence%20framework.pdf

http://www.home-start.org.uk/about/A_beginners_guide_to_children_and_families_workforce_development.pdf

This is a helpful link to effective supervision http://ec.europa.eu/education/more-information/doc/2011/coreannex_en.pdf

http://www.faculty.londondeanery.ac.uk/e-learning/supervision/principles_underpinning_effective_supervision.pdf

C – PROMOTION OF EARLY YEARS' PRIORITY

C1 – Evidence-based interventions

A range of American evidence suggests a strong economic case for greater investment in specific early intervention programmes which have been evaluated to show substantial net long term benefits. The evaluation of the Family Nurse Partnership in England is beginning to provide promising findings, suggesting that at least some of the benefits found by American studies can be replicated in the UK. A number of parenting programmes and other early years' interventions have also been shown to demonstrate substantial benefits in a UK context.

Commissioning evidence based programmes requires a good understanding of:

- the needs of the local population;
- which approaches / programmes are likely to be most effective in addressing them, based on evaluation and other evidence of effectiveness elsewhere;
- costs and ease of implementation (not all effective programmes are readily available in the UK)

The most effective programmes have been shown to have a positive long-term impact on outcomes, and potential savings to existing local services. But delivering these benefits depends on very good targeting of those resources, and effective implementation: the more you vary from an existing highly evaluated programme, the less likely, in general, you are to deliver the same benefits in your area. So effective local monitoring and evaluation are important to improve continually the effectiveness of services.

Resources

Chapter 3 pages 37-41

Economic theories

<http://www.ncsl.org/issues-research/human-services/new-research-early-education-as-economic-investme.aspx>

The commissioning toolkit of parenting programmes is a searchable database of parenting interventions designed to provide information and guidance for commissioners, service managers and programme developers on the quality and effectiveness of parenting programmes/approaches.

https://www.education.gov.uk/publications/eOrderingDownload/Commissioning_Toolkit_user_guide.pdf

C4EO- provides a range of support to drive positive change in the delivery of children's services. One of the priority areas for c4eo is early intervention. www.c4eo.org.uk

OXPIP - The Oxford Parent Infant Project - <http://www.oxpip.org.uk/>

C2 – Health

Specific Options for Health and Wellbeing Boards

- ✓ Consider prioritising infant mental health and factors of importance to infant wellbeing in the Joint Strategic Needs Assessment, because of the long term positive impact on wider outcomes.
- ✓ Learn from effective Children's Trust arrangements in the new commissioning process with Health and Wellbeing Boards in setting local priorities for children through the JSNA.
- ✓ Provide clear information to health practitioners about the importance of measures supporting children from pregnancy to age 2, and their parents.
- ✓ Recruit a Public Health champion to advise local areas on how best to incorporate the importance of 0-2 s into the JSNA and provide advice to the whole public health community and especially commissioners of early years' health services on the importance of the period birth to two with respect to long term public health outcomes.

Specific options for health commissioners

- ✓ The Healthy Child Programme needs further development of detailed clinical guidance (as was completed with the Two Year Review) for earlier ages (e.g. first year of life) so that it can be commissioned and disseminated in a similar way. This development would include expanding assessment of attachment and specialist

pathways, parental and infant mental health, drug and alcohol, domestic abuse, relationships, and links to 'Pregnancy, Birth and Beyond'.

- ✓ For health visitors, consider use of the high quality e-learning training modules as part of the Healthy Child Programme – which cover secure attachment, parent and infant mental health, domestic violence, drugs and alcohol, links to pregnancy. For midwives, consider high quality training modules on stress, domestic violence, drugs and alcohol, assessment of risk and links to Health Visitors. This resource was originally launched by Ann Milton and is available to all NHS staff free of charge.

Resources

For examples of good local practice in early years and useful information and advice for local authorities and others visit www.c4eo.org.uk/

The curriculum and a link to the HCP e-learning resources for all healthcare staff <http://www.e-lfh.org.uk/projects/healthychild/index.html> This work was commissioned by the Department of Health and delivered by e-Learning for Healthcare (e-LfH) in collaboration with a consortium of professional bodies.

DH Early Implementer Sites

http://webarchive.nationalarchives.gov.uk/+www.dh.gov.uk/en/Aboutus/Features/DH_125650

C3 – Communications – Conclusions

The most effective way to raise awareness of the importance of very early life and, therefore, how we support pregnant parents is to use a multi-channel approach, with a range of key credible spokespeople. The timing of the message needs to have resonance with the stage of life and proximity of behaviour of the target audience to have effect.

- Well educated and informed health and social care professionals can have an extremely powerful impact on outcomes (as testified by the results from FNP).

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Secure attachment

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²¹⁶ Crittenden, P. M. (1988). Relationships at risk. In Belsky, J. & Nezworski, T. (Eds) *Clinical implications of attachment*. Hillsdale: Lawrence Erlbaum Associates, 136-176.

²¹⁷ Benoit, D., Madigan, S., Lecce, S., Shea, B., & Goldberg, S. (2001). Atypical maternal behaviour toward feeding-disordered infants before and after intervention. *Infant Mental Health Journal*, 22(6), 611-626

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Improving parenting capability

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APPENDIX 1 –

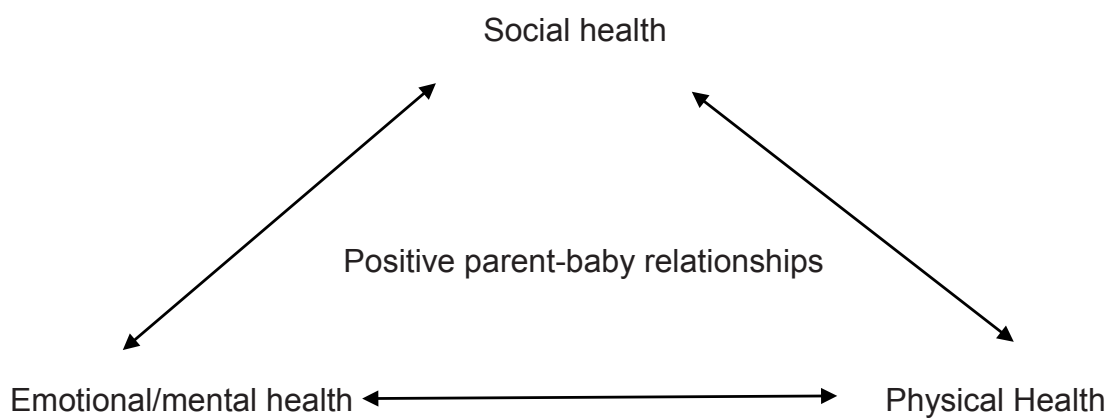
Mental Health Promotion in children under the age of two

Mental Health Promotion

- The World Health Organisation defined mental health and mental health promotion as follows: Mental health is a state of well-being in which the individual realises his or her own abilities, can cope with the normal stresses of life, can work productively and fruitfully, and is able to make a contribution to his or her community.
- Mental health promotion is an umbrella term that covers a variety of strategies, all aimed at having a positive effect on mental health. The encouragement of individual resources and skills and improvements in the socio-economic environment are among them (WHO, 2001).

The linkages between emotional, social and physical health

Emotional, physical and social health are interlinked and interdependent.



Failure to promote the secure relationships that underlie emotional health in infancy has a direct result on emotional, social and physical health, both in childhood and in the longer term. By promoting mental health in the first few years of life, beginning in pregnancy, society ensures that as many children as possible grow up to embrace social, physical and emotional health as adolescents and as adults. Positive pre-verbal health foundations are directly related to positive relationships within the family and within the family’s environment.

Infant mental health within a Positive Health Promotion framework

Infant mental health is synonymous with healthy social and emotional development across the life course. The emotional environment of infancy, which from the baby’s point of view consists of relationships with the parents, will be preserved on both a psychological and neurological level for good or for ill depending on the quality of that environment. On this foundation all future experiences will be built.

The most essential factors for positive infant mental health are: active, satisfying and reciprocal relationships with parents, which create the ‘taken for granted’ basis of a sense of identity; self-esteem; appreciation of others, and self-control.

It is now known that the developing brain of the baby adapts itself, on a neurobiological level, to the quality of the caregiving environment. Good quality relationships and secure attachment enable a growing brain to become socially efficient and so provide the biological basis for future self-control and cognitive development; whereas a brain marinated in maltreatment will carry what were once necessary responses to a hostile environment for the rest of life.

The central importance of children’s first significant relationships

Secure attachment, although not a guarantee of future mental health, is a protective factor, conferring confidence and adaptability, along with the emotional competence and benign interpersonal expectations needed to deal

with loss or trauma should they occur in life. Secure children and adults are resilient, are able to regulate their emotions, have developed empathy and can self-repair when stressed or challenged. Insecure attachment organisation, on the other hand, creates a significant vulnerability that, together with stressful life events and concurrent vulnerability factors, can create a spiral of 'deviation amplification' which eventually will lead to psychological or psychiatric symptomatology.

Secure attachment between infant and caregiver is promoted by sensitive and thoughtful parenting, where the baby can be held in mind and caregiving is not compromised by negative influences (see the risk factor check list in Appendix 2C). The quality of these first relationships will directly affect the development of the baby's brain.

Early social and emotional development in a public mental health context

There are significant and expensive public health consequences stemming from poor infant mental health at a population level. All forms of insecure attachment create negative susceptibility that will interact with other risks present in the emotional and physical environment of the growing child; the level of attachment disturbance is equivalent to a level of vulnerability that is difficult to change without help. Children with problems related to very insecure attachment begin to soak up statutory resources from early on when 'externalising' behaviour (aggression, non-compliance, negative and immature behaviours, etc.) demands a response from society.

From a life-path perspective it has been demonstrated that children who have suffered early neglect and abuse are far more likely to suffer from serious physical and mental illnesses when they are adults, thus taking up an excessive and disproportional amount of health service resources, and they are also at a greatly increased risk of early death. Children who develop strategies of compulsive compliance (as opposed to the more usual tactic of controlling and violent behaviour) as a response to abuse may become 'invisible' until this protective strategy collapses in adolescence.

Therefore, infant mental health must be seen as everyone's business; babies can neither wait nor stand up for themselves. It is a requirement of the UN Convention on the Rights of the Child that their wellbeing is protected.

The consequences of maltreatment and adversity in infancy

What is technically known as 'disorganised' or 'complex' attachment is the most serious form of insecure attachment. This may often occur when, for whatever reason, a caregiver has no mental space left over for their baby or, more gravely, poses some sort of threat through being frightening, fearful or out of touch.

Children who have been maltreated in the early years, most of whom will demonstrate disorganised attachment, end up with a 'wired in' compromised ability for self-control, and a lack of coping mechanisms on a neurological level for dealing with internal and external stresses and frustrations, which confer a high vulnerability for later emotional, relational and mental health problems.

Infants who have suffered adverse relationships frequently go on to become teenagers and adults who are grossly over-represented in the criminal justice system. This is not only a direct drain on resources; it also signifies a large population who are not in a position to contribute to the wider society (the same applies to those who never leave their dependency on mental health provision).

The importance of early intervention services

Early intervention, where vulnerable and highly stressed parents can be identified and supported before the baby suffers, is an essential preventive service if we want to avoid a steady growth in the number of referrals to adult health services and the criminal justice system.

A comparatively small proportion of the funds allocated to adult mental health services now could reduce this drain on resources in the future if it were allocated earlier to preventive interventions in the early years.

Economic benefits of very early intervention (see also Appendix 4)

A number of studies demonstrate the long-term cost benefits of helping vulnerable families provide the sort of emotional environment for their babies and toddlers that leads to secure attachment.

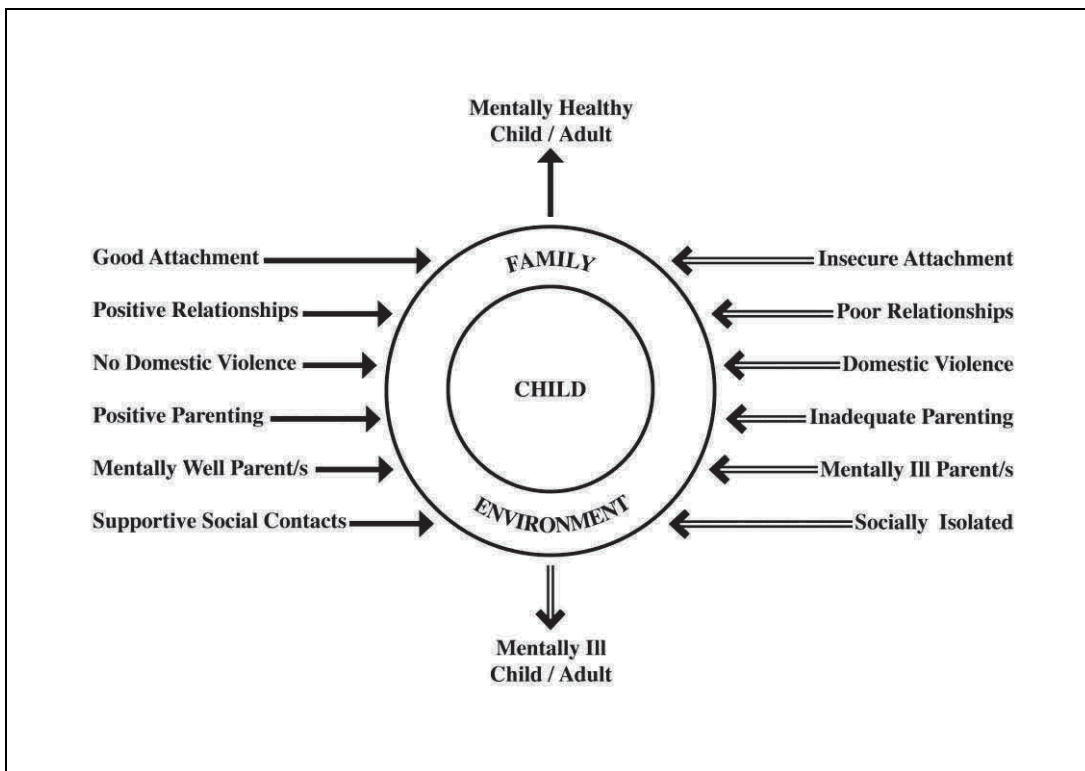
The expense of not intervening is in the direct and indirect costs of later anti-social behaviour, mental ill health or another generation struggling to offer 'good enough' parenting in turn.

Simply preventing the occurrence of early child maltreatment or, if that has been impossible, offering prompt and appropriate treatment, has a long-term benefit that is enormous in terms of services that will not need to be called upon to intervene in the child's future.

The contribution of the Healthy Child Programme to mental health promotion designed to benefit babies and toddlers

The Healthy Child Programme (HCP) provides the framework for health visitor-led mental health promotion in pre-school children. Interventions may be at a universal or targeted level. Universal support to families in the HCP includes activities to promote the development of emotionally secure children and families by, for example, promoting the self-esteem of the parents, child-caregiver attachment and positive parenting practices. It also includes working specifically with women experiencing postnatal depression or domestic abuse, with children with behavioural problems, managing child abuse and bereavement. Providing it is done as a universal service, health visitors leading the programme must ensure the programme is delivered across many social and ethnic boundaries, and with excluded groups such as the homeless, travellers, asylum seekers and the families of prisoners, who face particular mental health challenges as a result of their life styles.

The multiple positive and negative emotional forces within the family that may affect a child's future emotional health



(© Cheryll Adams, 2006)

Implications for early intervention

If the central relationship between the baby and parents is given the attention it deserves, it has two major implications:

- Firstly, many later emotional and mental health problems can be reworked only in a similar fire as forged them.
- Secondly, by recognising the parent-baby relationship is the crucible for change and development, for good or ill, we can see beyond the individuals to the wider conditions that impinge upon this relationship.

Anticipating when caregiving will be jeopardised: a consideration of risk factors

- The parent-baby relationship is always located in a wider context, within which are found both risk and protective factors. Risk factors can harm the baby directly (e.g. pollution, substance abuse in pregnancy, unhealthy housing) but mostly are titrated into the relationship via their effects on the parents' social and emotional functioning, since these dictate the baby's immediate emotional experiences.
- The information on risk factors allows babies who might be likely to have adverse developmental pathways through life, because of stresses in their initial relationship with their parents, to be easily identified early on.

The greater the number of risk factors found in a family's total ecology, the greater the need for immediate assistance and the longer term will be the time involved in helping and supporting them. The recognition and analysis of risk factors clearly shows how external pressures can distort the relationships within a family.

How should mental health promotion in the early years be targeted?

- Through 3 levels – universal interventions, targeted preventive interventions and therapeutic interventions addressing a problem.
- By considering the emotional and social health needs of the whole family as they will directly affect the emotional health of the infant.
- Through the use of available helpful policy and practice – particularly the need to implement fully the HCP.
- By promoting at every opportunity, in multiple settings, how families may promote secure attachment and emotional health in babies and toddlers.
- Screening for the factors putting infant mental health at risk.

Characteristics of effective early intervention services for families with very young children as part of a policy of overall mental health promotion

- Any intervention, regardless of technique or theory, is only as effective as the quality of the relationships the intervention team can build with the families.
- Programmes that aim to improve the relationship between parent and baby can deliver only if they are embedded within a 'relationship-based organisation' where the quality of the relationships within the team match the quality they aim to foster within the families being supported.
- Evidence supports the principle that proactive programmes, those that are truly preventive (and therefore kindest), beginning either in the pre-natal period or at birth, have the greatest and most sustained effect.
- The earlier we intervene, the better. Babies can't wait.
- The best results are attained with strength-based approaches that focus on parental empowerment and involvement.
- This is highly skilled work that demands well-skilled, well-trained and well-paid staff who possess the competencies needed to gauge when and how to intervene.
- Children's Centres are perfectly placed to deliver low stigmatising 'wrap around' services ranging from health visitors and specialist infant mental health teams to the full gamut of the different parenting groups available.
- Infant mental health services demand a core of specialised knowledge and skills congruent with the wide range of risk factors and developmental issues that need to be considered.
- Reflective supervision is essential to avoid the risk of defensive avoidance, vicarious traumatisation, counter-transference, collusion and burnout.
- Staff must be carefully selected for their emotional health as well as education and skills.

An inclusive framework for delivering true early intervention

This should be underpinned by the requirements of the Healthy Child Programme and be based upon the concept of Progressive Universalism. It would include universal, indicated and targeted interventions, delivered by different professionals in a variety of settings, including the family home. Set within a developmental framework (see Appendix 1B below) and would entail:

- 1) Getting ready to welcome baby in pregnancy;
- 2) Ensuring optimal bonding during and after delivery;
- 3) Tuning in to the very young baby;
- 4) Supporting baby's security and autonomy at 8-12 months;
- 5) Setting safe boundaries at 15 months.

Conclusion

Getting the first and centrally important relationship of anyone's life more or less right is a necessity, not a luxury. This is the most sensible and cost effective time to put in supportive and therapeutic resources. An investment in the present represents a saving in the future from a reduction in the use of health services, the need for social care and in the prison population. The knowledge and skills needed to deliver effective early intervention services are well known, and have been successfully applied elsewhere. Based on the principle of incorporating the three dimensions of Progressive Universalism, Building Working Alliances and Infant Maturation Development a comprehensive framework for delivering evidence-based interventions has been outlined.

APPENDIX 1B –

A comprehensive, developmental framework for early intervention

(Shortened version; full version of this paper can be seen on WAVE's website, www.wavetrust.org)

Getting ready to welcome baby in pregnancy

Universal Interventions

Revision of midwifery input to:

- Engage with all clients (The Family Partnership Model);
- Identify vulnerable mothers-to-be in general (PREview);
- Identify highly anxious mothers-to-be (Hospital Anxiety and Depression Scale).

This will in practice mean that midwives (as well as health visitors as is current) could use the Family Partnership Model both to engage with the mother-to-be and also to assess her level of vulnerability and mental health needs, referring to health visitor or infant mental health specialist colleagues if appropriate. The health visitor antenatal contact may be used to:

- start to build a relationship with the family (The Family Partnership Model);
- build on midwifery assessment to identify presence of risk factors;
- provide anticipatory guidance to promote the mental health of the whole family.

Targeted Interventions

- The Department of Health has launched *Preparation for Birth and Beyond* for people who plan and lead preparation for parenthood groups and activities. The pack aims to give practitioners the confidence to run groups tailored to the specific needs of those attending, that young mothers and their partners enjoy and that help them adapt to their parenting role.
- A group version of the FNP, initially trialled in two sites, starting in pregnancy and continuing until the babies are 12 months old. The aim is to reach young women who are not eligible for one-to-one FNP but would benefit from additional support;
- 'First steps into parenting' is an evidence-based parenting preparation programme with good outcomes;
- 'Mellow Bumps' is a group-based intervention derived from the 'Mellow Babies' approach. This has been shown to improve pre-birth mother-baby bonding in high-risk mothers.

Clinically indicated Interventions

Indicated interventions come into play when the parent/s-to-be have been identified as being particularly vulnerable, complex or at risk through substance abuse, antenatal depression or mental illness, or significant levels of antenatal anxiety, or having or being at risk of developing enduring mental health problems such as hallucinations, delusions, or rapid and unpredictable mood swings. Published NICE guidelines as to treatments and interventions should apply. However, in order to be truly preventive, this group should also include pregnant women in dangerous or threatening relationships as well as those disclosing and dismissing past trauma or loss (such as parents who have been in care). The interventions will range from psychotherapeutic work with the mother-to-be, with the parents-to-be, to the full range of psychiatric treatment and child protection processes.

Ensuring optimal bonding during and after delivery

Universal Interventions

Facilitating a 'secure' birth through:

- emotional preparation ante-natally;
- dealing with expectations of delivery/motherhood/baby;
- psychological preparations to cope with pain;
- developing a 'birthing alliance' through team midwifery, a birthing assistant or doula;
- feeling safe and supported through birth venue, birth assistant; and an emergency back-up plan;
- saying hello in the baby-friendly way;
- kangaroo care, especially if baby is born premature;
- ensuring minimal separation after birth;
- baby massage;
- using a baby sling.

Targeted and indicated interventions

Resolving trauma and/or loss consequent on a traumatic delivery through psychotherapeutic work.

Changing the future for infants in intensive care

Implementing the Newborn Individualized Developmental Care and Assessment Program (NIDCAP) in hospitals' Neonatal Intensive Care Units.

Tuning in to the very young baby

Universal Interventions

The purpose of these interventions (which are most likely midwifery-led) is to enable parents to develop a degree of mindfulness or mind-mindedness by helping them to recognise how 'smart' their babies are; demonstrating such behaviour as recognition of mother's voice and smell, baby's preference for faces, proto-speech, mirroring and provocation as well as baby's use of self-soothing reflexes. Finally, the intervention should help parents to recognise state changes and the infant's temperament. The preferred methodology would be for every community midwife to be able to undertake Brazelton's Neonatal Behavioural Assessment Scale, NBAS, or the shorter Neonatal Baby Observation, NBO, version.

Additional universal intervention

Buggy and push chair orientation: There is good evidence that promoting a face-to-face buggy and pushchair orientation can have significant positive benefits on infant development

- Baby massage. The benefits of baby massage are noted above;
- Health visiting support through home visiting and ensuring delivery of the universal mental health promotion elements of the Healthy Child Programme;
- Assessment for the possible presence of postnatal depression and other mental illness;
- Identifying poor inter-parental relationships and domestic violence.

Health visitor-led Targeted Interventions

- Family Nurse Partnership;
- Management of mild to moderate postnatal depression;
- Referral and support for inter-parental relationship difficulties.

