

# 'HERE FOR AS LONG AS YOU NEED US' AN EVALUATION OF THE HEALTHY LITTLE MINDS PARENT AND INFANT PROGRAMME



Healthy Little Minds (HLM) is an early intervention programme for young families commissioned by Small Steps Big Changes in Nottingham, which is funded by the National Lottery Community Fund. HLM began in 2022 and sought to improve mental health by strengthening parent-infant relationships.

Since September 2022, it has supported 203 families in Nottingham, particularly in deprived areas. HLM champions a philosophy rooted in early intervention, flexibility, and swift response times, offering support without session limits. They also work with colleagues elsewhere in the system to improve their practice and collaborate effectively. This approach has resulted in reduced perinatal and postnatal depression, as shown in our in-depth research with 34 local women, who reported a 21.4% average reduction in depression overall.

HLM has targeted Nottingham's most deprived areas, with over 75% of beneficiaries living in the city's most deprived neighbourhoods. Of the families with recorded outcomes, 45% had their needs fully met, and 82.3% showed positive changes.

The programme has demonstrated significant economic benefits, offering a return on investment of £9.84 for every £1 spent.



Stakeholders and service deliverers across the UK can learn from the experiences of Healthy Little Minds in Nottingham and incorporate the strengths of the approach into their services. The key strengths of the HLM model include:

- Providing specialised early intervention support focused on parent-infant relationships and mental health
- Offering flexible support pathways that are not limited by the number of sessions or long waiting lists
- Ensuring quick response times to help families access timely support
- Adopting an inclusive approach that supports diverse families and provides interpreters when needed
- Building strong relationships with families through personalised and trusted support
- Using evidence-based interventions such as Video Interaction Guidance and Newborn Behavioural Observations
- Providing professional workforce training to create a ripple effect of support across the community
- Adopting a coproduction model that places families at the heart of treatment planning and decisionmaking
- Implementing robust monitoring and evaluation processes to track clinical improvements and outcomes.

The economic case for adopting these approaches is compelling, as early intervention and prevention can lead to significant cost savings by reducing the need for more expensive mental health and educational interventions in the future. By integrating these strengths into their services, stakeholders and service deliverers can have a meaningful impact on the wellbeing of families and children across the UK.

# INTRODUCTION

Supporting the wellbeing of families, particularly during the perinatal period, is crucial for fostering a healthier society. In the UK, the economic burden of perinatal mental health issues is staggering, yet the impact on families' mental and social health is just as profound. Our briefing adds to the growing evidence base about programmes designed to mitigate these challenges, highlighting innovative approaches and frameworks that support early intervention and integrated care.

From national strategies to local services like Healthy Little Minds (HLM) in Nottingham – which is the particular focus of this study – the overarching objective is the empowerment of families and upskilling of professionals to nurture strong, supportive environments for young children. Here we demonstrate the critical importance of issues that parents face from pregnancy, through childbirth and onward with young children, and the promising efforts underway at HLM to ensure the best start for every child.

# **BACKGROUND**

Perinatal mental health issues impose a staggering financial burden on the UK, costing between £1.2 billion and £8.1 billion annually (Bauer *et al.