Other Targeted Interventions

The central issue at this stage in the infant's maturational development is to help the parents to develop attunement and sensitive responsiveness, to learn to recognise empathically and respond sensitively to the infant's communication, thus establishing a mutually rewarding 'dance'. There is very good evidence that the brief use of 'Video Feedback', or 'Interaction Guidance', can have a significant positive impact of vulnerable parents and it is also now commonly used therapeutically in families with more complex problems.

Indicated Interventions

Parent-Infant Psychotherapy, including Couple Therapy, Family Therapy, and Perinatal Psychiatric Interventions.

Supporting baby's security and autonomy at 8-12 months

By 7-8 months, baby's emerging need for autonomy can at times challenge the parents' anxieties about allowing this to happen, and feeding problems and sleep problems manifest. Parents and their babies begin to 'wrestle' rather than dance. This may occur albeit temporarily in families where the parenting is 'good enough' and it is

resolved as the parents work out the new meaning of the infant's behaviour. However, in parents with more 'vulnerable' or 'complex' problems, this can quickly escalate and the interventions then become Targeted or Indicated.

Universal Interventions

The Solihull Approach is already adopted in a number of health visiting services around the country. There is good evidence as to its effectiveness.

Targeted Interventions

- PEEP (Peers Early Education Partnership) is a group-based model grown out of the desire to improve children's capacity to learn by helping and supporting parents (Street, 2009);
- Mellow Babies is a development of the Mellow Parenting group-based programme that, although quite 'new', is developing a good evidence base. It is now applied in a number of localities across the country. It has been used not only with vulnerable parents but also with families with 'complex' problems and 'at risk';
- Circle of Security;
- Watch, Wait and Wonder;
- Interaction Guidance.

Indicated Interventions

Within the indicated interventions already discussed i.e. ante-natal, perinatal and infant mental health services, there are three approaches which need specific recognition:

- Circle of Security is a group-based programme using video feedback specifically of the child's behaviour in a Strange Situation Attachment Assessment as a basis for the parents' reflections and discussions;
- Watch, Wait and Wonder is a particular parent-infant psychotherapy approach that requests the parent learns to observe and then follow the child's lead in play without 'interference';
- Parent-Infant Psychotherapy.

Setting safe boundaries at 15 months

Universal Interventions

The issue at this time is almost invariably about infant behaviour. Sleeping and feeding problems may not have been recognised until the infant begins in nursery or day care; behaviour problems have similarly gone unrecognised.

Indicated and Targeted Interventions

In addition to the peri-natal and infant mental health services already mentioned, these approaches almost invariably mean using 'Parenting class' approaches (not to be confused with more relationship-based parenting groups) that are now ubiquitous in their use across the country.

The most well-known parenting classes, and with the best evidence as to outcome, are:

- The Incredible Years;
- Triple P.

References

Appendix 1

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Appendix 1B

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APPENDIX 2 –

Social and Emotional Assessments

Background

Following the publication of the Healthy Child Programme (Shribman & Billingham 2008), government public health policy in England has moved towards a clear recognition of the need to support the parenting of all families, alongside providing additional support to families of infants and young children, experiencing a range of problems that affect their capacity to parent. This move reflects recent evidence showing that early intervention can optimise the development of all children, and that appropriately targeted intervention along a gradient of need (Marmot 2010) can prevent children living in high risk environments from developing a range of social, emotional and cognitive problems. A number of recent research and policy reports (Allen and Smith 2008, Barlow et al 2008, Field 2010, Munro 2011, Tickell 2011) have underlined the need to assess and intervene as early as possible, truly developing a primary prevention framework.

In addition to economic and practical issues, the evidence strongly points to the need for appropriate targeting of services, alongside universal provision. This approach is perhaps most succinctly illustrated in the Health Visitor Implementation Plan 2011-15 (Dept. of Health 2011) which outlines the new health visiting service comprising *Universal Services*, through *Universal Plus* (offering a rapid response in such particular instances of need as postnatal depression, sleeping problems, weaning or any parental concerns) to *Universal Partnership plus* which offers on-going support from the HV team in partnership with other local services for more complex cases.

The application of the Health Visitor Implementation Plan requires practitioners to have access to practical and evidence-based tools with which to assess the level of need. PREview is one such method of stratifying the level of risk (see Chimat 2010). This tool was developed following a comprehensive evaluation process of available data by the University of York (Hennessy and Green 2008, Hennessy, Green et al 2008, Green 2008, Kiernan and Mensah 2011). However, the report concludes that although the

'key indicators from the ... analysis showed important associations with the child outcomes and the propensity score exercise showed that these factors had some power for predicting outcomes ... different set of factors were more or less influential depending on the child outcome under consideration ... suggests that it may be more appropriate to take a more holistic approach to understanding how families influence their children's development and well-being' (Kiernan and Mensah 2011).

These findings suggest that a reliance on demographic data – although useful from a population point of view – does not necessarily help the individual practitioner in his or her necessary assessment of a family's need.

This report presents the findings of a comprehensive review of preventive and early intervention services from pregnancy to age two that was aimed at identifying and making recommendations about the most practical and evidence-based methods of assessing social and emotional wellbeing, in order to target services appropriately for this age-group. Together with the reports by the other task groups, it should be regarded as a roadmap/timeline. It is very ambitious and implementation will take some considerable time, as it will need additional resources and manpower as well as substantial training, but then any journey begins with a first step.

The purpose of this appendix is:

1. To identify evidence-based social and emotional assessments (including assessment of emotional regulation) that could be incorporated within the Healthy Child Programme. The focus is exclusively on social and emotional well-being, and does not therefore include tools for the assessment of neuro-developmental disorders for example.
2. To address the training implications of the implementation of the identified tools.

The underlying principles, which have guided the appendix, are as follows:

1. The purpose with all assessments of a child's social and emotional wellbeing should be to establish the level of social and emotional functioning of the infant in addition to the sensitivity/responsiveness of relevant carers in order to guide the family and the practitioner towards the most appropriate support and intervention for the family within the context of a gradient of need.
2. Assessment tools should be practical as well as valid and reliable, based not only on sound research and evaluation but also on a high likelihood of being implementable as part of a busy practice.
3. All assessment tools need therefore to make sense to parents and carers, and to be seen as supportive rather than judgemental; this requires that such tools be implemented as part of a promotional and partnership model of working.
4. Measures and methods must be usable across the whole spectrum of ability, including social disadvantage, disability, culture and language.

5. Finally, training in any proposed assessments must be easily accessible and not prohibitively time-consuming or expensive.

Current practice

Screening for PND

NICE Guidelines

Pregnancy booking appointment:

- i. Assessment of social and emotional risk and resilience factors in mother, father and wider social context;
- ii. Specific questions about:
 - o past or present severe mental illness including schizophrenia, bipolar disorder, psychosis in the postnatal period and severe depression;
 - o previous treatment by a psychiatrist/specialist mental health team including inpatient care;
 - o family history of perinatal mental illness, as per NICE guidance.

At Initial Health visitor appointments

At a woman's first contact with primary care, at her booking visit and postnatally [usually at 4 to 6 weeks and 3 to 4 months (for families of higher needs)], healthcare professionals (including midwives, obstetricians, health visitors and GPs) should ask two questions (the Whooley questions) to identify possible depression.

- o During the past month, have you often been bothered by feeling down, depressed or hopeless?
- o During the past month, have you often been bothered by having little interest or pleasure in doing things?

A third question should be considered if the woman answers 'yes' to either of the initial questions.

- o Is this something you feel you need or want help with? (NICE guidance)

10-14 days postnatally

- i. Assessment of maternal mental health (as above);
- ii. At present the HCP also advises an assessment of parent-infant interaction and recommends using the Neonatal Behavioural Assessment Scale (NBAS) or the Nursing Child Assessment Satellite Training (NCASAT),

6-8 weeks – as above

3-4 months – as above

7-9 months – as above plus assessment of infant's social and emotional development

2-2.5 years – assessment of toddler's social and emotional development

The child in need assessment framework and locally developed assessments are probably the most common used currently (See <http://www.archive.official-documents.co.uk/document/doh/facn/fw-02.htm>)

Stratification of services

As noted above, PREview may well be of great help on a population level but for the individual practitioner it has not added anything not already known. The assessments noted below are proposed as useful tools to enable the individual practitioner to make a judgement as to which level of services will best match the identified level of need.

Note: Before any of these assessments are included and used in a local service, it is imperative that Universal Plus and Universal Partnership Plus services (including antenatal, perinatal and infant mental health services) are available in the locality. There is nothing more morale-sapping for a practitioner than to identify a clear need without an available service.

A note about child protection issues

Most serious child abuse is essentially unpredictable – even if the 'whole picture' had been known, it would not always have been possible to anticipate serious abuse for most of the children at the centre of serious case reviews. This emphasises the risk of providing a very selective service to families who are deemed 'vulnerable' (Rose, 1993). A robust universal service is essential for safeguarding and child protection.

The possible danger with targeting services at only those of high risk will be that vast swathes of families with substantial but not life-threatening health and social problems will be 'invisible'. Rose (1993), states that no one

screening instrument can be sufficiently precise to identify accurately those most likely to suffer problems. See also Browne (2002) and Barlow and Stewart-Brown (2003).

The biennial analysis of serious case reviews 2003-2005 (Brandon et al, 2008), support Rose's (1993) and Barlow and Stewart Brown's (2003) argument that the bulk of problems in society arise in the many who are not necessarily high risk rather than the few who are high risk. The reason for this is that there are a very large number who are not at especially high risk.

Child abuse, domestic abuse and depression are common problems that health visitors deal with regularly. To detect and prevent child maltreatment, a population level approach is essential (Barlow and Stewart Brown, 2003). For this to be effective, it cannot be emphasised enough that practitioners need time to develop trusting relationships with families as part of their holistic assessments. In addition, by using, or having access to, an assessment and partnership model as outlined below where, over time, the assessments move from a focus on the mother/parents to the infant to the parent-infant relationship, signs of risk in the development of the child will be identified early and additional help and support provided, reducing the likelihood of adverse outcomes.

Proposed frequency of assessments

These more or less follow the NICE guidelines with some modifications.

Early pregnancy at the **pregnancy booking-in appointment**. Following the NICE guidelines to assess 'social and emotional risk and resilience factors in mother, father and wider social network' the purpose of this universal assessment is to evaluate any significant risk factors in the mother's life. These are such risks as mental ill health, domestic violence, drug and alcohol abuse as well as such risks to the foetus as substance abuse, including smoking as well as significant levels of antenatal anxiety or depression. Resilience factors may include evidence of coping, supportive family relationships, especially with partner and own mother, and other relationship support.

Health visitor universal antenatal visit around 28 weeks' gestation

1st Promotional Interview by the health visitor using the Promotional Guide and in the context of a partnership approach to working. This is the first of two such promotional interviews that are aimed at a) promoting the wellbeing of *all* women; b) identifying women/families in need of Universal Plus services or Universal Partnership Plus that will involve referral to other services. The promotional interview provides practitioners with the opportunity to get to know the woman and her partner before the arrival of the infant, to support aspects of pregnancy that are going well, and to explore areas about which the woman/couple may have concerns. Although the promotional guide is comprehensive, the interview is patient-led, and aimed at providing women and their partners with the opportunity to think about the pregnancy, their developing relationship with the foetus, and the impact of the pregnancy on their relationship. The Promotional Guide is aimed at helping practitioners to identify medium level need (e.g. ambivalence feelings about the pregnancy; depression and anxiety) that can be met using Universal Plus services, or high level need that requires Universal Partnership Plus and referral to other services in accordance with the care pathways in place, e.g. serious mental health problems; substance dependency; and domestic violence (Davis 2009). Additionally, the health visitor can utilise a more formal assessment with one or more of the tools mentioned below.

10-14 days 2nd Promotional Interview: This is the scheduled universal visit when the health visitor will conduct the second promotional interview using the Promotional Guides in the context of a partnership model of working. The visit therefore provides another opportunity a) to promote wellbeing for all mothers/families; b) to assess the level of risk and resilience of the mother, the baby and the family so that the health visitor and parents can together make a decision as to what level of service provision should be appropriate. It also offers the first opportunity to assess mother's perception of her real baby (as opposed to the views of the imagined baby that were developed during pregnancy), and the parent's ability for attunement and for reflective functioning, both of which are predictive of the future relationship with the baby. It therefore provides an opportunity for practitioners to introduce the social baby; the concepts of 'reading and understanding baby cues', baby states etc.

14- 21 days (postnatally). This would be the ideal time to undertake an evaluation of the baby's reactivity and habituation to external stimuli, most often thought of as the infant's 'temperament'. By undertaking a Neonatal Behavioural Assessment (NBAS) or a Neonatal Behavioural Observation (NBO) (see below) in the presence of the parents, the health practitioner will not only establish the baby's reactivity but also increase the parents' empathic understanding of their baby's reactions. This assessment should be focused on more vulnerable parents, or parents who have complex problems, and it is not envisaged as a universal service. Whether this assessment is undertaken by the community midwife or the health visitor may be a local decision depending on available resources.

6-8 weeks. In line with NICE guidance, this is a second opportunity to assess risk and resilience which may not have been completed earlier.

At **3-4 months** the parent-infant interaction will have developed its own rhythm and patterns and the purpose of the assessment at this point is to evaluate the quality of the parent-infant interaction in terms of parental sensitive responsiveness as well as parental perceptions or attributions, unless this has already been assessed. In line with the Healthy Child Programme, this should be a formal, universal assessment. This is a crucial stage on the pathway to secure, or insecure, attachment and without assessing every mother-infant dyad, attachment difficulties would be missed at this crucial early stage..

The 8-9 months developmental review remains as at present. Regrettably, this is a little too early to undertake any evaluation of the baby's attachment behaviour which does not become clearly established until 12-15 months. Therefore, it is proposed that this additional assessment opportunity be added to the HCP at 12-15 months.

The purpose of the assessment at **12-15 months** should be to assess the infant's attachment behaviour. At this age the infant will have developed clear attachment behaviours as well as strategies to emotionally regulate. This offers the first opportunity to assess for risk and resilience in the infant and is also early enough for targeted or indicated interventions to help change a possible pathway towards insecure attachment and/or pathology. The assessment should be offered only to parents in the Universal Plus or Universal Partnership Programme.

22- 24 months (replacing the 2.5 year review). As additional support is soon to become available to vulnerable children at age 2, it is logical to move the 2.5 years review to an earlier time. Any significant emotional and/or social problems for the baby will now be apparent and should emerge in a review/discussion between parents and practitioners. These would be such issues as sleep, eating or general behaviour problems, and the practitioner can choose to rely on his or her professional judgements as to the severity of these problems or choose to use a more formal assessment. Of particular importance at this time is the assessment of language development.

Recommended assessment methods

This section comprises a list of recommended assessments and evaluation tools. Some are for universal use, others only in the assessment of vulnerable or complex cases. It is important to note that across the time period from early pregnancy to age 2 these assessments are complementary, each one adding further information to the whole picture of offering the right level of help and support at the right level of need. (Baggett et al 2007, Carter 2002, Denham et al 2009, Ringwalt 2008)

Pregnancy booking-in appointment

Assessing and enquiring about intimate and personal details is a highly skilled activity, the core of which is to rapidly establish a trusting relationship and a good 'working alliance'. In order to facilitate this process it is strongly recommended that all community midwives and health visitors are trained in 'The Family Partnership Model and promotional interviewing (Davis 2009). These health professionals will then be better placed to build a truthful picture of the risks and resiliencies of the family. The NICE guidelines are unfortunately very sparse in recognising social or emotional risk (other than substantial psychiatric disorder). On the other hand, the HCP mandates: 'A full health and social care assessment of needs, risks and choices by 12 weeks of pregnancy by a midwife or maternity healthcare professional' identifying the following risk factors:

- young parenthood, which is linked to poor socio-economic and educational circumstances;
- educational problems – parents with few or no qualifications, non-attendance or learning difficulties;
- parents who are not in education, employment or training;
- families who are living in poverty;
- families who are living in unsatisfactory accommodation;
- parents with mental health problems;
- unstable partner relationships;
- intimate partner abuse;
- parents with a history of anti-social or offending behaviour;
- families with low social capital;
- ambivalence about becoming a parent;
- stress in pregnancy;
- low self-esteem or low self-reliance; and
- a history of abuse, mental illness or alcoholism in the mother's own family.

There is evidence that the impact of these risk factors is not straightforward. Thus a woman may be able to cope with one or two risk factors (particularly if she is well supported by partner or family) but 'collapses' if another risk is added.

Following booking-in the midwives should notify all health visitors of pregnancy women to enable them to conduct an antenatal promotional interview at 28 weeks.

Antenatal Promotional Interview – 28 weeks

The core purpose of this assessment is a) to promote wellbeing for all pregnancy women/couples; b) to identify vulnerable women or women with complex psychological problems, and to distinguish between women in need of Universal Plus level services and Universal Partnership Plus. The latter will have been identified via the APG as having one of a number of problems that require referral to additional services (e.g. serious mental health problems; substance dependency; domestic violence).

The antenatal promotional interview involves the use of the Antenatal Promotional Guide (APG) which is conducted using the Partnership Model of working (Davis 2009), and covers the key areas associated with compromised foetal development, and also with a compromised relationship with the infant. For example, evidence suggests antenatal depression and antenatal anxiety (O'Connor et al 2002) can have significantly detrimental impact on the foetus' neurological development (Matthey 2004), and can also impact on the long-term development of the infant and child. The APG asks women about their experience of both anxiety and depression (the latter based on the 3 Whooley questions). Where concerns are identified, the practitioner may then wish to utilise a standardised tool to assess the level of anxiety or depression. This could be done using the EPDS or the HADS.

Another area that is a focus of the APG is the mother's attachment to the foetus. Where the health visitor has identified problems and wishes to explore these further using a standardised tool, the Antenatal Attachment Questionnaire (Condon 1993) can be used.

10-14 days

This is the scheduled universal visit when the health visitor is first likely to meet the mother and infant. In order to make the best use of this opportunity to engage the family, the health visitor needs to be 'sensitively responsive' to them. He or she will also be a potential 'change agent' for the family, engaging them in Universal Plus or Universal Partnership Plus targeted interventions. Thus, it is recommended that (following the Family Nurse Partnership practice) all health visitors train in the use of ***Motivational Interviewing***.

This visit provides another opportunity to assess the level of risk and resilience of the mother, the baby and the family so that the health visitor together with the family can make a decision as to what level of service provision is appropriate. This is an opportunity for the health visitor to assess whether the mother may be showing signs of Post-Traumatic Stress Disorder and a simple screening tool to identify PTSD can be used to focus practitioner assessment – ***Primary CARE PTSD Screen***. (Prins et al 2003). It is recommended that he or she re-visits the areas of risk outlined above during the early pregnancy and ***discusses these areas of vulnerability*** with the mother and (if appropriate) her partner.

The visit offers the first opportunity to assess ***mother's perception of her 'real' baby***. Ten to fourteen days is too early for mother to have formed any very clear attributions of baby but again the practitioner needs to be sensitive to highly negative, hostile or distorted comments the parents may voice about the baby.

Finally the visit gives the health visitor an opportunity to introduce the concepts of ***'reading and understanding baby cues'***. The practitioner might also use the Brazelton Neonatal Behavioural Scale or the Neonatal Behavioural Observation (see below) with the parents to introduce them to the social baby, and to help them to begin to understand their baby's behaviour characteristics in terms of strengths, and areas that may need support. For example, where babies are 'difficult to settle' the practitioner might help.

14 - 21 days postnatally As noted above, this would be the ideal time to undertake the short form of the Neonatal Behavioural Assessment Scale (NBAS), called the Newborn Behavioural Observation, in the presence of the parents (Brazelton and Nugent 1995, Nugent and Brazelton 2000) (See also www.brazelton.co.uk). Not only will this establish major temperamental characteristics of the baby, it will also offer an opportunity for the parents to learn about their baby's way of adapting, which will increase their empathy. Ideally it should be offered at a Universal level, but this might only be possible over time.

This assessment could be offered by the community midwife. Alternatively, as there is currently a shortage of midwives, it could instead be offered by health visitors. There are clear advantages to using this model as the assessment then would also be a valuable addition to the necessary development of trust and co-operation between the health visitor and the family. Which professional group actually undertakes the assessment may be for discussion between midwifery and health visiting at the local level.

6-8 weeks

Second Postnatal Promotional Interview

This is the second of the two Promotional Interviews using the Postnatal Promotional Guide (PPG) in the context of partnership working. As with the antenatal interview, the aim is to a) promote the wellbeing of all women; b) identify which women have additional needs in terms of the provision of Universal Plus or Universal Partnership Plus. In terms of promoting the wellbeing of all women, the Postnatal Promotional Interview provides the context within which to ***assess the parent-infant interaction***, including the mother's developing perceptions about the

baby and the presence of highly negative, hostile or distorted comments about the baby; introduce the concepts of *'reading and understanding baby cues'*; and *baby states*. The Postnatal Promotional Guide includes questions about the mother's mental health, including an assessment of postnatal depression (using the 3 Whooley questions).

In terms of families identified as having additional needs, health visitors will be a potential 'change agent' for families identified as needing Universal Plus and Universal Partnership Plus. The *Family Partnership Model of Working* provides practitioners with the necessary skills to work with families to achieve change using a cognitively based partnership model. *Motivational Interviewing* (i.e. as distinct from Promotional Interviewing above) is another evidence-based technique that can be used by primary care practitioners to help families achieve change and is central to Family Nurse practice.

Gloucestershire has developed a *checklist* (Appendix 2C) which may guide discussions at this time. Using a checklist of this nature is a training issue as there is evidence that the use of this type of checklist can disempower parents (Mitcheson & Cowley 2003). It also needs to be recognised that checklist and tools can lull practitioners into a false sense of security and can produce false negatives and miss children at risk.

The *Hospital Anxiety and Depression Scale* can also be used postnatally to establish early significant levels of psychological distress or anxiety very likely to impact the relationship with the infant. There are a number of scales available for this purpose and practitioners may want instead to explore the Kessler-10 previously recommended by CORE.

- *Kessler-10* is a 10 item self-administered questionnaire assessing psychological distress. It has been used in a series of large studies in the US as well as Australia. Information about the scale and scoring is available from http://www.hcp.med.harvard.edu/ncs/k6_scales.php

There are numerous brief questionnaires to assess formally mother's perceptions of the infant. These are all completed by the parent and later scored by the practitioner. They are brief, easily accessible, practical, with significant predictive power. It is recommended that one or two of the following tools are used:

- *The Ages and Stages Questionnaire – 2 months* (Briggs et al 2012) see also <http://www2.fiu.edu/~aip/documents/AgesandStages.pdf>. The ASQ has in fact a range of questionnaires over the child's development which can be used to track changes and measure improvement.
- *Maternal Attitude Scale* (Bor et al 2003). This is a 6 item scale where maternal negative attitude towards the infant is an independent predictor of child behaviour problems (boys' externalising behaviour and girls' internalising behaviour) at age five (see Appendix 2D).
- *The Post-partum Bonding Questionnaire* (Brockington et al 2001, 2006) is a 25 item scale which may still need some further validation but is useful with information not only about mother's perception but also other risk factors.
- *The Maternal Object Relations Short Form (MORS-SF)* (Milford and Oates 2009) has already been validated in a project in North Somerset and again gives information about mother's attributions and perceptions of baby (available from John Oates).

3-4 months

The most salient dimension of the early years is the parent-infant relationship. It has been very clearly established as being the best predictor of the child's future wellbeing and it is thus crucial to assess this core aspect. This assessment should be Universal and it is recommended that one of the following interactional assessments is used to assess the parent-infant relationship.

- **Keys to Interactive Parenting** (Comfort et al 2006, 2011) KIPS assesses 12 parenting behaviours in a 20 minute observation followed by some 10 minutes of scoring. It has published reliability and validity data and training can be accessed via the Internet. (<http://www.comfortconsults.com/kips.htm>)
- **Parent-Infant Interaction Observation Screen**. The PIIOS is a 13 item scale used to guide the assessment and evaluation of a video of a brief parent-infant interaction. The scale is highly correlated with the sensitivity scale of the CARE-index as an external validation, and its internal reliability is also excellent. It is in the final stages of development by Svanberg and Barlow at the University of Warwick and should become available through an Internet accessible training in 2013.
- **Emotional Availability Scales** (Biringen, 2000) is a method of assessing dyadic interaction for the emotional availability of the parent to child and child to the parent. It is a global measure of overall interactional style in each partner and requires clinical judgement and an awareness of contextual factors. There is extensive research to show it is highly associated with the infant's later attachment behaviour. Two versions of the four EA scales are available for different ages of the child, the salient one for the purpose of this review being 'The Infancy to Early Childhood Version' (0 to 4 years) The recommended method for coding the EA scales is to video-record and later analyse at least 20 minutes of interaction, although it has been used for shorter time periods. Substantial US-based training is required to reach reliability on the scales. Training can be done via distance learning DVDs and

consultation and/or follow-up workshops. Given the extensive training, this approach may be most useful in the assessment of Universal Partnership Plus families. It is not recommended for Universal use. Further information is available at <http://www.emotionalavailability.com/ea-distance-training-and-certification>.

- **The CARE-Index** (Crittenden 1997-2004) is based on a brief (3-4 minutes of 'playing and talking') video-clip of caregiver and infant or toddler (range 2 months to 4 years). It is currently used in a number of infant-mental health services across the country both for initial assessment and for outcomes evaluation. A handful of people in England are trained to the level of accredited teachers. The drawback with the tool is that it demands an extensive training and that reliability is difficult to achieve. Notwithstanding this, it can be a very important tool, particularly in child protection evaluations and it is thus recommended for this purpose. Further information is available at <http://www.patcrittenden.com/>
- **The Nursing Child Assessment Satellite Training** (NCAST) (Barnard 1997) was developed in Seattle in the early 1970s as one of the first parent-infant interaction tools focusing particularly on feeding and teaching behaviour. Recommended by the HCP, it was initially used by the Family Nurse Partnership in England but was later substituted by their 'in house' tool. It is currently used extensively in Leeds (Mishenko et al 2004). (See also http://www.browninghouse.org.uk/news/article.php?article_id=28)

In addition to using an interactional assessment it is recommended that the health visitor again uses the following brief questionnaires for more vulnerable families.

- **The Ages and Stages Questionnaire – Social and Emotional (SE)**. This version of the ASQ (best used at 6 months) is a brief screening version identifying social and emotional issues for the baby.

In addition, the following tool was specifically constructed to assess risk for abusive behaviour and is thus recommended when there are child protection concerns as part of a social services assessment.

- **The Adult-Adolescent Parenting Inventory (AAPI-2)** (Bavolek 1989) is a 40-item questionnaire used to assess parenting attitudes and child-rearing practices of adolescents and adults. The purpose of the inventory is to determine the degree to which respondents agree or disagree with parenting behaviours and attitudes known to contribute to child abuse and neglect. Responses provide a standard for risk in five parenting constructs known to contribute to the maltreatment of children: (1) inappropriate parental expectations, (2) inability to demonstrate empathy towards children's needs, (3) strong belief in the use of corporal punishment, (4) reversing parent-child family roles, and (5) oppressing children's power and independence. Training is US-based unfortunately, and it is not known whether there are services in England already using the tool. (See also <http://www.nurturingparenting.com/>)

There is of course an array of published tools to, for example, assess parents' psychological or psychiatric problems, couple functioning etc., but all of these will be part of specialist perinatal and infant mental health services as well as social services.

12-15 months

In an ideal world the technical facilities and trained practitioners would be available so that **Ainsworth's Strange Situation** could be undertaken. The Strange Situation (particularly when analysed using Crittenden's Dynamic Maturational Model) is the absolute gold standard when it comes to assessing an infant's attachment behaviour. However, training is very difficult to access and the technical requirements are costly. However, particularly in child protection assessments when the issue is about the removal of the child from the family, the methodology is unrivalled. (See www.pmcrittenden.com)

There are numerous variants on the Strange Situation in the research literature as well as such other procedures as **The Crowell Procedure** (see <http://www.infant institute.com/Crowell2005.pdf>) and the **Attachment Q sort (ASQ)** (Waters and Deane 1985) but the requirements for undertaking these procedures are such that they become impractical for routine use. It may have a place, however, when there are concerns about the need to remove the infant.

Instead it is recommended that the infant's social and emotional wellbeing at this age is assessed using the **Brief Infant and Toddler Social and Emotional Assessment** (Briggs Gowan et al 2004). The BITSEA is a 36 item parent-completed form used when the infant has reached 12 months. It is easy to administer and analyse although somewhat expensive as it is copyrighted. However, it has good predictive value (Briggs Gowan et al 2008) and in lieu of observational data it is practical and easily accessible (Briggs Gowan et al 2012).

Additionally the **Ages and Stages Questionnaire-12 months** can be used.

22- 24 months (replacing the 2.5 year review).

The Achenbach System of Empirically Based Assessment – Preschool Module (ASEBA) (see <http://www.assess.nelson.com/aseba/aseba.html>) is used to assess adaptive and maladaptive functioning using a set of rating forms and profiles. The 'Child Behaviour Checklist (CBCL/1.5-5)' is a parent-completed 99 item

questionnaire already in common use in England, which also includes the Language Development Survey (LDS). It is recommended for use at Universal Plus and Partnership Plus service levels.

Toddler Attachment Sort-45 (TAS-45). The US government-funded 'Early Childhood Longitudinal Study' (ECLS) was designed to provide policy makers, researchers, child care providers, teachers and parents with detailed information about children's early life experiences. The study followed up a nationally representative sample of approximately 14,000 children born in the U.S. in 2001. (see <http://nces.ed.gov/ecls/birth.asp>). It was important for this study to include an assessment of attachment (Spieker 2003) and in order to develop a brief and practical method the project linked up with John Kirkland in New Zealand. He had previously developed a 'spatial' model of the Attachment Q-sort (Bimler and Kirkland 2002, Kirkland and Bimler 2004) and the issue was whether this methodology could be used in a shorter, more practical form. The TAS-45 is the result (Condon and Spieker 2008, Spieker et al 2011, Andreassen and West 2007). Following a 90-minute parent-infant observation, the practitioner undertakes a comparative Q-sort, which takes some 10-15 minutes to complete. Using a lap-top, the practitioner sorts the 45 descriptive items into 4 piles (plus one for 'unsure') which will provide reliable information about the child's attachment behaviour and also specifically identify those children most at risk of disorganised attachment. It should be possible to replicate the training for the Early Childhood Longitudinal Study in this country without too much difficulty and the burden of introducing the assessment as part of the 24 month review should be minimal, i.e. an extra 10-15 minutes of completing the Q-sort 'back at base'. For a summary of all recommended assessments see below.

Additional tools, measures or assessment procedures

The Atypical Maternal Behavior Instrument for Assessment and Classification (AMBIANCE); (Lyons-Ruth et al 1999) was developed specifically to identify maternal behaviour which is highly associated with 'Disorganised attachment'. It is a video-based procedure, still more of a research instrument and the US-based training is very difficult to access (see also <http://www.challiance.org/Academics/AMBIANCETraining.aspx>).

The Alarm Distress Scale (Guedeney and Fermanian 2001) is another recent video-based screening procedure. Developed in France, it has good reliability and validity (Lopes et al 2008) and has been used elsewhere in Europe (Puura, et al 2007, 2010), although evidence is not yet available as to its predictive value in large samples.

The Child Development Inventories – the Infant Developmental Inventory is a 300 item parent-completed questionnaire and screen for language, motor, cognitive, pre-academic, social, self-help, behaviour and health problems. Although the original standardisation was done on a homogenous sample, subsequent validity work has demonstrated that the instrument is effective with minorities and with lower-income families (Ireton 1997) (see also <http://www.childdevrev.com/page15/page17/cdi.html>)

The Functional Emotional Assessment Scale was developed as a criterion-referenced instrument for children ranging in age from 7 months through 4 years of age. It was designed specifically to measure emotional functioning in children with constitutional- and maturation-based problems (e.g. regulatory disorders), children with interactional problems leading to a variety of such symptoms as anxiety, impulsivity, depression, etc., and children with pervasive developmental difficulties, and would thus be most useful in the pediatric clinic (see <http://www.icdl.com/dir/Floortime/research/FunctionalEmotionalAssessmentScale.shtml>)

Family Star The assessment is part of a large family of similar procedures focusing on outcomes evaluation. Theoretically these evaluations are based on 'The Cycle of Change' (Prochaska and DiClemente 1982). There seem to be no details as to reliability or validity of these instruments.

The famous Stanford **Marshmallow Test** (Mischel et al 1972) evaluated 4-year-olds capacity for delayed gratification and emotional regulation and proved to be highly predictive. However, the test would not be appropriate for two-year-olds.

Training implications

It has already been noted that the skill of rapidly establishing and maintaining a trustworthy relationship is absolutely central to effective assessment as well as intervention. Thus it is recommended that:

1. All community midwives are trained in the Family Partnership Model and that they subsequently have access to good clinical consultation opportunities from an antenatal, perinatal and infant mental health team.
2. All health visitors are trained in the Family Partnership Model as well as in the Motivational Interviewing Model and again that they have access to good clinical supervision from their local antenatal, perinatal and infant mental health team.

In relation to training in the use of specific approaches it is recommended that:

3. Midwives are trained in the administration and scoring of the Hospital Anxiety and Depression Scale as well as sensitively being able to enquire about risk and resilience aspects of the family including
 - a. Mother's perceived relationship with the family and partner.
 - b. Mother's perception and attributions of the foetus.
 - c. Resilience factors.
4. Community midwives or health visitors are trained to undertake the Newborn Behavioural Observation. All health visitors need to be competent and feel confident in order to assess effectively risk and resilience.
5. Health visitors are trained in the administration and scoring of the Hospital Anxiety and Depression Scale as well as sensitively being able to enquire about risk and resilience aspects of the family including
 - a. Mother's perceived relationship with the family and partner.
 - b. Mother's perception and attributions of the baby.
 - c. Resilience factors.
6. He or she are trained to use at least one of the following questionnaires
 - a. The Ages and Stages Questionnaire – 2 months
 - b. Maternal Attitude Scale
 - c. The Post-partum Bonding Questionnaire
 - d. The Maternal Object Relations Short Form (MORS-SF).

Being able to analyse and understand parent-infant interaction is one of the most important skills a health visitor should have.

7. At a universal level it is recommended that all health visitors are trained in one of the appropriate procedures such as
 - a. Keys to Interactive Parenting
 - b. Parent-Infant Interaction Observation Screen
8. In addition to using an interactional assessment, it is recommended that the health visitor is trained to administer the following brief questionnaires for more vulnerable families.
 - a. The Ages and Stages Questionnaire – 4 months
 - b. The Brief Infant and Toddler Social and Emotional Assessment
 - c. The Child Behaviour Checklist – 1.5 years
9. Finally, to be able to establish specifically the attachment behaviour of the two-year-old, it is recommended that the health visitor is trained to observe and analyse the Toddler Attachment Q-sort-45.
10. In addition, it is recommended that when assessing a family of one to two year olds when there is a child protection concern, the Adult-Adolescent Parenting Inventory (AAPI-2), the CARE-Index or the (Dynamic Maturational model) Strange Situation is included in the standard assessment framework

It should be recognised that training the early years' work force in this manner is a very substantial undertaking. It is noted that training providers will not as yet have the capacity to offer the recommended training to the necessary scale and it will take time to 'scale up'. To be realistic it may be a 6-10 year process before all the specific skills are available across the country. However, no training in any assessment skill should be offered unless the practitioner is trained in promotional interviewing or motivational interviewing. Using an assessment tool insensitively is very likely to do more harm than good and should be resisted (e.g Mitcheson and Cowley reference).

Implications to practice following implementation

The quite outstanding levels of engagement and retainment demonstrated by the Family Nurse Partnership can probably in part be related to the fact that the Family Nurse established a 'working alliance' with the family during pregnancy. To build on this knowledge it is thus recommended that once risk has been established by the midwife's assessment at 12 weeks, a referral is made to the health visiting service for vulnerable families and for families with complex problems. This will enable the health visitor to establish one or two promotional visits to build a relationship with the family before the baby is born. A practice protocol to establish these changes needs to be constructed for both midwives and health visitors.

Implications to the service following implementation

As noted, the training and practice implications of these recommendations are very substantial. However, they should not be unmanageable with the appropriate resources in place. Thus it is recommended that government:

1. Resolves all contractual and licensing issues with copyright holders and buys or leases copyright centrally. This should reduce the costs considerably.
2. Commissions a number of translations so that all materials, measures or tools are validated for the use with all cultures and available in all major languages.

3. Commissions the build of a comprehensive web-site where practitioners can access all material and where automated analyses can be carried out.
4. Pilots the use of laptops or tablets where all material is available and analyses can be carried out at the click of a mouse.

Additional research recommendations

Whilst reviewing the field, it has become apparent that there are a number of research approaches which could become very useful in practice although they are not yet developed for routine use in universal services.

One such approach is the *Still Face Paradigm* (Tronick and Cohn 1989) which has been shown to predict later attachment behaviour (Cohn and Campbell 1991). Building on the work by Fuertes et al (2006) it should be possible to develop a simple way of coding the Still Face procedure and establish its association with attachment behaviour.

It has now become relatively simple to establish physiological signs of stress by assaying *cortisol levels* from a simple mouth swap (Gunnar and White 2001, Gunnar 1992) and high levels have been associated with disorganised attachment behaviour (Hertsgaard et al 1995). Again, to establish these associations in a large cohort could potentially be very useful.

There is additionally a dire need to resolve a number of the outstanding issues in the field currently competing over theoretical approaches, methodological issues and interventions. The government would be well advised to scope this area and fund some *comprehensive, large scale longitudinal research* specifically into infants' and children's attachment behaviour and social and emotional well-being over time.

Finally, desperately needed is research into service delivery and the use of skill mix so there is clarity as to who should deliver these interventions, often to very vulnerable and hard-to-engage families. Whilst the evidence is that this needs very skilled staff (Olds, Henderson et al 1999, Olds 2002), in recent years we have seen increasing skill mix in health visitor and other professionally led teams and the delegation of many interventions to staff with little professional training through children's centres. If this research were done, commissioners would be better informed to allocate.

A summary of recommended assessments (additional to current practice)

	Universal	Universal Plus	Partnership Plus	Child Protection
Ante-natal booking in 12 weeks	Comprehensive risk assessment as outlined in HCP	Antenatal Attachment Questionnaire	Ditto	
Ante-natal 28 weeks	Antenatal promotional interview risk assessment			
10-14 days	Promotional interview and risk assessment	Primary Care PTSD screen	Ditto	
14- 21 days		Neonatal Behavioural Observation	Ditto	
6- 8 weeks	Promotional interview HADS or Kessler-10 Ages and Stages- 2 months	Maternal Attitude Scale or Post- Partum Bonding Questionnaire or The Maternal Object Relations Short Form	Ditto	
3-4 months	Keys to Interactive Parenting or Parent-Infant Interaction Observation Screen		Ditto	Emotional Availability Scales, The CARE-Index The Adult-Adolescent Parenting Inventory (AAPI-2)
8-9 months				
12-15 months		BITSEA Ages and Stages-12	Ditto	As above plus The DMM Strange Situation
22-24 months	Language development Child Behaviour Checklist Toddler Attachment Sort – 45			

Appendix 2B

The anxiety and depression scale

Your Name: _____ Date: _____

This questionnaire is designed to help us to know how you feel. Ignore the numbers printed on the left of the questionnaire. Read each item and underline the reply which comes closest to how you have been feeling in the past week.

Don't take too long over your replies; your immediate reaction to each item will probably be more accurate than a long thought-out response.

I feel tense or 'wound up':
 3 Most of the time
 2 A lot of the time
 1 From time to time, occasionally
 0 Not at all

I still enjoy the things I used to enjoy:
 0 Definitely as much
 1 Not quite so much
 2 Only a little
 3 Hardly at all

I get a sort of frightened feeling as if something awful is about to happen:
 3 Very definitely and quite badly
 2 Yes, but not too badly
 1 A little, but it doesn't worry me
 0 Not at all

I can laugh and see the funny side of things:
 0 As much as I always could
 1 Not quite so much now
 2 Definitely not so much now
 3 Not at all

Worrying thoughts go through my mind:
 3 A great deal of the time
 2 A lot of the time
 1 From time to time, but not too often
 0 Only occasionally

I feel cheerful:
 3 Not at all
 2 Not often
 1 Sometimes
 0 Most of the time

I can sit at ease and feel relaxed:
 0 Definitely
 1 Usually
 2 Not often
 3 Not at all

I feel as if I am slowed down:
 3 Nearly all the time
 2 Very often
 1 Sometimes
 0 Not at all

I get a sort of frightened feeling like ‘butterflies’ in the stomach:
 0 Not at all
 1 Occasionally
 2 Quite often
 3 Very often

I have lost interest in my appearance:
 3 Definitely
 2 I don’t take as much care as I should
 1 I may not take quite as much care
 0 I take just as much care as ever

I feel restless as if I have to be on the move:
 3 Very much indeed
 2 Quite a lot
 1 Not very much
 0 Not at all

I look forward with enjoyment to things:
 0 As much as ever I did
 1 Rather less than I used to
 2 Definitely less than I used to
 3 Hardly at all

I get sudden feelings of panic:
 3 Very often indeed
 2 Quite often
 1 Not very often
 0 Not at all

I can enjoy a good book or radio or TV programme:
 0 Often
 1 Sometimes
 2 Not often
 3 Very seldom

Now check that you have answered all the questions

D:

A:

APPENDIX 2C

Risk factors

Check list for early intervention: Risk factors that stress the caregiving relationship

Research indicates a number of risk factors that impose a strain on the baby-parent relationship. The presence of four to six moderate risk factors is significant although some combinations of a lesser number merit attention in vulnerable families. However, there are certain serious conditions that on their own may call for intervention.

- 1. Biological Vulnerability in the Infant:**

 - Low birth weight / prematurity
 - Failure to thrive / feeding difficulties / malnutrition
 - Developmental delays
 - Exposure to harmful substances [teratogens] in utero
 - Delivery complications
 - Congenital abnormalities / illness
 - Very difficult temperament / extreme crying
 - Very lethargic / non-responsive
 - Resists holding / hypersensitive to touch
 - Chronic maternal stress during pregnancy
 - Head injuries
 - Regulatory / sensory integration disorder

- 2. Parental History and Current Functioning:**

 - Mental illness, including depression*
 - Serious medical condition
 - Own mother mentally ill / substance abused*
 - Parents seem incoherent or confused
 - Developmental delay / learning disability
 - Criminal or young offender's record
 - Previous child has been in foster care or adopted
 - Mother experienced the death of a child
 - Previous child has behaviour problems
 - Alcohol and / or drug abuse (current or past)*
 - History of physical or sexual abuse, witnessing violence, neglect or loss.*
 - Absent parent or step-parent (i.e. non-biologically related)*
 - Presence of an acute family crisis

- 3. Interactional or Parenting Variables:**

 - Lack of sensitivity to infant's cries or signals
 - Negative affect openly shown towards child
 - Physically punitive towards child
 - Lack of vocalisation to infant
 - Lack of eye-to-eye contact
 - Negative attributions made towards child, even if 'jokey'
 - Lack of preparation during pregnancy
 - Lacks knowledge of parenting and child development
 - Infant has poor physical care (e.g. dirty and unkempt)
 - Does not anticipate or encourage child's development
 - Quality of partner relationship, undermined or unsupported
 - Infant a victim of maltreatment, emotional abuse or neglect*
 - Lack of consistent caregiver for infant

- 4. Socio-demographic Factors:**

 - Chronic unemployment
 - Inadequate income / housing
 - Frequent moves / no telephone
 - Low educational achievement
 - Single teenage mother without family support
 - Any violence reported in the family, especially if witnessed by child*
 - Severe family dysfunction
 - Lack of support / isolation
 - Recent life stress (e.g. bereavement, job loss, immigration)

Appendix 2D

Maternal Attitude Scale (Bor et al, 2003)

Mother's name _____ Baby's name _____

Date _____

Below are a number of statements about your baby or infant and how you feel about him or her. Please answer each statement by putting a circle around the answer which best describes how you feel at the moment.

1. Caring for my baby is very satisfying

Strongly Agree *Agree* *Neutral* *Disagree* *Strongly Disagree*

2. I feel so angry that sometimes I could smack my baby.

Strongly Agree *Agree* *Neutral* *Disagree* *Strongly Disagree*

3. My baby makes me feel too tired.

Strongly Agree *Agree* *Neutral* *Disagree* *Strongly Disagree*

4. My baby is so good I hardly know he/she is there.

Strongly Agree *Agree* *Neutral* *Disagree* *Strongly Disagree*

5. Sometimes I feel like hitting my baby.

Strongly Agree *Agree* *Neutral* *Disagree* *Strongly Disagree*

6. I feel fed up looking after my baby all day.

Strongly Agree *Agree* *Neutral* *Disagree* *Strongly Disagree*

Scoring

Score Item 1 & 4 4-3-2-1-0 (Strongly agree to strongly disagree)

Remaining items are scored 0-1-2-3-4

Higher scores represent a more positive attitude.

Maximum = 24, minimum 0

Mothers scoring in the lowest 10th percentile (Total 3 or less) considered at risk.

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APPENDIX 3 – Section 1

Quality and training of the workforce

Core knowledge

Knowledge that informs interactions with infants and toddlers:

1. Has an understanding of the link between feelings, needs and behaviour, including the recognition that all behaviour is communication (and not just something to be controlled).
2. Has an understanding of proactive, authoritative and positive approaches to boundary setting.
3. Has an understanding of the importance of reciprocity, empathy and containment from all parents/caregivers, and their impact on physical, social and emotional development and future health in adulthood.
4. Understands the fundamental importance of the parental (or caregivers') relationship to their baby, from pregnancy and throughout infancy.
5. Is able to identify harmful influences on the unborn baby, infant and/or toddler – i.e. alcohol and substance misuse, domestic abuse, parental mental ill health.

Knowledge of child development from pre-birth to three years:

1. Has an understanding of child development, including social and emotional development, and appropriate expectations of individual infants and toddlers.
2. Has an understanding of attachment and how it links to relationships.
3. Has an understanding of baby, infant and toddler brain development (and recognises that this work is constantly evolving and therefore requires regular professional update).
4. Has an understanding of the cultural, social and emotional factors which may contribute to common behavioural problems in children under three years, such as feeding, toilet training, sleeping etc., and knows how to support parents in responding to these concerns.
5. Has an understanding of the importance of a preventive approach towards child and family work and understands the need to intervene early to prevent the escalation of concerns and maltreatment.

Interface with safeguarding knowledge:

1. Recognises their professional role to intervene actively where 'clues' to poor attachment are noted.
2. Has an understanding of factors creating social, emotional, economic and physical pressures and how the complexity of family health needs may impact on their ability to be effective as parents.
3. Has an understanding of the ways in which family strengths and protective factors interact with risks, harm and needs – is able to apply a theoretical model to practice that recognises 'good enough parenting' and where the statutory need for professional intervention (including on the child protection threshold), lies.
4. Has a theoretical understanding of the ability within families to change behaviour – parenting risks and protective factors are dynamic and subject to change. Where families need to make changes to ensure the best outcomes for their child, there is an understanding that this needs to be at a sufficient pace to meet the needs of the infant /toddler.
5. Has an understanding of the levels of stress that are toxic to the unborn baby, the infant and the toddler, either through direct experience or via stress in the mother or primary care giver.
6. Has an understanding of the benefits of working with multidisciplinary, professional practitioners and how to access a range of multi-agency support services in active partnership with parents.

Core Skills

Demonstrates the aptitudes, qualities and skills associated with an emotionally competent professional practitioner – i.e. emotionally mature and contained.

Interactions with infants and toddlers

1. Ability to observe the interaction/relationship between parents and children.
2. Ability to support and enhance infants' and toddlers' physical, social and emotional development.

Skills to intervene in child development, from pre-birth to three years

1. Ability to provide a confident level of advice (or education) to parents or parents-to-be, regarding the parenting role and the vital importance of their relationship to their infant and, for 2 parents/carers, with each other (including reciprocity, empathy and containment, as well as positive approaches to boundary setting).
2. Has skills to assist and support the relationship and the attachment between parent and infant and/or toddler – i.e. able to model empathy and containment to parents and infants/toddlers.
3. Has the ability to connect and develop warm, nurturing and stimulating relationships with infants and toddlers that are ‘tuned into’ the needs of each individual child.
4. Ability to work as a member of a team, including as a fully participating member of a multi-disciplinary ‘team around the child’.
 - Considers asking for help and support as a strength.
5. Demonstrates capacity in professional reflection and utilises supervision process appropriately, i.e:
 - Is able to reflect on the impact on their own childhood and life experience;
 - Is able to reflect and learn from their current work experience;
 - Assumes professional responsibility and arrives prepared for supervision sessions;
 - Shows signs of incremental professional growth and progression.

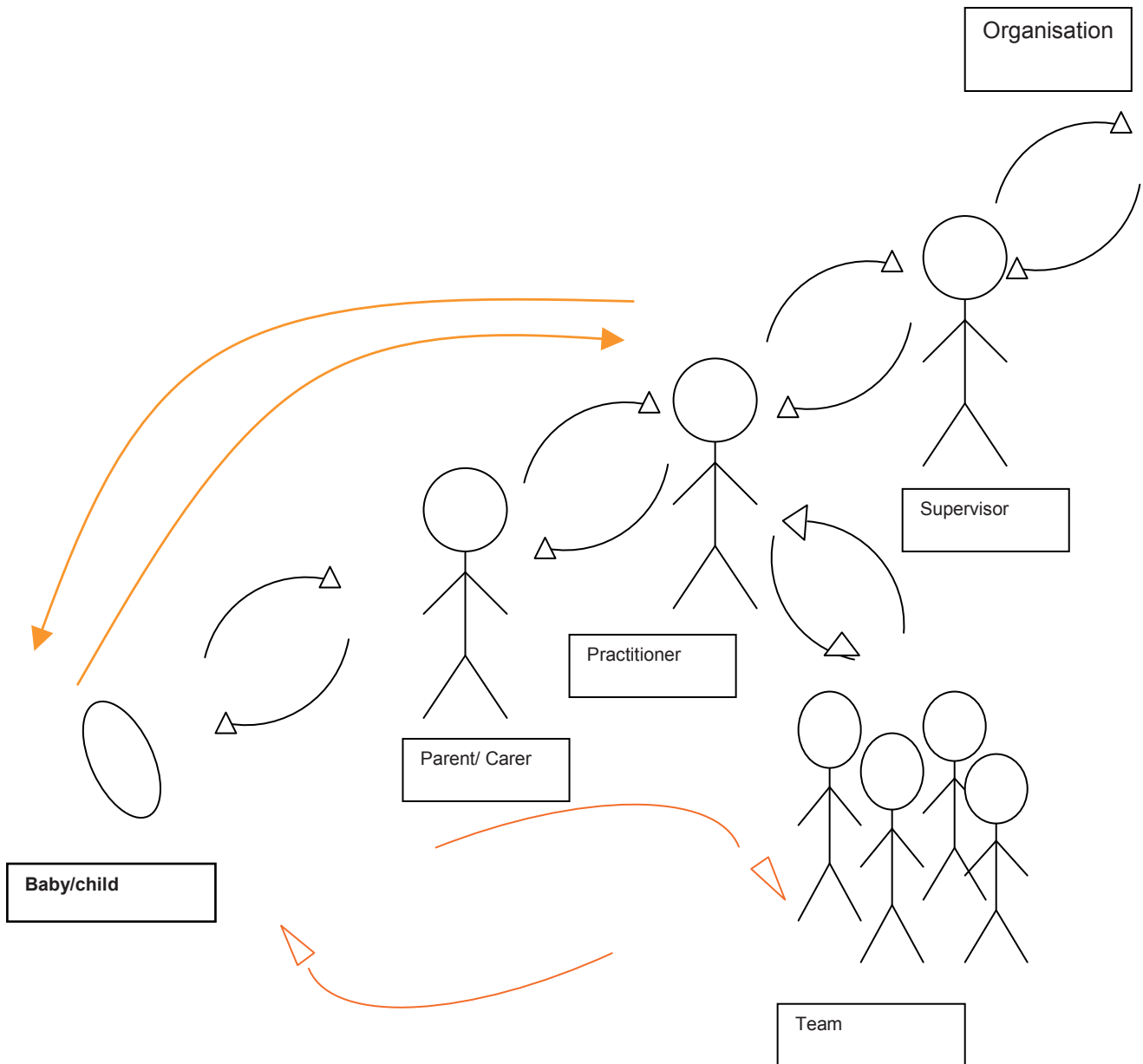
Skills to form empathetic relationships with parents in a professional capacity

1. Ability to listen to parents and use clear, jargon-free language in all communication.
2. Ability to form a meaningful partnership with all parents in an open, honest and respectful manner that engenders respect and maintains dialogue throughout contact.
3. Ability to form and maintain empathetic relationships with parents in a professional capacity.
4. Demonstrates an ability to work with the development of the family/professional relationship, including the building of confidence and trust.
5. Demonstrates the ability to take a proactive approach to ensuring services are inclusive, i.e. able to recognise and work with parents from a diverse array of cultural, religious and social backgrounds, including the ways in which this might impact on the engagement process.
6. Demonstrates an awareness of their own beliefs, values, judgements, feelings, needs etc., and those of others, and ways in which these impact on their professional interaction with infants and their parents.
7. Ability to identify, discuss and raise concerns with parents about the growth, development and well-being of their child.
8. Ability to recognise and work with the strengths, skills and expertise of parents and families, including how to work with parents to improve their effectiveness and enable them to believe they can make changes in their own lives and those of their children.
9. Has skills and professional confidence to communicate ‘the unsayable’ with parents, in such a way that they can take this on board and not be offended and undermined.
10. Ability to maintain neutrality and to demonstrate empathy in their connection and relationships with others.
11. Ability to anticipate and work with barriers to parents’ understanding and engagement with services and has the requisite skills to adapt professional approaches, as appropriate.
12. Ability to recognise possible emotional or mental health difficulties in parents, seek guidance and refer as appropriate.
13. Ability to recognise patterns of avoidance, ambivalence, confrontation and violence in parents’ relationships and/or towards professionals; can evidence this, seek professional guidance and refer as appropriate.
14. Ability to support confidently the resolution of conflict.

APPENDIX 3 – Section 2

Professional Reflective Supervision

This Section is intended as a guide to Professional Reflective Supervision and is presented as a sister to the preceding section on the core knowledge and skills for the early years' sector.



This diagram illustrates the system for focus during professional supervision. The arrows represent being able to communicate (represented by an arrow) and the capacity to receive the communication and convey an understanding of the communication (represented by an arrow). Implicit within this is the capacity to be in tune with one another.

The diagram demonstrates that similar elements of a relationship occur within the parent/infant relationship as in the parent/practitioner relationship, practitioner/team relationship and the practitioner/supervisor relationship

Core principles

This model for Professional Reflective Supervision includes the same underpinning principles as contained in Section 1 above.

1. All practitioners working with infants and their families need a reflective space with another person, a supervisor, coach or mentor, to understand and process their work.
2. All supervisors need to be trained in a reflective model of supervision, including the coaching dimension. Whatever the training option selected, it is essential that the central focus is upon the quality of the relationship.
(NB To achieve coverage, this could include aspects of peer observation/modelling, coaching skills and abilities and e-learning. It is essential that Supervisors are assessed as competent)
3. Supervision should be recognised as a fundamental structure to support high standards of professional practice. Supervision should therefore be prioritised, regular and uninterrupted.
4. Supervision sessions should be consistent in approach, style and the person (Supervisor), providing the supervision. As far as practicable, any change of Supervisor should include a carefully managed transition.
5. The frequency of supervision depends on the demands of the work and the experience of the practitioner. New practitioners will require more supervision. We suggest a minimum of once a month.
6. Recognised as a cornerstone to high standards, supervision should be well structured, purposeful and thoroughly prepared for by both Supervisor and Supervisee.
7. Supervision should be supported by a written agreement, agenda and record, which document the process to be followed by Supervisee and Supervisor. These records should be signed off by both the Supervisor and Supervisee. Should an issue arise regarding professional performance this should be recorded, with care given to both parties' views being noted. If a matter cannot be resolved and either party is left with a grievance, a third party should be approached to mediate a resolution.
8. Supervision should be understood as an integral part to professional practice with infants and their parents and embedded within the organisational ethos and philosophy. Agreement about what aspects of supervision are confidential and which are shared should be explicit.
9. Supervision is not optional. The time taken will pay for itself in a better developed workforce, better quality services and improved outcomes for parents and children.
10. When there is regular supervision structure in place for the organisation, issues underlying behaviour concerning competence, 'stuckness' etc. are addressed promptly. As a consequence, the need for disciplinary action often reduces substantially.

Definition of Reflective Supervision

Professional supervision provides the opportunity for facilitated, in-depth reflection on issues affecting practice. It is a process whereby the supervisor can clarify the dynamics that operate between the family and the supervisee and can ensure that safe practice is maintained for both the family and the practitioner. Supervision includes discussion and problem-solving for both administrative and clinical tasks. The process includes devoting time to explore the thoughts and reactions of the practitioner to the intensity and specific focus of the work. This approach is often described as reflective supervision.

The Components of Supervision

Professional supervision provides the opportunity for both Supervisor and Supervisee to reflect on the practitioner's work with infants, their parents, wider families and their joint work with other professional practitioners within the network. Supervision includes the following functions:-

- Managing performance (how well the supervisee has carried out their required duties and role. This will include day-to-day practice, sickness, absences, competency discussions and, on occasions, annual appraisals).
- Supporting development (what skills and knowledge the supervisee needs to carry out their duties effectively; identifying training needs and opportunities which support continued professional development).
- Personal support (recognising the emotional impact of the work and the impact of personal issues for the supervisee and ensuring that the supervisee has emotional intelligence).

- Mediation (acting as a bridge between the organisation and the supervisee, ensuring the supervisee is engaged with the organisation).

There are also components within the supervisory relationship that serve to promote effective supervision and safe practice, including:

- o The supervisor should be open to hearing the story and experiences of the supervisee and asking exploratory questions to support an open discussion of the issues.
- o The supervisor should endeavour to provide the opportunity for reflection in which the supervisee can reflect and consider their experiences in the light of the dynamics that are operating between themselves and the family/infant. This is also an opportunity to examine any cultural or individual bias that may affect the supervisee's ability to carry out their duties.
- o Having heard the story and reflected on the issues, the supervisor and supervisee should then consider the issues in the light of recent relevant research and knowledge and form a view regarding future plans and actions.
- o Supervision will also include a process for making decisions, forming and reviewing plans and then considering resources needed to put these plans into action.

Both supervisee and supervisor contribute to an effective supervisory relationship. They should both recognise the power differentiation between Supervisor and Supervisee and seek to maintain equity.

Professional supervision does not fulfil a therapy function for either Supervisee or Supervisor.

The Role of the Supervisor

Essentially the supervisor fulfills a supportive, normative, restorative and informative function. Their role is to:

- o Work in partnership with the supervisee.
- o Familiarise themselves with the role and responsibilities of the supervisee.
- o Provide the supervisee with uninterrupted time and a safe space for the session.
- o Listen with attention to the issues and experiences of the supervisee, reflect back their observations and ask challenging questions that enable the supervisee to reflect on what is happening that is working, what is not working and to support them in seeing the way forward.
- o Be honest and straightforward, compassionate in an empathetic way, is able to view situations from a variety of perspectives and uphold a duty of care to the supervisee, the infants and families.
- o Give reference to a professionally agreed code of ethics.
- o Keep content of sessions confidential in line with organisational policies.

The Role of the Supervisee

As a practitioner working with infants and their parents, the supervisee should recognise that supervision is an integral part of their professional practice. It is a means by which they reflect upon and account for their approach and interventions. Their role is to:

- o Be committed to the process of supervision
- o Keep appointments
- o Be willing to engage in reflection
- o Be open and honest and committed to work within a professional and ethical framework
- o Be prepared for the session ahead of time (having already considered their work load, what is working well, what is not working well and what they are concerned about and therefore intend to take to the supervision session)

Professional Supervision within a group care environment

It should be recognised that those working within a group care environment, including in early years' settings, are accountable for their own practice and that of their colleagues. They have a key role to play in observation and monitoring professional practice within the setting. This includes professional interaction with infants, their parents and with each other, as colleagues. It is the responsibility of all practitioners to question and, in some circumstances, intervene where they observe a child, parent and/or colleague is struggling, distressed and/or at risk of harm. It is also their responsibility to raise concern regarding their colleagues' practice with their supervisor.

NB. This may be outside of the scheduled supervision appointment, dependent on the level of risk posed and seriousness.

The need for structured supervision system

Effective supervision is one of the keys to delivering positive outcomes for everyone. It is important for all organisations to have an unambiguous commitment to a well-structured supervision system, provided in the context of a clear organisation approach/ culture. To ensure its continued relevance and appropriateness, an annual review is essential, combined with monitoring and quality assurance checks to confirm the validity of the supervision system.

A sample procedure for setting up a Supervision System is included at the end of this document.

In designing a supervision structure, thought should be given to how the organisation's ethos, culture, principles and values will be reflected.

It also needs to be recognised that a balance needs to be struck between providing structure and the provision of a reflective space. Sessions that are too structured and goal-orientated leave no time for reflection. This is the same issue when working with families, balancing a relationship model with structure and goals.

Models of Supervision

There are numerous models for supervision, in addition to the traditional 1:1 Supervisee and Supervisor approach. These include options for working in groups, where the learning 'edge' in building professional confidence and competence might be optimised through the group dynamic. Examples are:

- Action learning sets
- Peer circles
- Peer : peer supervision

The underpinning principles of supervision

These principles for supervision have been mapped with Section 1 above:

1. Has an understanding of the link between feelings, needs and behaviour, including the recognition that all behaviour is communication (and not just something to be controlled).
2. Has an understanding of proactive, authoritative and positive approaches to boundary setting within supervision.
3. Has an understanding of the importance of reciprocity, empathy and containment in supervision and their impact on the practitioner's development.
4. Understands the need for containment in stressful situations in order to restore the practitioner's ability to think. Providing space to process the particular work experience, including the emotional experience or anxiety, enables the practitioner to think about and understand the work experience, leading to appropriate intervention.
5. Understands that sometimes current or past experiences in the practitioner's life may be impacting their ability to think in certain situations. Sometimes recognising this is enough to restore the ability to think. It should be recognised that professional supervision is not therapy.
6. As with work with parents and infants, is able to set up a 'safe space' for supervision, with protected time, a respectful and trusting relationship and with the emotional space to be able to listen to the practitioner.
7. As with parents and infant, understands the importance of reciprocity within supervision, to be attuned to the practitioner.
8. Knows how to get support if overwhelmed him/herself, in order to be able to provide reflective supervision.
9. Has an understanding of the need to assess the developmental needs of the supervisee and can promote and support opportunities for learning.
10. Has knowledge and experience of various models for supervision, including those working on a one to one basis, with groups and between peer groups.

Sample procedure for setting up a Supervision System



APPENDIX 4 – The economics of early years’ investment

SECTION I – International studies

How advisable is it for national or local policy-making bodies in the UK, with responsibility for child health or welfare, and control over spending, to switch investment more heavily to the early years? We have conducted a review of both UK and international studies which look at this question from a number of different but complementary perspectives. This Section focuses on the findings of the international studies. Section 2 summarises the UK studies.

Overview

The short answer is there is general expert consensus that it is somewhere between economically worthwhile and imperative to invest more heavily, as a proportion of both local and national spend, in the very earliest months and years of life. Nine approaches to evaluating the outcomes of early years’ investment are reviewed here.

- Every approach – even the most cautious and circumspect in its recommendations – finds that returns on investment on well-designed early years’ interventions significantly exceed their costs.
- The benefits range from 75% to over 1,000% higher than costs, with rates of return on investment significantly and repeatedly shown to be higher than those obtained from most public and private investments.
- Where a whole country has adopted a policy of investment in early years’ prevention, returns are not merely financial but in strikingly better health for the whole population. The benefits span lower infant mortality at birth through to reduced heart, liver and lung disease in middle-age.
- The logical links between the investments and the health benefits are described in the ‘Adverse Childhood Experiences’ (ACE) studies which reveal that for every 100 cases of child abuse society can expect to pay in middle or old age for (amongst a wide range of physical and mental health consequences):
 - one additional case of liver disease
 - two additional cases of lung disease
 - six additional cases of serious heart disease, and
 - 16% higher rate of anti-depressant prescriptions (Felitti and Anda, 2009)
- None of the estimates takes account of the economic value of the knock-on effect that child abuse averted in one generation will itself result in a cumulative reduction in this dysfunction during future generations.

Summary of studies reviewed

RAND/Karoly et al

The RAND study by Karoly et al (2005) found:

- Statistically significant benefits being delivered in at least two-thirds of 20 early years’ programmes, in seven different domains of health and welfare.
- With the exception of two programmes where costs either exceeded their benefits, or could not be monetised, eight cost benefit analyses of early years’ programmes, or meta-analyses of such programmes, showed benefits significantly exceeding costs, with payoffs per dollar invested ranging from \$1.80 to \$17.07.
- The estimated net benefits ranged from \$1,400 to nearly \$240,000 per child.
- The greatest benefits come from programmes with long-term follow-up.
- The authors concluded:

‘benefit-cost estimates for effective programs are likely to be conservative’

Reynolds et al

- Reynolds et al’s (2011) intensive analysis of the Chicago Child-Parent Center Program found benefits of more than \$80,000 per child, with \$10.80 of benefits per \$1 invested.
- They also found that children with four or more family risk factors yielded almost double the benefits of those with fewer (\$12.8 vs. \$7.2 per \$1 invested).
- Children from the highest poverty neighbourhoods had returns more than *four times higher* than those from less disadvantaged areas.

- The Chicago findings are additionally significant because they come not from a pilot study but via evaluating a practice embedded in the Chicago Public Schools' system for over four decades.

Reynolds also identifies a further early years' programme, not included in the RAND analysis:

- The prenatal and infancy and nutrition programme, Women, Infants, and Children (WIC) which reportedly saved \$3.07 per \$1 invested in reduced medical costs in the first year of life (Avruch & Cackley, 1995). This is likely to be a rather conservative estimate of its lifetime benefits.

Federal Reserve Bank of Minneapolis/Rolnick & Grunewald

A different perspective on the issue is provided by bankers from the Federal Reserve Bank of Minneapolis, Rolnick and Grunewald (2003) who calculated that:

- The significantly higher returns found from early years' programmes compared to most public investment is evidence that society is not spending enough on the early years – and that to do so is sound financial policy.
- Internal rates of return for those early years' programmes evaluated exceed both:
 - stock market returns, and
 - returns from typical public policy investments.

They would also significantly exceed returns from many UK large-scale public investments, including (for example) the high speed HS2 rail link.

James Heckman

Another viewpoint from outside the sector is provided by the Nobel Laureate economist James Heckman, whose focus is on economic efficiency and skill formation, rather than avoiding social dysfunction. Heckman (2008) asserts that:

- Financial returns on early years' investments are highest for age 0-3, and diminish progressively as children become older.
- His persuasive argument in logic for why this should be so is supported by reference to the principle that learning begets learning (i.e. early benefits become cumulative) and (disappointing) economic evaluations of such later interventions as attempts to skill-train adolescents.
- Society is demonstrably under-investing in the early years.
- Because early years' interventions both promote economic efficiency and reduce lifetime inequality, they provide policy makers with a rare opportunity to spend money in a way that delivers social and economic benefits at the same time.

Harvard University

The Harvard Center on the Developing Child at Harvard University (2007, 2010) bases its case on the science of neurobiology:

- Because the infant (and human) brain is built from its basic structures upwards, each new stage depends on the quality of the preceding stage.
- This means creating the right conditions for early childhood development is likely to be more effective and less costly than addressing problems at a later age.
- The basic principles of neuroscience and the process of human skill formation indicate that early years' intervention for the most vulnerable children will generate the greatest payback.
- Also, although the large number of children and families who could benefit from additional assistance will require significant increases in funding, extensive research indicates that investment in high quality interventions will generate substantial future returns through:
 - increased taxes paid by more productive adults, and
 - significant reductions in public expenditure on special education, welfare assistance, and incarceration.
- Policy makers can achieve greater return on investments in early childhood education for children from families with low incomes and limited parent education than from remedial programs for adults with limited workforce skills.

While the comparison is different, this latter point echoes the finding of Reynolds et al, that returns are much higher for families from poverty neighbourhoods and those with more family risk factors.

Sweden

Sweden adopts a whole country approach which follows the principle of early years' prevention. The payoff from this policy at a national level is shown in:

- Infant mortality half of that in the UK.
- Obesity levels less than half those in the UK.
- Teenage pregnancy one quarter of the level in the UK.
- Deaths from cancer and smoking-related diseases about 20% lower than the UK.
- Deaths from circulatory diseases 25% lower than in the UK.
- Deaths from chronic liver disease more than 50% lower than in the UK.

Cohen et al – view from the other end of the perspective

In their studies Cohen, Piquero and Jennings (2010) take a different approach by estimating the lifetime costs of bad outcomes for at risk youths, and offering an innovative methodology for assessing early years' interventions whereby their cost-effectiveness can be judged by the minimum number of cases of child abuse, drug abuse or criminality a given intervention can be reliably predicted to prevent.

Applying the costs per family of such typical early years' interventions as First Steps in Parenting, Nurse Family Partnership, the Sunderland Infant Project, Circle of Security, Mellow Parenting, Triple P etc to the Cohen, Piquero and Jennings methodology suggest that such programmes need to be successful in preventing child abuse in only 2% of their participants to pay for themselves, without taking account of what they may deliver in reduced alcohol or drug abuse, future domestic violence or such other benefits as reduced medical and welfare costs.

Washington State Institute for Public Policy (WSIPP)

The Washington State Institute for Public Policy takes a rigorously conservative stance to programme evaluation, based on an absolute 'no false positives' approach. It arguably under-states by some margin the value of preventing child abuse and heavily discounts, or disqualifies, the research findings of many early years' practitioners. Even with these restrictions, it still finds positive benefit to cost ratios for a range of early years' programmes, ranging from \$1.75 per \$1 invested from Parents as Teachers through \$3.23 per \$1 invested for Nurse Family Partnership and \$7 for Parent Child Interaction Therapy to \$10.32 per \$1 invested for Level 4 Group Triple P.

Their methodology and mandated legislative focus lead them to recommend many more teen than early years' programmes. Such interventions should not be seen in terms of either/or; both provide higher returns to society than the bulk of public and private investments.

The following provides further detail on the evaluations above:

Review of cost benefit studies of early years' programmes

A) Rand review of early years' investments

The PNC Grow Up Great initiative is a ten-year, \$100-million programme to improve school- readiness for children from birth to age 5. PNC Financial Services Group Inc partnered with Sesame Workshop (producers of Sesame Street) and Family Communications Inc, producers of Mister Rogers' Neighborhood, to develop content for the initiative, guided by an advisory council of experts in the early childhood field.

As part of the initiative, PNC asked the RAND Corporation to prepare a thorough, objective review and synthesis of current research on interventions in early childhood, looking at:

- the potential consequences of not investing additional resources in the lives of children – particularly disadvantaged children – prior to school entry;
- the available range of early intervention programmes, focusing on those rigorously evaluated;
- the demonstrated benefits of interventions with high-quality evaluations and the features associated with successful programmes;
- the returns to society associated with investing early in the lives of disadvantaged children.

Carried out by Karoly, Kilburn and Cannon (2005), the study notes that disadvantages in early childhood have significant implications for how well prepared children are when they enter school, not only in cognitive skills but also in socialisation, self-regulatory behaviour, and learning approaches. Children with more disadvantaged

backgrounds enter school with lower levels of knowledge and social competencies, and achievement gaps tend to widen over time. Children from disadvantaged backgrounds experience higher rates of special education use and dropping out of school; lower rates of employment and higher rates of welfare dependency, delinquency and crime. The authors comment:

Even if only a portion of these detrimental outcomes in childhood and adulthood can be averted, the benefits may be substantial

Turning to evaluation, the study observes that while many early childhood interventions have been implemented, only a relatively small subset have been evaluated using scientifically sound methods. After rigorous review, the authors identified published evaluations for 20 early childhood programmes with well-implemented experimental, or strong quasi-experimental, designs. The study then examined the following benefit domains:

- cognition and academic achievement
- behavioural and emotional competencies
- educational progression and attainment
- child maltreatment
- health, accidents and injuries
- delinquency and crime
- social welfare programme use
- labour market success

Statistically significant benefits were found in at least two-thirds of the programmes reviewed in every one of these benefit domains, with one exception (social welfare programme use). (See Tables S.2 and S.3 of the original Karoly et al report.) The magnitudes of the favourable effects were often (though not always) sizable.

Seven of the 20 programmes studied had been subjected to cost-benefit analyses. The authors summarised the findings of these studies, together with benefit-cost meta-analyses of home visiting programmes for at risk children and early childhood education programmes for low-income 3-4-year-olds, based on rigorous outcome evaluations. The results are summarised in the table below, arranged by age of participants at the time of the last follow-up (adapted from Table S.4 in the original):

Benefit-Cost Results for Selected Early Childhood Intervention Programs

Program	Age at Last Follow-Up	Program Costs per Child (\$)	Total Benefits to Society per Child (\$)	Net Benefits to Society per Child (\$)	Benefit-Cost Ratio
Follow-Up During Elementary School Years					
Comprehensive Child Development Program	5	37,388	-9	-37,397	—
HIPPY USA	6	1,681	3,032	1,351	1.80
Infant Health and Development Program	8	49,021	0	-49,021	—
Follow-Up During Secondary School Years					
Nurse Family Partnership — higher-risk sample	15	7,271	41,419	34,148	5.70
Nurse Family Partnership — lower-risk sample	15	7,271	9,151	1,880	1.26
Nurse Family Partnership — full sample	15	9,118	26,298	17,180	2.88
Home Visiting for at risk mothers and children (meta-analysis)	Varies	4,892	10,969	6,077	2.24
Follow-Up to Early Adulthood					
Abecedarian	21	42,871	138,635	95,764	3.23
Chicago Child-Parent Center	21	6,913	49,337	42,424	7.14
Perry Pre-School (including intangible crime costs)	27	14,830	76,426	61,595	5.15
Early Childhood Education for low-income 3- and 4-year-olds (meta-analysis)	Varies	6,681	15,742	9,061	2.36
Follow-Up to Middle Adulthood					
Perry Preschool	40	14,830	253,154	238,324	17.07

NOTES: All dollar values are 2003 dollars per child and are the present value of amounts over time where future values are discounted to age 0 of the participating child, using a 3 percent annual real discount rate.

Because of differences in evaluation methodology (such as which benefits are measured and monetised) the authors caution that these results cannot identify exactly which programmes have the highest returns. However, they can demonstrate whether, in principle, early childhood intervention programmes generate benefits outweighing their costs.

One of the programmes evaluated (the Comprehensive Child Development Program, or CCDP) was not shown to be effective, because it could not generate net economic benefits. Another (the Infant Health and Development Program, or IHDP) had favourable effects as of the follow-up at age 8, for example in IQ and maths achievement for heavier low birth weight (but not very low birth weight) babies, but the outcomes assessed could not be translated into dollar savings. For the remaining studies (including the meta-analyses), the estimates of net benefits ranged from about \$1,400 to nearly \$240,000 per child. The returns to society for each dollar invested ranged from a low of \$1.26 to a high of \$17.07. Positive net benefits were found for both expensive and low-cost programmes. Favourable returns were found both for home-visiting and parent education programmes as well as combination programmes.

The largest benefit-cost ratios were found in programmes with longer-term follow-up because they allowed measurement at older ages of outcomes that most readily translate into dollar benefits. These outcomes included educational attainment, delinquency, crime and earnings. The authors conclude:

'Not only do the studies ... based on long-term follow-up, demonstrate that the benefits from early interventions can be long-lasting, they also give more confidence that the savings the programs generate can be substantial'

and observed that:

'benefit-cost estimates for effective programs are likely to be conservative'

(because so few are funded to track the long-term outcomes and so translate them to dollar benefits).

B) Large-scale city-wide approach

Recognising Karoly et al's point that evaluations which take account of benefits over a longer time scale will provide more accurate pictures of cost benefit analysis, Reynolds et al (2011) carried out a cost benefit analysis of the Chicago Child-Parent Center (CPC) Early Education Program using data collected up to age 26. The 2011 analysis was able to use actual rather than projections for earnings and adult crime prevention outcomes and also included benefits on health and wellbeing, including mental health and substance use.

The analysis showed that preschool participants in the CPC had:

- significantly higher rates of high school completion
- completed more years of education
- significantly lower rates of felony arrest
- higher rates of health insurance coverage and lower rates of depressive symptoms, as assessed from ages 22 to 24
- lower rates of daily smoking and substance misuse by age 26

Juvenile benefits included lower rates of:

- special education placement
- child maltreatment and
- out-of-home placement, and juvenile arrest

Percentage reductions over the comparison group ranged from one third to one half.

A benefit to cost analysis of the preschool programme showed a ratio of \$10.80 benefits per \$1 invested with an average economic return to society of \$92,220 for a cost of \$8,512 per participant.

Benefits to the public, excluding earnings and participant benefits, totalled \$61,246 with a benefit to cost ratio of \$7.20 per dollar invested.

Children with four or more family risk factors received nearly double the benefits of those with fewer such risk factors (\$12.80 vs. \$7.20), and children from the highest poverty neighbourhoods achieved returns more than four times higher than those for children from less disadvantaged areas.

Estimates were robust across a wide range of analyses, including Monte Carlo simulations.

Reynolds et al also evaluated the benefits of intervention at school age and found that these also justified the cost of the investment – but with significantly lower returns than the preschool programme (\$1.70 to \$2.00 per \$1 invested). Here again, returns were much higher for disadvantaged children.

The Reynolds findings are significant. The Chicago Child-Parent Center programme has been established in the Chicago Public Schools' system for over four decades. Although costing moderately more than other contemporary federal and state-financed programmes, the CPC programme has generally similar teacher qualifications, class sizes and ratios, instructional approaches, school-based structures, and scope of services.

The CPC findings reinforce the Karoly conclusions that there can be high economic returns from preschool programmes for children at risk, and suggest these can apply even when programmes are implemented on a large scale.

Reynolds et al also report on a very early intervention programme, not included in the Karoly analysis: the prenatal and infancy nutrition programme Women, Infants, and Children (WIC) which reportedly saved \$3.07 per \$1 invested in reduced medical costs in the first year of life alone – due to reduced rates of low birth weights (Avruch & Cackley, 1995).

A number of studies have found links between low birth weight and such expensive problems in later life as high blood pressure and coronary heart disease (Barker 1995). Lewitt et al (1995) calculated that low birth weight children incur additional annual costs of \$1,500 (in 1988) up to the age of 15 in terms of health care and education. Low birth weight has also been negatively correlated with adult health, qualification and labour market attainment (Case et al, 2005, Currie and Hyson, 1999) hence the benefits of the WIC programme are probably very significantly understated.

C) Bankers' eye view on where public spending should be focused

A hard-nosed banking perspective on the economics of early years' investment is provided by Rolnick and Grunewald (2003). Art Rolnick is Senior Vice President and Director of Research, and Rob Grunewald is Regional Economic Analyst at the Federal Reserve Bank of Minneapolis. They show that investment in human capital breeds success for the overall economy. They contrast the ratio of earnings for those with degrees compared to the average worker prior to 1983 (40% higher) and in the 2000s (closer to 60% higher). The premium for an advanced degree has grown even more, from 60% to over 100%.

Rolnick and Grunewald compare the value of investment in early childhood development with investments in other public projects. Well-grounded benefit-to-cost ratios are seldom calculated for public projects, but an alternative measure – the internal rate of return (IRR) or compound return on the project – can be used to compare the financial return to public as well as private investments.

Rolnick and Grunewald converted the paybacks from the Perry preschool programme and arrived at an IRR of 16%, after adjustment for inflation. They also calculated that about 80% of the benefits went to the general public (e.g. students were less disruptive in class and committed fewer crimes), yielding over a 12% internal rate of return for society in general.

While the authors did not calculate the IRR for other early years' development programmes, Reynolds et al do this for the CPC preschool programme, arriving at an IRR of 18% (Reynolds et al, 2011).

Rolnick and Grunewald observe that preschool investment returns are much higher than those achieved by other public investments, or by most private industry investments. Commenting on the large sums of money spent in the US on supporting, or rescuing, underperforming businesses, in investments in sports stadia and other forms of public investment, they conclude that society is under-investing in the early years – otherwise the rates of return would be brought down by natural competition to a more equivalent level for society in general.

To put this method in perspective: the UK Department of Transport estimates the rate of return on the new HS2 high-speed rail link at between £1.80 and £2.50 per £1 invested. In an analysis of 15 economic studies of programmes from birth to age 9, Reynolds and Temple (2008) found an average economic return (expressed in pounds) of £2.83 per £1 invested for interventions implemented before age 5.

Rolnick and Grunewald conclude by recommending heavy public investment in early childhood development programmes.

D) Study of the costs of failing to intervene early on the pathway to dysfunction

Cohen, Piquero and Jennings (2010) stand on its head the question of how worthwhile it is to invest in early years' programmes,

Rather than wait a couple of decades for the results of a well-designed longitudinal study and cost benefit analysis, they propose the value of investments can be determined much more rapidly by knowing the cost of the adverse outcomes such programmes are designed to prevent, then calculating the rate of success required by a programme to justify its cost. If a programme's success rate is clearly exceeding the requisite break-even point, we can judge it is a sound investment without waiting years to make the decision.

Cohen (1998) provided one of the most comprehensive attempts to calculate the costs of crime. His research estimated that the typical career criminal caused \$1.3 to \$1.5 million in external costs. The overall estimate of the 'monetary value of saving a high-risk youth' was put at between \$1.7m and \$2.3 million (per youth).

More recently Cohen and Piquero (2009) used a more comprehensive cost methodology plus new data on career offenders, and estimated the present value of saving a single high-risk youth (as of birth) at between \$2.6 and \$4.4 million.

In a follow-up paper, 'Estimating the Costs of Bad Outcomes for At Risk Youth and the Benefits of Early Childhood Interventions to Reduce Them', Cohen, Piquero, and Jennings (2010) conducted a thorough analysis of a range of adverse outcomes for society (and the individual), placing a monetary value on each.

The authors conducted a literature search through a series of electronic databases to identify potential early childhood prevention/intervention programmes with long-term results on at least one rigorous evaluation relating to the following outcomes:

- crime/delinquency;
- education;
- alcohol and drug abuse;
- smoking;
- child abuse and neglect;
- physical health problems; and
- teenage pregnancy.

They then required the study to contain, or be capable of:

- a well-constructed comparison group;
- quantifiable evidence to determine whether a programme was successful at preventing/reducing the relevant outcomes of interest;
- replication in 'real-world' settings.

Following an exhaustive search, 14 well-designed studies with long-term follow-up results met the selection criteria. The majority of these programmes started during pregnancy or at birth and followed the children (and sometimes the mothers) for a considerable time, ranging from 4 to more than 30 years. Most were home-visitation programmes, with some day-care/school-based programmes and some early parent training programmes (see original article for list). One programme was Australian (the Busselton Project), one was Canadian (the Montreal Longitudinal Experimental Study) and the remainder were American.

Next, Cohen et al examined the costs of each social ill identified as being related to an at-risk childhood and conducted an extensive literature review on both the incidence of impacts and their costs. Their article takes 20 pages to describe in detail their methodology for estimating the costs of each adverse outcome. We will not summarise their approach here other than to say it was conducted with considerable rigour.

Cohen et al estimate the following present value costs for the outcomes below:

Adverse outcome	Lifetime present value cost
career criminal	\$2.1-\$3.7 million
drug abuse	c. \$700,000
alcohol dependence	c. \$700,000
child abuse and neglect	\$250,000 to \$285,000
smoking	\$260,000
diabetes	\$187,000
asthma	\$144,000
teen pregnancy	\$120,000 to \$140,000
coronary heart disease	\$127,000

One-time criminal offenders were estimated to cost \$78,500 – thus crime has a range of costs between that lower sum, and the cost of a career criminal.

Cohen et al conclude:

‘properly designed programs and policies that focus on early childhood intervention have the potential to produce significant social benefits’

Noting that the large-scale longitudinal data which, in a perfect world, would allow early childhood intervention programmes to be evaluated on the basis of their long-term [cost] effectiveness is hard to come by, they again stand the question on its head and propose the reverse approach of asking the question ‘how effective must a program be before it pays for itself?’

So, at a stroke, Cohen and colleagues resolve a major challenge for international policy makers! Instead of having to wait a decade or more, plus the expense of a Randomised Control Trial, before being able to judge the cost-effectiveness of relatively new or under-researched programmes, a judgment can be made in a fraction of the time if the operational effectiveness of the programme can be established. Provided this is greater than the break-even performance needed to justify the programme’s costs it can be judged to be cost-effective and worthy of investment.

They give as a theoretical example a programme found to reduce obesity in young children, with the expectation that in turn this will reduce diabetes and heart disease over their lifetime. If the programme covered 1,000 children at a cost of \$1 million, one could calculate the break-even point at which the programme would pay for itself. Given an average cost of c.\$150,000 per case of heart disease or diabetes, the programme could be judged a success if it prevented seven cases (i.e. the benefits are 7 times \$150,000 or \$1.05 million). Thus if it works for 0.7% of the children in the treatment programme it can be judged to be cost-effective.

Based on the costs of early years’ programmes, and using Cohen et al’s estimates, the rate of effectiveness in preventing cases of child abuse and neglect need be no more than 2% per participant for such programmes to pay for themselves.

E) The Adverse Childhood Experiences’ studies

Another ‘avoidance of negative outcomes’ approach which is relevant to juxtapose with the work of Cohen et al is the series of studies carried out by Vincent Felitti and colleagues in the Californian Adverse Childhood Experiences’ (ACE) studies. This was (and is) a major American epidemiological study providing retrospective and prospective analysis in over 17,000 individuals of the effect of traumatic experiences, during the first eighteen years of life, on adolescent and adult medical and psychiatric disease, sexual behaviour, healthcare costs, and life expectancy.

The ACE Study was carried out by Kaiser Permanente’s Department of Preventive Medicine in collaboration with the US Center for Disease Control and Prevention (CDC). Subjects were Kaiser Health Plan patients – middle-class Americans, all with high quality health insurance. The participants were 80% white including Hispanic, 10% black, and 10% Asian; 74% had attended college; their average age was 57. Almost exactly half were men, half women.

There were 2 waves to the study, with 8 categories of ACEs studied in the first wave and two categories of neglect added (at the request of participants) in the second wave. ACEs in a general, middle-class population were unexpectedly high.

The researchers created for each individual an ACE Score, a count of the number of categories of adverse childhood experience during their first 18 years. The ACEs were captured in three groups – Abuse (emotional, physical and sexual); Household dysfunction (domestic violence, alcoholic or drug user in the home, household

member imprisoned, household member chronically depressed, suicidal, mentally ill, or in psychiatric hospital, and child not raised by both biological parents); and Neglect (physical and emotional).

ACE Score does not tally incidents within a category; the occurrence during childhood or adolescence of any one category of adverse experience is scored as only one point. The ACE Score therefore can range from 0 to 8 or 10, depending on which stage of the study.

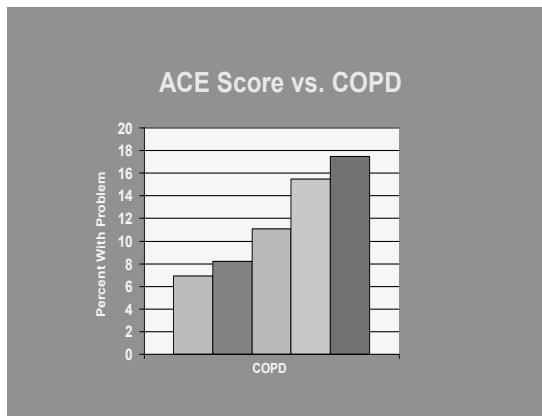
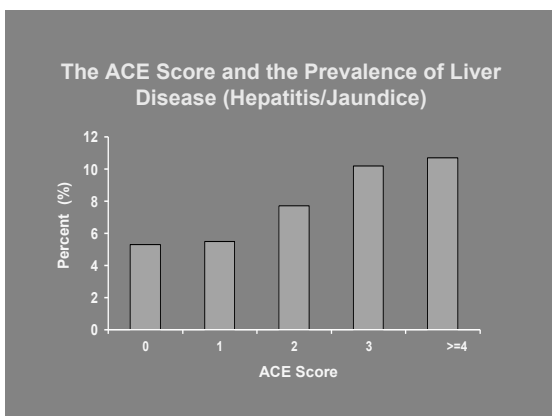
Only one third of this middle-class population had an ACE Score of 0; one in six individuals had an ACE Score of 4 or more, and one in nine had an ACE Score of 5 or more. Women were 50% more likely than men to have experienced 5 or more categories.

The ACE Study matches retrospectively an individual’s current state of health and well-being against the ACE Score, and then follows the cohort forward to match ACE Score prospectively against:

- doctor office visits,
- casualty visits,
- hospitalisation,
- pharmacy costs, and
- death.


The prospective study has been running for fourteen years. Findings include:

- A proportionate relationship between ACE Score and depression (prescription rates for antidepressant medications), fifty to sixty years after the ACEs occurred. An analysis of population-attributable risk shows that 54% of current depression and 58% of suicide attempts in women can be attributed to adverse childhood experiences.
- Strong, proportionate relationships between ACE Score and the use of various psychoactive materials or behaviours. Self-acknowledged current smoking, self-defined alcoholism and self-acknowledged injection drug use were strongly related in a proportionate manner to ACEs.
- The relationship of ACE Score to intravenous drug use was particularly striking. Male children with ACE Score of 6 or more had a 4,600% increased likelihood of later becoming an injection drug user, as contrasted with an ACE Score 0 male.
- ACE Score was also related to the decades-later use of anti-psychotic and anxiolytic medications
- Poor self-rated job performance correlates with ACE Score.
- Teen pregnancy and promiscuity (more than 50 sexual partners) were also proportionally related to ACE Score
- Miscarriage of pregnancy was related to ACE Score.
- Four examples of the links between childhood experience and adult biomedical disease were the relationship of ACE Score to liver disease, lung disease, coronary artery disease and autoimmune disease



ACEs Increase Likelihood of Heart Disease*

• Emotional abuse	1.7x
• Physical abuse	1.5x
• Sexual abuse	1.4x
• Domestic violence	1.4x
• Mental illness	1.4x
• Substance abuse	1.3x
• Household criminal	1.7x
• Emotional neglect	1.3x
• Physical neglect	1.4x



The researchers observe that while it might be thought that the relationship with lung or heart disease might simply reflect the links of ACE Score to levels of smoking, in fact the actual situation is more complex. For example, the study found a strong relationship of ACE Score to coronary disease, *after* correcting for all the conventional risk factors like smoking, cholesterol, etc. They hypothesised that this is likely to reflect the long-term effects of childhood stress, an assumption supported by recent research findings on the long-term health effects of maternal stress in pregnancy, where it has been found that this can have life-long adverse effects on children’s health and development through alterations to gene expression (epigenetics).

The ACE authors have begun a prospective analysis of adult death rates and their relationship to ACE Scores. However, there is already striking evidence. Between the ages of 19 to 34 participants in the medical exam, who had an ACE Score of 0, outnumbered those with an ACE Score of 4, by just over 3 to 1. By age 50 to 64 the participants with a Score of 0 outnumbered those with a Score of 4 by just over 7 to 1. For participants in the medical exam aged 65 and over those with an ACE Score of 0 outnumbered those with a Score of 4 by over 17 to 1. The researchers surmised that, quite simply, far more of those with a Score of 4 or more are dead. (The researchers looked for alternative explanations but the data did not support these.) The progression seems to be: ACE Score is strongly related first to health risks; then to disease; then to death.

The implications of the ACE Studies for national health policies are huge. They indicate that large cost savings can be made over time by reducing the number of children suffering Adverse Childhood Experiences.

We know from much of our other research that the most effective time to intervene in a child’s life, or in the progression of a family, to prevent ACEs, is before birth and in the first few years of life. The peak age for child abuse in the UK is 0-1 (DCSF, 2009; Welsh Government, 2012), and abuse and neglect are also significantly higher for 1-4 year olds than for older children (DCSF, 2009; Scottish Government, 2012; Welsh Government, 2012).

To take just one example of the potential benefits by preventing ACEs from pre-birth onwards, the criminal justice system and National Health Service spend huge sums dealing with drug abuse, which is reported to cost the UK over £15 billion per annum (House of Commons Public Accounts Committee, 30th Report of Session 2009-10). In the ACE studies, the one sixth of individuals with 4 or more ACEs had 11 times higher levels of intravenous drug abuse than those with an ACE Score of 0. The researchers propose that alcohol and drugs are often used as self-medication by people who have suffered adverse childhood experiences. The ACE Studies indicate that a far more effective way to reduce drug abuse in society is to reduce ACEs rather than to wait for the misuse of drugs to emerge and then address those symptoms of a deeper malaise.

However, the work of the ACE researchers also indicates the potential for much shorter-term savings. At Kaiser Permanente’s high-volume Department of Preventive Medicine they have used what they learned to expand radically the nature of their Review of Systems and Past History questionnaire.

Examiners were trained to ask questions relating to prior ACEs in medical exams and an impact was found: compared to the year before, a 35% reduction in visits to doctors’ surgeries was found in the year following the evaluation, visits to Accident and Emergency departments showed an 11% reduction and hospitalisations dropped by 3%. The researchers believe patients respond positively when doctors recognise the true underlying causes rather than simply alleviating symptoms and, crucially, still ‘accept’ the patient.

F) Econometric analysis of where spending should be focused

Another approach to determining the value of investment in the early years is based on econometrics. The main proponent of this approach is the Nobel Laureate Professor James Heckman. Essentially, his analysis states that structures (including knowledge and skills) are based on foundations and the stronger the foundations the more solid the structure.

In financial terms, he argues that investment early in getting the foundations of knowledge and social skills right in a young child creates compound benefits. A child who is confident, emotionally stable and interested in learning learns (much) faster and more effectively than a child who is fearful or depressed, or who cannot control his emotions. It follows that when you spend money on children in later interventions (and Heckman says we must) then the rate of return on such later interventions is much higher for those children on whom you first spent early (but much lower from those you allowed to slip through that part of the net). He produces tables, figures and calculations which show how this would work, and validates this with evidence showing much higher returns for early years' than for later intervention programmes.

In 'The Case for Investing in Disadvantaged Young Children' (Heckman 2008) he states his argument in 15 points:

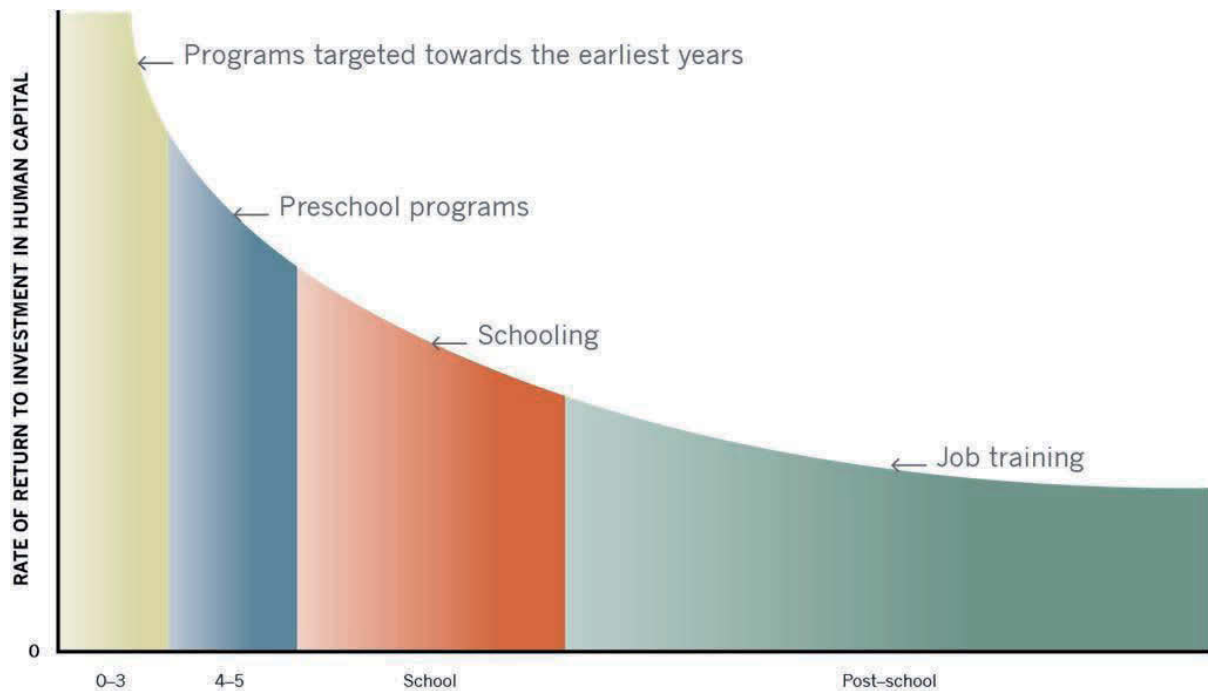
1. Many major economic and social problems such as crime, teenage pregnancy, dropping out of high school and adverse health conditions are linked to low levels of skill and ability in society.
2. In analyzing policies that foster skills and abilities, society should recognize the multiplicity of human abilities.
3. Currently, public policy in the U.S. and many other countries focuses on promoting and measuring cognitive ability through IQ and achievement tests. A focus on achievement test scores ignores important non-cognitive factors that promote success in school and life.
4. Cognitive abilities are important determinants of socioeconomic success.
5. So are socio-emotional skills, physical and mental health, perseverance, attention, motivation, and self-confidence. They contribute to performance in society at large and even help determine scores on the very tests that are commonly used to measure cognitive achievement.
6. Ability gaps between the advantaged and disadvantaged open up early in the lives of children.
7. Family environments of young children are major predictors of cognitive and socio-emotional abilities, as well as a variety of outcomes, such as crime and health.
8. Family environments in the U.S. and many other countries around the world have deteriorated over the past 40 years. A greater proportion of children is being born into disadvantaged families including minorities and immigrant groups. Disadvantage should be measured by the quality of parenting and not necessarily by the resources available to families.
9. Experimental evidence on the positive effects of early interventions on children in disadvantaged families is consistent with a large body of non-experimental evidence showing that the absence of supportive family environments harms child outcomes.
10. If society intervenes early enough, it can improve cognitive and socio-emotional abilities and the health of disadvantaged children.
11. Early interventions promote schooling, reduce crime, foster workforce productivity and reduce teenage pregnancy.
12. These interventions are estimated to have high benefit-cost ratios and rates of return.
13. As programs are currently configured, interventions early in the life cycle of disadvantaged children have much higher economic returns than such later interventions as reduced pupil-teacher ratios, public job training, convict rehabilitation programs, adult literacy programs, tuition subsidies, or expenditure on police. The returns are much higher than those found in most active labour market programs in Europe (See Heckman, LaLonde and Smith, 1999; and Martin and Grubb, 2001).
14. Life cycle skill formation is dynamic in nature. Skill begets skill; motivation begets motivation. Motivation cross-fosters skill and skill cross-fosters motivation. If a child is not motivated to learn and engage early on in life, it is more likely that in adulthood, he or she will fail in social and economic life. The longer society waits to intervene in the life cycle of a disadvantaged child, the more costly disadvantage is to remediate.
15. A major refocus of policy is required to capitalize on knowledge about the importance of the early years in creating [or reducing] inequality and in producing skills for the workforce.

Heckman points to the evidence that enriching the early environments of children in low income families produces significant financial returns, citing in particular the Perry Preschool and Abecedarian Programs because they use random assignment designs and collect long-term follow up data. Their findings are confirmed by data

from the Nurse Family Partnership (Karoly et al, 1998; Olds, 2002) and the Chicago Child-Parent Center's programmes (see above).

Commenting on the high reported rates of returns of Perry and other early years' programmes Heckman observes that these rates of return are likely to be understated because they ignore the economic returns from such investments in improving health and mental health. As mentioned earlier, this omission is a recurring source of underestimate of benefits in evaluations of early years' programmes, yet the ACE Studies referred to above (e.g. Felitti and Anda, 2010) show the very significant impact of early adverse experiences on a range of health outcomes including heart, liver and lung disease, diabetes, obesity, alcoholism, drug abuse, depression and attempted suicide, most of which are not included in the calculations of benefits referred to above.

Heckman contrasts the 14% return of the Perry Program with the (then) standard 7.2% stock market equity return. He also compares it favourably with published evaluations of the returns from public job training programmes, adult literacy services, prisoner rehabilitation programmes and education programmes for disadvantaged adults. Heckman is famous for his graph of estimated returns from investment in children at different ages.



Source: Heckman (2008)

Heckman's conclusion, like that of Rolnick and Grunewald, is that from a purely financial perspective, society is under-investing in early years.

Heckman also points out a particular characteristic of early years' investment, not found with investments in later years. It is very common in public investments to find a trade-off between equity (giving benefit to those who need it most) and efficiency (creating benefit where returns are highest). Heckman argues (Cunha and Heckman, 2007b; Heckman and Masterov, 2007) that because early years' interventions both promote economic efficiency and reduce lifetime inequality, they provide policy makers with a rare ability to spend money in a way which delivers both social and economic benefits at the same time.

G) Approach to early years' investment based on neurobiology

Drawing on the full breadth of intellectual resources available across Harvard University's graduate schools and affiliated hospitals, the Harvard Center on the Developing Child generates, translates, and applies, knowledge in the service of improving life outcomes for children in the United States and throughout the world.

The Center's goal is to promote healthy child development, economic prosperity, strong communities, and a just society, and their mission is to advance that vision by the use of science to inform policy making.

The Science of Early Childhood Development is one of a series of reviews by the Center. Focusing on the challenge of 'Closing the Gap Between What We Know and What We Do', this report states as one of its major conclusions that creating the right conditions for early childhood development is likely to be more effective and less costly than addressing problems at a later age.

The report explains that as the maturing brain becomes more specialised to assume more complex functions, it is less capable of reorganising and adapting to new or unexpected challenges. Once a circuit is 'wired', it stabilises with age, making it increasingly difficult to alter.

Plasticity is maximal in early childhood and decreases with age. Although 'windows of opportunity' for skill development and behavioural adaptation remain open for many years, trying to change behaviour or build new skills on a foundation of brain circuits that were not wired properly when they were first formed requires more work and is more 'expensive'. For the brain, this means that greater amounts of physiological energy are needed to compensate for circuits that do not perform in an expected fashion. For society, this means that remedial education, clinical treatment, and other professional interventions are more costly than the provision of nurturing, protective relationships and appropriate learning experiences earlier in life. Stated simply, the report says getting things right first time is more efficient and ultimately more effective than trying to fix them later.

The report draws the following conclusions from the study of the science:

Implications for Policy and Practice

- These findings direct our attention to the importance of informal family support and formal preventive services (when needed) for vulnerable children before they exhibit significant problems in behaviour or development. When policy makers ensure that all young children who are at high risk for poor outcomes are enrolled in high quality programs whose effectiveness has been documented, the returns are far greater than those achieved when only a subgroup of eligible children are served.
- The basic principles of neuroscience and the process of human skill formation indicate that early intervention for the most vulnerable children will generate the greatest payback. Although the large number of children and families who could benefit from additional assistance will require significant increases in funding, extensive research indicates that investment in high quality interventions will generate substantial future returns through increased taxes paid by more productive adults and significant reductions in public expenditures for special education, welfare assistance, and incarceration.
- Research indicates that policy makers can achieve greater return on investments in early childhood education for children from families with low incomes and limited parent education than from remedial programs for adults with limited workforce skills. In fact, long-term studies show that model programs for three- and four-year-olds living in poverty can produce benefit-cost ratios as high as 17:1 and annualised internal rates of return of 18% over 35 years, with most of the benefits from these investments accruing to the general public. While it is not realistic to assume that all scaled-up early childhood programs will provide such handsome returns, it is likely that benefit-cost ratios still will be considerably greater than 1:1.
- The essence of quality in early childhood services is embodied in the expertise, skills, and relationship-building capacities of their staff. The striking imbalance between the supply and demand for well-trained personnel in the field today indicates that substantial investments in training, recruiting, compensating, and retaining a high quality workforce must be a top priority for society. Responsible investments in services for young children and their families focus on benefits relative to cost. Inexpensive services that do not meet quality standards are a waste of money. Stated simply, sound policies seek maximum value rather than minimal cost.

H) Whole country approach to early years' prevention

Sweden

In UNICEF's 2007 *Report Card 7: An overview of child well-being in rich countries*, (UNICEF 2007), averaging rankings on 6 measures of child well-being shows the two countries leading the international league table of child well-being are the Netherlands and Sweden. Both countries have made a commitment to a preventive approach to child welfare.

The countries of Scandinavia have consistently led international comparisons in terms of welfare (Wilkinson and Pickett 2009). Recognising the value of prevention and early intervention programmes, in the last 20-30 years these countries have increased this type of investment (Killén 2000; Socialstyrelsen 1997).

A 2008 study by Heiervang, Goodman et al, investigating children's externalising and internalising problems in both Norway and Britain, discovered that Norwegian children scored lower on all problem scales (emotional, behavioural, hyperactive and peer relationship) on the Strengths and Difficulties Questionnaire, according to parents as well as teachers. The prevalence of externalising disorders (behavioural and hyperactivity) in Norway was about half that observed in Britain.

A comparison of societal child welfare between the UK and Scandinavia shows marked differences in a range of factors. Maternity healthcare services in Sweden are accessed by the vast majority of pregnant women (99 per cent), who typically have 11 individual contacts, mostly with midwives. Ninety-eight per cent of all maternity healthcare clinics offer parenting education in groups to first-time parents, with 60 per cent allowing repeat parents to participate. Additional support in the form of specialised groups is provided to those mothers with particular needs, for example young mothers, single mothers and those expecting twins.

Ninety-nine per cent of all families make use of the child healthcare services in Sweden. They have an average of 20 individual contacts, primarily with nurses. Parents are invited to join parent groups when the child has reached the age of one to two months. In Stockholm County for example, 61 per cent of all first-time parents participated in at least five sessions in 2002 (Bremberg 2006). Parent education accounts for around 8-10 per cent of midwives working time; 65 per cent of midwives received regular professional training on the subject, and 72 per cent were instructed by a psychologist (Socialstyrelsen 1997).

At 2.5 per cent, the infant mortality rate in Sweden was the lowest in the EU in 2005 and half that in the UK. Sweden also performs well on a number of health indicators from later life; the country has the third lowest mortality rate in the EU from cancer and circulatory diseases, amongst the lowest rates for deaths due to chronic liver disease and smoking related causes, and has the highest life expectancy in the EU for men (and the third highest for women). In addition Sweden has the third-lowest rate of teenage pregnancies in the European Union at 1.6 per cent, compared to 7.1 per cent in the UK (only several Eastern European countries have a greater number than Britain). Given the poor relative life prospects for children of teenage mothers, this also contributes to better long-term outcomes in Sweden.

	SWEDEN (2005)	UK (2005)
% Of Live Births To Mothers Under 20 Yrs	1.6	7.1
Infant Mortality (rate per 1,000 live births)	2.5	5.1
Smoking (% daily smokers aged 15 and over)	15.9	25.0
Alcohol (annual pure alcohol litres per person)	6.9	11.4
Adult Obesity (% of population)	10.7	23.0
Smoking Related Deaths (age standardised per 100,000 pop'n)	195.5	244.9
Chronic Liver Disease Deaths, Under 65 Yrs (per 100,000 pop'n)	4.0	9.5
Cancer Deaths, Under 65 Yrs (age standardised per 100,000 pop'n)	56.0	67.5
Circulatory Disease Deaths, Under 65 (age standardised per 100,000 pop'n)	31.9	43.3

These figures strongly imply a well-resourced and professional healthcare service in Sweden, with a strong focus on prevention, and starting at the very beginning of life with emphasis on breast-feeding (55-60% of Swedish mothers are exclusively breastfeeding at 4 months, 7% in the UK). In addition long periods of maternity and parental leave support attention to the needs of the child in its earlier months. 100% of hospitals have BFHI (baby-friendly) status (less than 10% in the UK) and early parent training is provided for a high proportion of the population. From that strong beginning it is able to improve its user's quality of life through helping them to avoid many preventable illnesses, and enabling the country to save money on both the healthcare and non-healthcare costs of those illnesses.

The difference between the UK and Sweden is hard to explain by reference to different levels of spending on health. The countries spend almost identical proportions of their GDP on health, and while Sweden's GDP is higher the slightly greater spend per head of population is far short of that needed to produce such differences in

health outcomes. Sweden also spends much less on health, both as a percentage of GDP and per head than the United States, but with much better health outcomes, infant mortality and life expectancy. We suggest Sweden’s success reflects how it spends its health money rather than how much it spends.

I) The approach of an American public policy advisory group

Washington State Institute for Public Policy (WSIPP)

The Washington State Institute for Public Policy (WSIPP) was created by the 1983 Washington Legislature to carry out non-partisan research assignments. The 2009 Legislature directed the Institute to ‘calculate the return on investment to taxpayers from evidence-based prevention and intervention programs and policies.’ The Legislature instructed the Institute to produce ‘a comprehensive list of programs and policies that improve outcomes for children and adults in Washington and result in more cost-efficient use of public resources.’

For nearly 30 years WSIPP has been evaluating the payoffs from specific programmes and identifying those which produce the highest return. WSIPP uses a four step research approach:

1. Systematically assess evidence on ‘what works’ (and what does not) to improve outcomes.
2. Calculate costs and benefits for Washington State and produce a Consumer Reports-like ranking of public policy options.
3. Measure the riskiness of their conclusions by testing how bottom lines vary when estimates and assumptions change.
4. Where feasible, provide a ‘portfolio’ analysis of how a combination of policy options could affect state-wide outcomes of interest.

Their analyses produce two key bottom-line statistics: an expected value of overall benefits minus costs, and an estimate of the risk that a given strategy could produce negative net benefits. Since WSIPP was first set up they have conducted thousands of evaluations and identified many hundreds of programmes which produce positive outcomes. Their work has been extremely influential in driving Washington State towards a more evidence-based and rational set of investments, particularly for youth programmes, which has been their main area of focus.

In their evaluations of Child Welfare programmes WSIPP estimates the following returns (WSIPP, July 2011):

Topic Area/Program	Monetary Benefits	Cost	Benefit to Cost ratio	Return on Investment
Nurse Family Partnership for Low-Income Families	30,325	9,421	3.23	7%
Incredible Years: Parent Training and Child Training	15,571	2,085	7.5	12%
Other Home Visiting Programs for At risk Families	14,896	5,453	2.73	5%
Healthy Families America	13,790	4,508	3.07	7%
Parent-Child Interaction Therapy: Disruptive Behavior	9,584	1,302	7.37	31%
Parent-Child Interaction Therapy: Child Welfare	9,498	1,516	6.27	15%
Intensive Family Preservation (Homebuilders®)	10,995	3,224	3.41	4%
Incredible Years: Parent Training	8,488	2,022	4.2	12%
Triple P5: Level 4	7,237	1,790	4.06	19%
Triple P: Level 4	3,740	365	10.32	n/e
Parents as Teachers	7,236	4,138	1.75	5%
Triple P: (Universal)	1,277	139	9.22	8%

They estimate, on average, that 30% of benefits go to the taxpayer and 70% to the family.

The WSIPP evaluation approach is conservative, and likely to under-estimate the benefits of many early years’ programmes. In setting up a rigorous evaluation system there is always a tension between a system which creates false negatives and one which creates false positives. The WSIPP system is strongly designed to avoid false positives. They do not include some significant areas of benefit in their calculations, and arguably under-

value others. Their policy of significantly reducing the reported benefits of many of the studies they utilise is prudent (avoiding potential optimistic bias due to studies carried out by the programme developer, or due to a weak evaluation design, for example). However they have no mechanism to increase reported benefits when a study evaluation omits known benefits. They are aware of the under-evaluation of economic benefits due to excluding ACE-type health savings, or ignoring the monetary value of breaking cycles of family violence or drug use, but prefer an approach with minimal risk of recommending a programme which might fail to deliver the projected benefits.

This rigorously ‘safe’ approach allows WSIPP to make recommendations with a high degree of confidence. Their top eight juvenile justice programmes, for example, have an average probability of delivering positive economic benefits of over 90%. Similarly, in adult criminal justice, they have identified 10 programmes with 100% probability of delivering economic benefits, and a further three with a 99% probability. The lack of risk in their policy recommendations makes them very popular with state legislators, and their many crime-focused efforts have paid off. Relative to national rates, juvenile crime has dropped in Washington State, adult criminal recidivism has declined, total crime is down, and taxpayer criminal justice costs are lower than alternative strategies would have required (Aos et al, 2011).

An inevitable feature of the ultra-safe WSIPP approach is that their age focus leans heavily towards later years, when the gap between intervention and financial benefit is shortest. A 2011 analysis of the age spread of a range of evaluations carried out by WSIPP between 1990 and 2011 found a ratio of more than 30 to 1 in number of evaluations of programmes related to school children or youths, compared with those related to infancy. This presumably reflects the focus of their political commissioners on the age groups which cause them most problems.

The innate caution in the WSIPP assumptions can be seen from the following (provisional) comparison of the benefits of preventing a case of child abuse, using three sources: WSIPP, Cohen, Piquero and Jennings; and an Australian estimate conducted at Monash University in Melbourne by Taylor, Moore et al (2008).

Lifetime costs of abuse (i.e. value of preventing one case of abuse) in US \$

Cost category	WSIPP	Cohen et al	Taylor, Moore et al
Child Health treatment	1,901	21,622	3,468
Additional educational assistance	<i>Not included</i>	<i>Not included</i>	3,397
Productivity losses of survivors	4,887**	<i>Not included</i>	1,690
Productivity losses due to premature death	<i>Not included</i>	<i>Not included</i>	905
Crime	169**	70,000	4,381
Government expenditure on care and protection	5,719	<i>Not included</i>	23,809
Costs of alcohol and drug abuse	13**	<i>Not included</i>	<i>Not included</i>
transaction costs of other costs	<i>Not included</i>	<i>Not included</i>	9,706
Sub-total: Costs to society exc. illness	12,689**	<i>Not included</i>	47,355
Depression, anxiety, suicide	<i>Not included</i>	<i>Not included</i>	60,767
Other long-term health costs	<i>Not included</i>	<i>Not included</i>	<i>Not included</i>
Sub-total: Costs to society	12,689**	91,622	108,123
Cost in terms of suffering of victim	22,948	178,378	<i>Not included</i>
Total Costs	35,637**	260,000	108,123

This table is highly provisional, as communication with the authors will be required to bring the cost estimates to a consistent basis. We could not find data for the items marked ** in the WSIPP column, but have estimated these from a WSIPP evaluation of the benefits of the Nurse Family Partnership. The figures may be overstated. None of the three approaches includes the long-term health costs for liver, lung, heart disease etc due to ACEs such as child abuse.

Karoly (2010), in a report calling for more standardised approaches to cost-benefit analyses, identifies the following benefits found by WSIPP in studies of Nurse Family Partnership (NFP) and Infant Health and Development Program (IHDP), but not valued by them:

NFP: Emergency room use; Earnings (and taxes); Welfare use (mother); Total births & birth-spacing (mother); Substance abuse (mother).

IHDP: Achievement tests, IQ scores, Mother-child interactions, Home environment.

Conclusion

As stated in the opening of this report, there is a great deal of massively compelling evidence in favour of the cost-effectiveness of primary preventive intervention at the earliest possible time in the life cycle. Whether programmes address maternal nutrition during pregnancy, promoting breastfeeding, understanding the cues of tiny babies or ensuring pre-schoolers develop social and emotional competence as well as the basic cognitive skills needed to learn, the strong message is that young life rewards early support. Such support must often be delivered via the prime caregiver(s) – typically the mother. If we want an affordable society that works well, we need to invest in the best possible, evidence-based early years’ programmes to address this issue.

Table S.1
Early Childhood Intervention Programs Included in Karoly, Kilburn and Cannon (2005) Study
Home Visiting or Parent Education
Nurse-Family Partnership (NFP)
Developmentally Supportive Care: Newborn Individualized Developmental Care and Assessment Program (DSC/NIDCAP)*
Parents as Teachers*
Project CARE (Carolina Approach to Responsive Education)—no early childhood education
HIPPY (Home Instruction Program for Preschool Youngsters) USA
Reach Out and Read*
DARE to be You
Incredible Years
Home Visiting or Parent Education Combined with Early Childhood Education
Early Head Start*
Syracuse Family Development Research Program (FDRP)
Comprehensive Child Development Program (CCDP)
Infant Health and Development Program (IHDP)
Project CARE (Carolina Approach to Responsive Education)—with early childhood education
Carolina Abecedarian Project
Houston Parent-Child Development Center (PCDC)
Early Training Project (ETP)
High/Scope Perry Preschool Project
Chicago Child-Parent Centers (CPC)
Head Start
Early Childhood Education Only
Oklahoma Pre-K
NOTES: Programs marked with an asterisk are designated as having a <i>promising</i> evidence base because a substantial number of children were as young as age 2 or 3 at the time of the last follow-up. All other programs are designated as having a <i>strong</i> evidence base.

SECTION 2 – UK studies

The economics of UK-based early years' interventions

Having reviewed the international evidence-base for the economics of early years' intervention, this section is devoted specifically to UK-based evaluations. We examine these across a range of assessments:

While there is a significant amount of American research evidence for the cost-effectiveness of well-designed early years' interventions, there is much less data from the UK, where there has been a historical reluctance to fund early years' research because of its assumed long-term nature. This is one factor making such research (and especially Randomised Control Trials) relatively more expensive than studies for older age groups. As a result, few evaluations have been carried out in relation to UK-based early years' prevention and intervention programmes. Those which have been conducted have often been on low budgets and with a limited scope. Often such evaluations have been methodologically flawed.

Within these limitations there have been varied approaches to evaluating early years' interventions, including cost-benefit analyses (with or without randomised control trials), case studies and social return on investment studies. There have also been predictive studies, at both macro and micro level, which have compared the costs of comprehensive systems of intervention with projected savings from avoidance of the costs of dysfunction. Qualitative, quantitative and mixed method research studies all have useful information and insights about the success (and comparative value) of interventions during the early years.

The 'cost of inaction' approach

There have been UK-focused analyses that point to the very high costs of dysfunction (in individual/social terms) and the very low cost, by contrast, of interventions to prevent those high costs. These studies appeal to the common sense and judgement that early years' investment makes good sense in both economic and human terms. This 'ounce of prevention is better than a pound of cure' approach has been adopted by such countries as Sweden and the Netherlands, which top the UNICEF child wellbeing tables.

In the UK, such organisations as Action for Children, C4EO, the Centre for Social Justice and WAVE Trust, and such Government-commissioned reports as the Allen and Field Reviews, have produced persuasive analyses for the case that early years' investment makes good sense and would save substantial sums of public money.

Scotland: Christie Commission and the Scottish Parliament Finance Committee

In Scotland, the Christie Commission (Christie, 2011) has estimated that 40% of public spending is created by the failure to intervene early enough to prevent dysfunction.

The Scottish Parliament asked its Finance Committee to conduct a study of the merits of preventive spending, with a particular focus on the early years. After nine months of taking evidence, the Committee's work was summarised by former Health and Finance Minister Tom McCabe, who said:

'I will not spend time on the statistics that we heard about during the inquiry, because there are enough experts and committed individuals in the chamber who already know the basis of the evidence. They know that there is empirical evidence stacked from the floor to the sky that backs up our taking a different approach to preventative spending and investment in the early years.'

The Scottish Government, with cross-party support from the Scottish Parliament, has pressed ahead with an agenda to promote early years' preventive spending. In support of this it has declared that there has been a 'decisive shift' to preventive spending and 'a step change in the way in which we fund and deliver public services. To support this approach the Scottish Government introduced a new Early Years and Early Intervention Change Fund and, in partnership with Local Government, the NHS, the Police and the Third Sector, set up an Early Years Taskforce (and, most recently, the nationwide Early Years Collaborative) to 'take forward a significant change programme to help deliver the joint commitment to prioritising the early years of children's lives and to early intervention' (Scottish Government, 2012). Its objectives include to:

- Put Scotland squarely on course to shifting the balance of public services towards early intervention and prevention by 2016.
- Sustain this change to 2018 and beyond.

Study by GLA Economics for the Greater London Authority

This study provided evidence for, and analysis of, the case for investment in early years' interventions to address health costs and inequalities in London. The study highlighted the high costs (£13,000-£65,000 annually per child) of mental illness, emotional and behavioural disturbances, or antisocial behaviour, and cited the joint

LSE/Institute of Psychiatry study which estimated £70,000 per head direct costs to the public of children with severe conduct disorders versus £600 per child cost for parent training programmes. The report concludes:

'The evidence shows that well designed and implemented early years programmes can have significant benefits in terms of life-long health, educational attainment, social, emotional and economic wellbeing and reduced involvement in crime that far outweigh their costs... Programmes implemented in the critical pre-natal, post-natal and pre-school periods can have very high returns.'

The GLA Economics report recommends a series of pre-natal, post-natal and pre-school programmes from conception through to age 5, noting that the earliest years of a child's life provide the opportunity for the greatest benefits, with cumulative effects throughout the child's life. (Greater London Economics, 2011)

Evaluation of the Parenting Early Intervention Programme

Behaviour problems during early and middle childhood are associated with antisocial behaviour during adolescence and increased risk of negative outcomes in adulthood. The consequences of these can be very expensive for society and, on the assumption that successful parenting is a key element in preventing children developing behavioural difficulties, the Parenting Early Intervention Programme (PEIP, 2008-11) was set up to provide government funding to all 150 local authorities in England to deliver selected parenting programmes with proven efficacy in improving parent outcomes and associated reductions in children's behavioural difficulties. (Lindsay et al, 2011)

An evaluation report examined the effectiveness in everyday use in community settings across England of five parenting programmes initially selected by the government for use in the PEIP: Families and Schools Together (FAST); Positive Parenting Program (Triple P); Strengthening Families Programme 10-14 (SFP 10-14); Strengthening Families, Strengthening Communities (SFSC); and The Incredible Years.

All five programmes had an evidence base for improving parent and child outcomes when tested in small scale, controlled trials. The evaluation examined whether these outcomes could be maintained and replicated when the programmes were rolled out nationally and implemented in all local authorities in England.

The evaluation found that: Triple P, Incredible Years, SPF 10-14 and SFSC were effective in improving outcomes for parents and children; these outcomes were maintained one year on from the end of the programme; and the beneficial effects on parents' mental well-being and style of parenting, as well as children's behaviour, are all key protective factors for achieving positive long-term child outcomes.

Crucially, PEIP achieved comparable improvements in child behaviour (as reported by parents) to those achieved in the previous small scale studies. Costs were not large. For instance, reducing conduct problems and the total level of 'difficulties' measured using the Strengths and Difficulties Questionnaire required an average cost between £3,300 and £4,300. Parental gains were even more economical. For each measurable unit of improved parental mental well-being, reduced parenting laxness, and reduced parenting over-reactivity, the cost was between £2,000 and £2,600.

Over the PEIP as a whole, the cost of a parent training intervention, including infrastructure, was £1,658 per parent, with one local authority sustaining a three-year average cost of only £534.

Thames Valley Partnership

Thames Valley Partnership carried out an evaluation (Ball, 2001) of eight early intervention programmes targeted at children in areas of multiple disadvantage and high levels of crime. Some of the programmes worked with pre-school children and families, some with children in the first years at primary school. The researchers found all the programmes, at low cost, had some beneficial effect on children, their parents and their schools, or on all three together. The younger the child, the more pronounced the effects on behaviour. While the study did not include a formal cost-benefit analysis, the authors stated:

'These interventions have had an effect on parenting and the behaviour of the children involved, and they are not expensive.'

Case study approach

Both North-East London Foundation Trust (NELFT) and the University of Salford have carried out case study analyses of early years' interventions in practice.

NELFT

In the NELFT cases, the main costs were for the time of a Consultant Perinatal Psychotherapist.

In their Case 1, a suicidally depressed 17-year-old mother was living in an environment of domestic violence with a 6-week-old baby who was becoming hypervigilant, depressed, thwarted and dissociated. The treatment cost £8,208.

Following perinatal mental health intervention, the child is now 8 years old and thriving; the mother is with a new and stable partner, has had 3 more baby boys and experienced no difficulties with them. There is no domestic abuse. The intergenerational transmission of trauma has been broken. The estimated costs to health and social services alone, if treatment had not taken place, would have far exceeded the cost of the intervention, without even taking account of predictable extra expenditures on the children's schooling, criminal justice and physical health costs in the long term, or inter-generational effects.

NELFT Case 2 was of a 23-year-old mother, referred when 6 months pregnant suffering from escalating aggression and anti-social tendencies with a diagnosis of Borderline Personality Disorder. She had lost custody of two previous children. Treatment cost £5,265.

In Case 2, the baby is now securely attached to both mother and father and the mother is now studying 3 'A' levels with a plan to seek employment.

In both examples the absence of intervention was reliably projected to have resulted in highly expensive consequences in terms of the costs of lasting damage to parent and child and the costs to health services of dealing with these.

University of Salford

The University of Salford (UoS) carried out two case study analyses (Livesley et al, 2008) of an intervention to provide a budget-holding leading practitioner to families with very young children or babies. The project promoted more effective early intervention through earlier identification of, and response to, unmet needs.

In UoS Case 1 there were children aged 6 years, 5 years, 2 years and 6 months. Previous family history had included sexual abuse of two of the girls by the mother's previous partner. Neither mother nor current partner was working, and they were in debt. The property was sparsely furnished, uncarpeted and partially fire-damaged. Concerns were raised by the family health visitor about the home environment and the social and emotional development of the children. Intervention in this case cost £6,768.

In UoS Case 2 there were 4 children aged 4 and 3 years and twins of 18 months. The mother was pregnant. Their house was cramped, in poor condition, unsafe and too small. The father was unemployed and could be volatile following the effects of a traumatic motoring accident. The children and the mother were all showing signs of stress and the twins and 3-year-old were displaying developmental delay and behaviour problems. Intervention in this case cost £16,868.

In the UoS Cases, costs were a mixture of (mainly) providing professional support through midwives, health visitors, lead practitioners and others, and (at a lower level) such practical help as provision of beds and carpets, or payment for Montessori sessions for some of the children.

Professionals engaged with the families projected the likely cost consequences if the support had not been provided. The benefits (i.e. future costs avoided) exceed the intervention costs in Case 1 if there is a 9% or higher probability of realising the professionals' projections; in Case 2 benefits exceed the costs if there is a 16% or higher probability of realising the projections. The judgement of the practitioners is that the costs avoided significantly exceed the costs of the interventions.

Social return on investment (SROI) approach

SROI is a form of adjusted cost-benefit analysis that puts a value on some less tangible outcomes, such as improved family relationships. It considers the benefits that accrue from services to a range of stakeholders, children, families and communities.

C4EO analyses of Social Return On Investment (SROI)

Early years' intervention to increase breastfeeding

Blackpool Children and Young People's Department developed Children's Centres that welcomed breastfeeding, ensured staff directed queries about breastfeeding to both professional and voluntary sources, and set up support groups. The Primary Care Trust (PCT) provided training to staff and the Children's Centres promoted the 'Be a Star' campaign aimed at increasing the perceived value of breastfeeding to young women. The PCT and Children's Centres worked in partnership to reach out to mothers in disadvantaged areas who were predictably less likely to breastfeed.

Breastfeeding support groups were developed, breastfeeding training was made available to frontline staff and the first satellite breast milk bank centre in the UK was set up, as was a signposting service to breastfeeding mothers and their partners.

Breastfeeding initiation rates rose from 42% to 56% over a 2-year period, an increase sustained over the following two years. 903 vulnerable young mothers received targeted support at a cost of £29,811, or £33 per mother. The SROI reported by C4EO was £1.56 for every £1 invested, and the estimated savings to local health services were £57,500, e.g. from reduced GP and A&E visits, over a two-year period (C4EO, 2010).

I CAN Early Talk, Kent

Concern about the number of children with severe speech, language and communication needs requiring a specialist unit place in a primary school led to a joint partnership agreement with I CAN to develop Kent's first specialist Early Talk centre. The aim was to offer a targeted, multi-agency approach to supporting young children with severe speech, language and communication needs, so that they could participate in everyday activities and attend their local primary school – empowering parents as co-educators in a programme that could be delivered in a nursery, children's centre or home.

The Ashford Better Communicators Service established a virtual team including a Speech and Language Therapist (SLT), a Learning Support Assistant, a children's centre teacher, an Early Years Special Educational Needs Coordinator and staff from a nursery based in a children's centre. A referral pathway was established and targets set in partnership with the parents. Parents received regular support from both the virtual team and a dedicated parents' support group.

Four years after the programme was designed 92% of the children supported attended their local primary school and made good progress, rather than requiring specialist language provision; 70-80% had increased their understanding and use of language to an extent greater than was predicted without this intervention. The success of the programme led to its roll-out to other areas of Kent.

The programme was delivered to 37 children at a project cost of £46,300, with an SROI of £1.37 for every £1 invested. This translates into estimated savings of £17,131 over the anticipated extra costs for these children in the absence of this intervention.

New Economics Foundation (nef) / Action for Children

As part of the Backing the Future study for Action for Children, the New Economics Foundation (nef) conducted Social Return on Investment (SROI) analyses on three Action for Children projects (Nef, 2009). Two of these interventions, one in Doncaster and one in East Dunbartonshire, impacted the early years:

Wheatley Children's Centre, Doncaster

Wheatley Children's Centre (WCC) in Doncaster has aims geared towards achieving the goals of 'Every Child Matters' by promoting the following outcomes:

1. Be healthy
2. Stay safe
3. Enjoy and achieve
4. Make a positive contribution
5. Achieve economic well-being

WCC has developed theories of change for all their activities to explain how their children's activities achieve the above outcomes, and the Centre provides a mixture of universal and targeted services to children aged 0-5.

Nef calculated an SROI ratio for WCC of 4.6:1, i.e. an estimated £4.60 worth of social value was generated for every £1 spent on the programme. Nef carried out a number of sensitivity analyses on the results. These suggested the conclusions were robust; for example, for the most significant outcomes (by value) of education, mental health and family relationships, a halving of the unit proxy values resulted in a reduction in the SROI to no lower than 3.7.

The Doncaster analysis provides interesting data for those reflecting on the relative merits of universal services vs. those targeted at high-need children alone. High Need children at WCC represented only 8% of the number of children being supported and gained 27% of the benefit from the service while 73% of the financial benefit came from the 92% of children categorised as Low Need. Despite the projected benefits lasting for a shorter period of time for the latter group, the group size (over 800) offset the shorter benefits period.

East Dunbartonshire Children's Centre

This service provided short-term, focused and flexible support for children, young people and families in crisis. Its goals were to reduce the number of children being looked after and accommodated; assess more accurately children's needs; support parents better to meet their children's needs; and help children and young people address issues that may be affecting their lives and well-being.

Project staff worked intensively with families for a period of 8 to 12 weeks. Referrals were made by social workers with the permission of families.

The SROI calculated by nef was £9.20 return for every £1 invested. The most significant value (34%) was obtained by the state, which recouped its investment by the end of one year. This was primarily through the reduction in need for foster care and its associated costs. Children and families also derived significant benefits. Parents benefited from the changes in behaviour and social skills of their children, and from their own improvements in confidence, self-esteem and anger management, as well as broader parenting skills and knowledge. Children benefited from the improved parenting skills of their parents, and better behaviour of their siblings. Most of the value was delivered within the first three years, but there is significant value to both children and the state in the longer term.

Barnardo's – 4 early years' services

A set of SROI evaluations on early years' services provided by Barnardo's was carried out by the international consultancy firm, ICF GHK (Mason et al, 2012).

Stay and Play, Bournemouth

Stay and Play groups are delivered weekly, for families with children under the age of 2, with weekend groups on a bimonthly basis and some groups targeted at families with such particular needs as English as an Additional Language. Stay and Play sessions offer parents opportunities to: build networks of support with their peers; receive parenting and childcare advice and guidance; and receive signposting to other services.

Benefits identified included improved confidence of parents; improved knowledge of parenting strategies; improved English language skills for children with English as an Additional Language; improved diet; increased access to physical activities; parents' promoting children's play and learning; improved progress in children's learning and development; reduced social isolation; reduced obesity; and improved parenting. ICF GHK calculated an SROI of £2 for every £1 invested.

Family Support Workers, Warwickshire

Family Support Workers (FSWs) at Evergreen Children's Centre in Warwickshire provide families with children under 5 who have additional needs with intensive one-to-one support.

Referrals to the service are made by health, education, voluntary and community sector organisations, and statutory services. Following referral an initial assessment takes place to assess the specific needs of families. These families are then matched with an FSW. FSWs discuss and agree a package of tailored support responding to the families' needs, taking account of the families' views. Support is discussed with families on an on-going basis and closed with their agreement.

Benefits identified included improved parenting skills; improved confidence of parents; reductions in the level of risk / harm to children; safer home environments; improved access to information on housing, health, benefits, rights or support needs; reduced numbers of families accessing high level services; reduced social isolation of families; improved family relationships; and carers promoting children's play and learning. The consultancy firm calculated an SROI of £4.50 for every £1 invested.

Tiny Toes: Hazlemere and Loudwater Children's Centres

The Tiny Toes service supports expectant teenage and young mothers and their babies. It brings mothers together in a safe, fun and educational environment, allowing Tiny Toes to address a range of complex issues experienced by mothers.

The service is intensive; Tiny Toes staff make it as easy as possible for the expectant mothers to attend. This includes providing very strong encouragement and even picking mothers up and taking them to appointments. A wide range of support includes cooking and preparing food; supported play; training towards accredited qualifications; trips to events and attractions; and specific issues delivered by expert professionals.

Benefits identified included improved parenting skills; improved parental confidence; reduced social isolation; improved family health; reduced levels of risk / harm to children; improved resource management by parents; and parents' accessing employment, education and /or training. Tiny Toes was judged to deliver an SROI of £3.50 for every £1 invested.

Triple P: Brock House, Somerset

At Brock House Children's Centre in Somerset, parents attending the Triple P parenting programme are in need of additional support to manage their child's behaviour but are not amongst those at risk of having their children taken into care. Families are referred to the service by a range of agencies and a crèche is provided to support attendance.

Four weekly group sessions are delivered by a Project Worker and a Parenting and Family Support Advisor (PFSA), plus two further weeks of telephone support. If additional support is required, home visits are provided. On completion of the programme, parents are encouraged to build relationships with their peers and continue to access such universal services as Stay and Play.

Benefits identified included improvements in parental confidence; social networks; knowledge of parenting; family relationships; and child behaviour. Triple P was estimated to deliver an SROI of £2.50 for every £1 invested

In commenting on their methodology, ICF GHK state that in valuing outcomes they have taken a conservative approach, and where they have been unable to establish a plausible financial valuation for specific benefits have said so and excluded them from the final ratio. They conclude: 'This means that the results presented are, if anything, an underestimation.' Sensitivity analyses suggested the results were stable when key variables were modified.

Cost-benefit analyses

Commissioners frequently need to make difficult choices between alternative investments. In making such choices it is valuable to know not only which spending decisions deliver the desired results, such as improved mental health or improved parenting, but also what (if any) economic benefits flow from different decisions. Cost-benefit analysis compares these factors for specific programmes or policies and adds to the information available to commissioners.

NICE (The National Institute for Health and Clinical Excellence) and other organisations use a standard and internationally recognised method to compare clinical effectiveness: the quality-adjusted life years measurement (the 'QALY'). Although one intervention might help someone live longer, it might also have serious side effects. Another treatment might not help someone to live as long, but it may improve their quality of life while they are alive (for example, by reducing pain or disability). The QALY method gives an idea of how many extra months or years of life of a reasonable quality a person might gain as a result of treatment.

NICE Assessment Group evaluation of parent-training/education programmes

A NICE Assessment Group evaluation of Parent-training/education programmes in the management of children with conduct disorders (NICE 2009) concluded there was evidence of effectiveness for such programmes. The costs of conduct disorder were found to be high: £63,000 higher per child than for those with no problems, and £24,324 per child higher than for children with the less serious diagnosis of conduct problems.

The Assessment Group concludes that, for children with conduct disorders, these programmes are cost-saving, with the majority of the savings accruing to education and health services. The Assessment also noted possible additional savings, beyond those in their evaluation, from youth justice, adult healthcare and social services. The report states:

'The Committee was persuaded therefore that a wide variety of public services stood to benefit from the appropriate implementation of parent-training/education programmes.'

Morrell et al (post natal depression)

Morrell et al (Morrell et al, 2009) carried out a randomised cluster trial to estimate any differences in outcomes for women with post-natal depression, (and their families and infants) who received two different forms of psychologically informed treatment in intervention groups (IGs), delivered at GP practice (cluster) level, compared with the health visitors' usual care as the control group (CG). The secondary aim was to establish the relative cost-effectiveness of the intervention from an NHS perspective.

While there were weaknesses in the study (e.g. missing data) the authors concluded:

'The results show a consistent pattern of psychological approaches being cost-effective at funding levels used by NICE. This was achieved by lower mean costs and higher mean QALYs [Quality Adjusted Life Years] gained in the Intervention Group. Although these aggregate differences are not statistically significant in isolation, in combination they produce a high probability of the intervention being good value for money.'

London School of Economics study for the Department of Health

Mental health promotion, prevention and early intervention

This study was set up to identify and analyse the costs and economic pay-offs of a range of interventions in mental health promotion, prevention and early intervention. The approach and assumptions were conservative – i.e. designed to under-state rather than over-state benefits - across all areas investigated. (Knapp et al, 2011) We include here two interventions, one addressing post-natal depression in the first year; the other addressing parenting programmes for conduct disorder when children were aged 5. Although this is outside the 0-2 age range which is the focus of our report, it does give an indication of the economics of a parenting intervention at age 5, and NICE itself recommends addressing conduct disorder at as early an age as possible, stating:

'Prognosis is particularly poor in early-onset conduct disorders, reinforcing the importance of early effective treatment. More than 60% of 3-year-olds with conduct disorders still exhibit problems at the age of 8 years if left untreated, and many problems will persist into adolescence and adulthood. Approximately half of children diagnosed with conduct disorders receive a diagnosis of antisocial personality disorders as adults, with others being diagnosed with psychiatric disturbances including substance misuse, mania, schizophrenia, obsessive-compulsive disorder, major depressive disorder and panic disorder.'

<http://www.nice.org.uk/nicemedia/pdf/TA102guidance.pdf>

1. Post-natal depression

An evaluation of a health visiting intervention to reduce post-natal depression was compared with routine care after childbirth. The authors found that, over a one-year time horizon, and excluding benefits to fathers or infants, there were no cost savings, because lower treatment costs and reduced workplace productivity loss were outweighed by increased training and higher staff costs. Over the longer term, however, the model predicted cost savings from reduced treatment costs and productivity losses (where depression persists) together with savings in costs of negative behavioural, emotional and cognitive consequences for the children of mothers who suffered from post-natal depression. The authors comment that their methodology is likely to produce conservative estimates of benefits, both because of conservative assumptions and because no monetary value was put on the health and quality of life gains for the beneficiaries, i.e. the children of these mothers.

2. Parenting programmes for conduct disorders

An evaluation of parenting programmes targeted at parents of 5-year-old children with, or at risk of, conduct disorders found parent training to have positive effects on children's behaviour, and that the benefits persist. The study's economic model calculated total gross savings over 25 years of £9,288 per child, exceeding the cost of the intervention by a factor of 8 to 1. No benefits were assumed from such wider impacts as improved employment prospects, reduced adult mental health issues and improved outcomes for the child's family and peers, which the authors suggest are likely to be substantial. If accurate, then this would make the intervention an even better investment than reported. As noted above, the earlier in the child's life such parenting programmes for conduct disorder are delivered, the earlier their benefits will begin to accrue.

Randomised control trials (RCTs)

While there are numerous RCTs of early years' interventions showing good evidence for economic value from other countries, few RCTs assessing economic benefit have been conducted in the UK. We found two: the Social Support and Family Health Study; and the Oxfordshire Home Visiting Study. Findings were very mixed; this is not surprising in view of the particular intervention designs chosen. Despite the caveats, both offer valuable learning.

Social Support and Family Health Study

The Social Support and Family Health (SSFH) study began 14 years ago and ran for 3 years. It was delivered to women in deprived districts of Camden and Islington.

Two initiatives were assessed: home-based listening support by health visitors, and the services of community support organisations. Both were compared with routine services. The primary outcomes of interest were child injury, maternal smoking and maternal psychological well-being; with secondary interest in health, health service use and changes in household resources.

In essence, the home visiting arm tested the value of providing non-intrusive listening support of about 7.5 hours in total length, over a 12-month period, for new mothers. Although the service was primarily a listening one, health visitors did provide advice if asked. The service was very popular with most mothers, especially because of its focus on what the mother wanted to talk about, with a minority of mothers finding the visits to be pointless.

Fewer than 20% of mothers allocated to community support groups used the services. Home visiting organisations had a higher uptake than those requiring the mother to drop in.

At 12 months post-randomisation the study found slightly lower levels of depression, child injuries and maternal smoking in the intervention groups, and higher levels of reported good health for children. However, none of these results were at a sufficient level to eliminate chance as an explanation. Both intervention groups reported better health than control group women. Overall, 18% of women in the health visitor group and 19% of community group women said they had poor health, compared with 26% of control group women.

The study found no evidence that the interventions produced economic benefits; on the other hand they cost no more than routine services, small savings matching their low costs.

The modest results of the experiment were not a surprise to the service providers. The researchers stated in their summing up:

‘The apparent inability of either intervention significantly to improve major health outcomes is consonant with the views stated in the process evaluation by the providers of both interventions. The view was expressed that social support alone, whether given by health visitors or by community services, is unlikely to be able to counteract the health-damaging effects of social and material disadvantage, including the stresses and difficulties that are a normal part of many mothers’ lives in countries such as the UK today.’ (Wiggins et al, 2004)

Given that approximately 40 minutes per month of extra ‘listening’ took place, it is difficult to imagine the benefits originally anticipated accruing from such a modest intervention.

Oxfordshire Home Visiting to reduce child abuse

The Oxfordshire Home Visiting Study evaluated the effectiveness of a professionally delivered, intensive home visiting programme beginning during the antenatal period and continuing for one year after birth. It thus lasted approximately 18 months, compared with 30 months for the Family Nurse Partnership programme (Barlow et al, 2008).

It was designed to improve parenting and child outcomes, including the prevention of abuse and neglect. Its recipients were 131 high risk women, with children who were not necessarily the first for those parents – again a contrast with Family Nurse Partnership, which focuses on first-time mothers (as they tend to be more malleable in their parenting behaviours).

This is a complex study to interpret. Some of the benefits it delivered – greater maternal sensitivity and greater infant cooperativeness in the first 12 months – were not repeated at 3-year follow-up. However there is research evidence that it is sensitivity in the first 12 months of life that is most crucial to child outcomes (Martin, 1981, Shaw and Winslow, 1997)

In addition, children in the intervention group who suffered maltreatment were more likely to be detected, and more likely to suffer maltreatment for shorter periods of time. These findings were not at a level of statistical significance, due largely to the small numbers involved. The authors comment that the findings may be clinically significant, in particular because of the benefits of identifying abuse at as early an age as possible, and might have reached statistical significance in a larger trial. These findings could be of very significant economic value.

On some subsidiary measures, the control group performed better than the experimental group. It is perhaps worth looking at the findings on detection of abuse in detail, as these bear heavily on the economic evaluation:

	Intervention Group	Control Group
Number of Participants	66	60
Children re whom concern registered by health or social services professionals	19 (28.8%)	13 (21.7%)
Physical abuse concern	1 (1.5%)	1 (1.7%)
Neglect concern	11 (16.7%)	8 (13.3%)
Emotional abuse concern	7 (10.6%)	4 (6.7%)

There was marginally more concern and proactive engagement in the intervention group, while child deaths were higher in the control group.

	Intervention Group	Control Group
Number on Child Protection Register	6	4
Children removed from home long-term	6	4
Children who died	0	2

One child removed long-term from home, in the control group, had had their name placed on the Child Protection Register twice in the preceding years, and was finally removed from home due to neglect at age 4.

Of the two children who died, the coroner recorded an open verdict on one with child protection concerns; in the other case, a paediatrician involved had a high level of concern about non-accidental bruises on the child, but the child died before a child protection investigation could take place.

Economic evaluation

In the three-year follow-up report, Barlow et al state that the results suggest that intensive home visiting improved maternal sensitivity at 12 months and better enabled health visitors to identify infants in need of further protection at an incremental cost of £3,985 per woman over 36 months, and conclude:

'The extent to which these potential benefits are worth the costs, however, is a matter of judgment.'

The following remarks address that judgement – tentatively, because the numbers in the study are too small to exclude the possibility of the results merely reflecting chance.

Cohen, Piquero and Jennings (Cohen et al, 2010) have identified the present value lifetime cost of child abuse and neglect in the United States as being US \$250,000-285,000. This equates at a November 2012 exchange rate to £166,864 in UK money. A UK professor with experience in this field suggested that UK costs of abuse and neglect are unlikely to vary much from those in the US, with some components being higher and some lower. Thus the detection of even one additional case of abuse or neglect would provide an economic payback on the cost of detection indicated in the Oxfordshire study provided that only one additional child was saved from harm for every 41.9 mothers (i.e. £166,894 divided by £3,985) receiving the intensive health visiting service.

The tables above show two fewer child deaths in a cohort of 66 mothers receiving the home visiting intervention, and six more children (7%) about whom concern has been registered. While the numbers involved are too small to eliminate chance as an explanation of these figures, at face value the intervention is protecting children at significantly above the level needed to break-even and deliver a financial benefit. Again, at pure face value, assuming just two were saved from abuse or neglect by the intervention (not implausible given four more children were placed on the risk register or removed from home, two fewer died, and many others received more sensitive parenting), the cost would have been:

$$66 \times £3,985 = £263,010$$

And the saving would have been

$$2 \times £166,984 = £333,788$$

This represents a 27% return on investment – in line with the assertions of both Professor James Heckman and the Federal Reserve Bank of Minnesota that early years' investments far exceed stock market returns. Further, this apparent pay-off does not factor in any benefit from improved maternal sensitivity (i.e. it ignores the benefits to all other children from improved quality of parenting, or of the value of the health benefits of reducing ACEs in the children's lives). Given that a single form of abuse (e.g. neglect or emotional abuse) has been shown by Felitti and Anda (2009) to result in between a 30% and 70% higher rate of heart disease in the victims, and Cohen et al (2010) have estimated that a single case of heart disease costs about \$150,000 (£93,750), the 27% ROI calculation could be quite conservative. However, to repeat, these are very tentative conclusions given the small numbers involved.

Subsidiary measures

On a number of subsidiary measures the outcomes for the control group were better than those for the intervention group (12 vs 18). This study was of a very high risk sample of mothers – the average number of risk factors (such as mental health problems, domestic violence, drug and alcohol abuse) in the intervention group was 5.4 for each mother (4.8 in the control group). The designer of the intervention, Professor Hilton Davis, believes that to be truly effective with families suffering such severe and multi-faceted problems would involve:

a support team of experts to provide the health visitors with easy access for relevant referral (e.g. to housing and/or psychiatric support), and more extensive training in the 'partnership', rather than the 'expert', model of interaction between parents and health professionals.

Given the conditions, the cut-off point of the support might have been too early, but might be effective with less complex families, or where there was a circle of expert support available for referral, or both.

Predictive studies

Finally we look at three predictive studies, two at a macro and one at a micro level, each of which compared the costs of systems of prevention or early years' intervention with projected savings from avoiding the costs of dysfunction in the lives of children.

At a macro level, two UK charities, Action for Children and WAVE Trust, have recommended a conscious switch of policy in the UK from remedial interventions after harm has occurred to investment in preventing harm from happening in the first place. Using quite different costing methodologies, both of these third sector organisations have projected major benefits to society – including financial ones – from such a preventive strategy.

Both studies assumed a national commitment to transformational change in levels of disadvantage and adverse outcomes for society. At a micro level, Croydon NHS Trust and Croydon's local authority conducted a joint study, the Croydon Total Place report, with the more modest aim of simply improving the outcomes of the most disadvantaged children and families in their borough. The following table summarises the costs and benefits predicted by the three studies, with the Croydon figures uplifted (pro rata to population) to national (UK) scale for comparison:

£ billion

	Predicted Costs	Predicted Benefits	Return per £ invested
Action for Children	£619.7	£1,499.9	£ 2.42
WAVE Trust	£ 97.0	£ 686.1	£ 7.07
Croydon NHS & LA uplifted to national scale	£ 12.7	£ 144.8	£11.44

On a Net Present Value basis, the Croydon returns fall to £9.82 per £ invested. On the basis of these comparisons, the Action for Children predictions look quite conservative, which they claim to be.

The Action for Children model assumes the need for much higher universal costs than the WAVE Trust model, while the Croydon Total Place approach includes neither the costs of targeted interventions, as recommended by both WAVE and Action for Children, nor the comprehensive investment in improved universal services proposed by the latter.

Macro Studies

Action for Children / New Economics Foundation

In *Backing the Future: why investing in children is good for us all* (Action for Children and New Economics Foundation, 2009), a joint report by Action for Children and the New Economics Foundation, the authors cite the extensive evidence of the harmful effects that social problems such as drug use, crime, inequality, family breakdown, and poor mental health can have on children's well-being and their future life chances, and observe that these negative outcomes are being transmitted from generation to generation, perpetuating and deepening cycles of inequality and disadvantage. They then calculate the costs of doing nothing to improve social problems in the UK over the next 20 years and project these to be almost £4 trillion.

The authors then propose a twin-track approach to minimise this cost, and its associated waste of human capital and quality of life. First, to break the vicious cycle of inter-generational disadvantage, they propose a series of targeted interventions for the most 'at risk' children, young people and families. Second, to make these improvements permanent and to consolidate deeper structural change, they propose a set of universal interventions, the phasing in of a more holistic approach to children's services along the lines of the most successful European countries, with access to universal high-quality childcare and properly funded parental leave, coupled with proven support services and delivery models.

The study uses data from the Washington State Institute for Public Policy both to cost the targeted programmes, and to estimate their effectiveness in reducing negative outcomes such as drug abuse, crime, teenage births and mental illness. Effectiveness was assumed to be half that found by evaluations, to avoid over-claiming. In estimating the effectiveness of the projected increase in preventative universal services, the authors identified the top performing countries in terms of child well-being and social outcomes and assumed a switch to social policies

that appear to produce better outcomes in these countries, such as high-quality universal child care, well-funded parental leave and attention to improving the quality of early interactions between children and their parents. These were costed assuming both the need for fixed costs such as building facilities and training staff, and the running costs of delivering the improved services. Returns from investment in universal services were assumed in two forms: reduced spending on existing measures such as cash transfers to reduce child poverty (which international comparison suggests are less effective than improved universal services), and savings from improved positive outcomes after children reach 10 years of age. The assumption is that without significant investment in universal services, the improvements in outcomes from the targeted interventions will not be sustained.

It should be noted that while the increased investments in universal services proposed are essentially early years and prevention focussed, the targeted interventions include several which are not early years.

This very detailed and carefully reasoned approach produces forecasts of total new spending of £620 billion (£428.3 universal and £191.4 targeted), and savings of £1.5 trillion (£1,039.84 billion from universal and £460.7 billion from targeted). The calculations of benefits produce predicted returns on investment of £2.43 per £1 invested for improved universal services, £2.41 per £1 invested for targeted services (the similarity of these figures being coincidental), and £2.42 per £1 invested overall.

WAVE Trust

Operating with a much smaller budget for evaluation, the approach of WAVE Trust produced similar conclusions. In this case an Excel-based computer model was set up to predict changes in levels of child maltreatment (physical abuse and neglect) as part of WAVE's campaign to reduce child maltreatment by 70% in the UK by 2030 – i.e. its 70/30 strategy. While the economic evaluation is much less sophisticated than the nef/Action for Children approach, the model's operational assumptions led to it being described by the Centre for Social Justice as the leading-edge computer model of its kind when created in 2010, and it was used by the Cabinet Office, also in 2010, as input to its studies.

The computer model explores one possible way (not necessarily the recommended way) in which the challenge of reducing child maltreatment by 70% by 2030 might be approached. The model, designed by Brojo Pillai, takes this shape:

1. It begins with the cohort of children born in the first year of this comprehensive intervention and assumes a certain proportion of families are vulnerable - i.e. their children are at risk of being maltreated.
2. It uses validated screening instruments to identify families at different levels of vulnerability (Level 1 = no concern, Level 4 = grave concern).
3. Families identified to be vulnerable (Levels 2, 3 and 4) are encouraged to participate in a set of evidence-based interventions. Some families may require a strong incentive to participate in the interventions; for some, who are severely maltreating their children, participation may be mandatory.
4. The interventions proposed were selected as part of an international review of best practice. They have proven to be effective in preventing child maltreatment, or addressing its consequences.
5. Over the course of the year, these vulnerable families are exposed to a number of interventions. Each intervention has a certain effectiveness in terms of its likelihood to have a particular positive impact on a family's vulnerability. Effectiveness is measured by a set of values that are representative of both the intervention and the level of vulnerability of the family.
6. At the end of each intervention, a certain number of families would have become less vulnerable to maltreatment. Some families will move from the highest level of vulnerability (Level 4) to a lower level (Level 3). Some may even move out of the radius of vulnerability (to Level 1).
7. The goal is to move at least 70% of families who would otherwise be within the radius of vulnerability (Levels 4, 3 or 2) outside of that radius (to Level 1).
8. At the end of the first year, and a set of interventions later, a number of families would have made that move to Level 1.

9. At the start of the second year, the whole cohort is screened again, using a screening instrument appropriate to that age group (the one-year-olds). Once again, families at different levels of vulnerability are identified (Level 1 to Level 4). The number of families at Level 1 would be higher this time, because of the previous year's interventions.
10. Families who are still at Levels 2, 3 and 4 are offered another set of interventions, appropriate for this age group (one-year-olds). Again, these interventions were carefully selected as part of an international review of best practice.
11. This process of screening and offering interventions to the families who need them, continues until the child turns age 16. A number of universal interventions are also included, and these are offered to children and families at all Levels (1, 2, 3 and 4).
12. Interventions assumed include First Steps in Parenting, Front Pack Baby Carriers, Video Interactive Guidance, Family Nurse Partnership, Circle of Security, Triple P, Incredible Years, Mellow Parenting, Roots of Empathy, the Dorset Healthy Alliance and a domestic violence reduction programme.
13. Unit costs for each intervention were calculated, typically through discussion with the intervention creators, such as Dr David Olds for Nurse Family Partnership. Costs of running these interventions at the scale required were calculated at each stage.
14. As the first cohort moves into the second year of the 16-year schedule, a new cohort is born, and they move through the first year of the 16-year schedule. In the third year there is a new cohort moving through the first year of the schedule, another cohort moving through the second year, and a cohort moving through the third year of the schedule. This process continues until, 16 years later, there are 16 cohorts simultaneously experiencing the programme. An estimate of the cost of doing this, and the likely result of doing this, was then calculated. The model followed a narrative laid out in the Excel worksheet.
15. To summarise its results, the model suggests we can reduce the risk of child maltreatment in the UK by 84% within 16 years, at a total cost of £97 billion. Further, we can reduce the risk of maltreatment for a single birth cohort by 79% over the next 4 years, at a cost of £5.1 billion. The computer model was driven by a number of assumptions, and was designed to allow users to see, instantly, the impact of changing any or all of these assumptions.
16. The author comments that the possible cost of £97 billion over 16 years may, at first glance, seem high, or unaffordable. However, against this may be set the costs being incurred as a result of adverse early childhood experiences. These were estimated more conservatively than in the *nef/Action for Children* model, at £429 million. The author concludes that if just 10% of these costs can be avoided as a result of the interventions, it would repay the investment seven times over. Moreover the £97 billion is mainly a one-off cost over a 16-20 year period, whereas the benefits would flow for a much longer time scale (Pillai, 2010).

Micro Study

Croydon local authority and Primary Care Trust, after an exhaustive study through the Treasury-initiated Total Place analysis of all money spent in their area, concluded (NHS Croydon and Croydon Council, 2010) that the introduction of an early years' preventive strategy with a particular focus on preparation for parenthood, beginning with maternity services, would lead to a return on investment of more than £10 per £1 invested.

The Croydon approach planned to focus service redesign on 4 wards in the borough, approximately 15% of the overall population, identified on the basis of high levels of need and poor outcomes. An improved early years' infrastructure and a limited set of universal propositions were to be implemented borough-wide.

A key assumption arising from the Croydon study was that it was possible to make very substantial savings over time. The report stated:

'We believe it is possible to achieve radical efficiency: innovations which both release significant cost savings as well as improvements in outcomes. At the same time as increasing the volume and effectiveness of prevention and early intervention work, we have calculated the savings that we will make over time: short term savings in specific service areas and medium term savings particularly in reducing our spending on cost of failure – services dealing with poor outcomes in older children and

young people. In both cases these cut across service providers, with a focus particularly on NHS Croydon and Croydon Council.

In keeping with HM Treasury finance, we have applied discounted rate over time (Net Present Value) to our figures. We anticipate savings on an NPV basis of over £8.4m during the spending period 11/12 - 13/14, £25m by the end of the next spending period (ending 16/17) and more than £63m by the time our current 4 year olds turn 18 in 23/24. These calculations are net of up-front investment costs as well as new revenue costs, and are based only on implementing our main propositions in 4 of our wards: we therefore believe our estimations are conservative.'

The report goes on to forecast savings outside the borough, and to recommend investment in early years' prevention approaches across public bodies more widely:

'It is clear that we will also deliver substantial long term savings to the public purse, as we reduce the number of young people who end up in the justice system and in prison, and increase the number of children who grow up to be economically active, net contributors to society, capable of parenting effectively themselves. We have not sought to estimate these long term savings at this stage, but they are likely to be very significant, and accrue to public bodies beyond the boundaries of Croydon. A systems thinking approach would suggest a strong case for these services to invest in early years' intervention as part of their own preventative agendas.'

Croydon Total Place echoes the financial findings of Action for Children, RAND and Reynolds, and supports the recommendations of the Federal Bank of Minnesota, Heckman and the Harvard Center on the Developing Child (see international economics section), that investment in early years' prevention is worthwhile, and far exceeds the returns of stock market investments, but from a uniquely English and local-based perspective.

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APPENDIX 5

Systems

Background

It was proposed that the systems sub-group provide an analysis of the changing local delivery context and identify opportunities to improve support and outcomes for vulnerable 0-2s and their families (including antenatally). To achieve this goal, the group focused on addressing the following exam question:

In a world of increased localism – what are the levers and incentives to turn the rhetoric of early intervention into evidence-based support on the ground for vulnerable families with babies?

The group prepared an outline of the key systems and levers of influence in the context of local working arrangements currently for the 0-2 agenda. These would be the systems and levers for key SIG messages and findings to be communicated to and through.

Key conclusions

These are laid out in tabular form in the following pages.

Levers		Action
Local structures and processes	<p>Creation of Joint Health & Well Being Boards</p> <p>Use of Joint Strategic Needs Assessments (JSNAs) to inform local commissioning</p> <p>Community budgets</p> <p>Formation of clinical commissioning groups (CCGs)</p>	<p>Provide clear information about the importance of pregnancy to age 2 in statutory guidance and other non-statutory communications for 'shadow' and emerging Health & Wellbeing Boards.</p> <p>Provide clear information about the importance of measures around pregnancy-2s and their parents in statutory guidance and other materials about JSNAs. Support LAs to find and collect the relevant data (e.g. through improving data collection, information sharing etc.). Recruit a DPH champion to explain how to incorporate 0-2s into the JSNA.</p> <p>Encourage a community budget approach as an aspiration for the pregnancy-2 stage using learning from Total Place sites. Use economic examples where possible.</p> <p>Link with commissioning champions (where in post in LAs) and find a champion GP to take early action to make sure 0-2s and preventive work are made a priority in the minds of the CCGs.</p>
Frameworks	<p>Public health outcomes framework</p> <p>Healthy Child Programme (HCP)</p> <p>New Health Visitor (HV) Offer</p> <p>Core Purpose of Children's Centres</p> <p>Pregnancy, Birth and Beyond – new framework for antenatal education</p> <p>NICE guidance e.g. on antenatal and postnatal mental health</p> <p>Early Years Foundation Stage</p>	<p>Influence the inclusion of indicators in the Children and Young People's public health outcomes strategy and framework around earlier outcomes/risk factors in conception and infancy and maternal mental health. Ensure the 2/2.5 placeholder indicator takes into account infant mental health/social and emotional development and knowledge about neuroscience developments. Use of evidenced based tools such as ASQ-SE in reviews of children at age 2/2.5.</p> <p>Use all opportunities to help DH refresh HCP to build on the framework and integrate new models and practice that have a good evidence base. For example, HCP could include more on assessment of attachment and specialist pathways, parental and infant mental health, drug and alcohol, domestic abuse, relationships and links to pregnancy, birth and beyond.</p> <p>Use HV training programme to enhance the curriculum for all HVs, ensuring they receive high quality modules in attachment theory, parent-infant interaction, child development, video interaction guidance.</p> <p>Link with relevant DfE team to ensure revisions to Sure Start Children's Centres statutory guidance includes clear evidence on parental risk factors (to support local decisions about targeting) and guidance about effective information sharing.</p> <p>Government to develop a strategy to ensure that antenatal education using this framework is available for all new parents. Disseminate through links to NCT and build links to NHS operating framework.</p> <p>Refresh framework and/or provide resources and showcase effective models and incentives to encourage and enable local services to commission effective support in all areas.</p> <p>Feedback the 0-2 findings about supportive family environments and the importance of attachment and attunement to the relevant DfE policy team as part of any further revision/maintenance work to the Early Years Foundation Stage.</p>

<p>Data/measures</p>	<p>Children's Services Data Profile (Being developed by Association of Directors of Children's Services) ADCS and others to enable benchmarking to improve LA performance)</p> <p>Improve measures of outcomes/risk factors in 0-2s</p> <p>Public Health Indicators (included in the outcomes framework)</p>	<p>Clarify the best links to ADCS and Children Improvement Board (CIB) to ensure the profile contains plenty of data for conception-2, including the risk factors for neglect and abuse. Research what the priorities for CIB will be for 2012/13.</p> <p>Explore how to further improve recording and reporting of infants' social and emotional development and attachment, and of parental risk factors in parents (and parents-to-be).</p> <p>Ensure proposed indicators capture the impact of early parenting and infant mental health (see box 1 above).</p>
<p>Workforce</p>	<p>Measures to improve early years' workforce - including new early years teaching centres and training in integrated centre leadership</p> <p>Nutbrown review of early childhood workforce.</p>	<p>Ensure a focus on attachment and infant mental health, not just early learning. Link to National college/Teaching Agency and the NPQICL work.</p> <p>Explain the concept of workforce emotional intelligence. Include a strong focus on identification of early attachments and interventions to support secure attachment in any response to the Nutbrown review.</p>
<p>Investment policy priority and funding</p>	<p>Making Early Intervention a Priority</p>	<p>Look for opportunities to influence emerging policy about the importance of pregnancy-2 and infant mental health as part of the Early Intervention agenda (e.g. links to Frank Field work, <i>BIG Lottery – A better start</i>). Feed into revised 'working together' document and EYFS consultation.</p>
<p>Inspection</p>	<p>Ensure Ofsted and CQC are assessing how children's care and health settings are working to improve safety and wellbeing during conception-2.</p>	<p>Ensure Ofsted and CQC are assessing how children's care and health settings are working to improve safety and wellbeing during conception-2.</p>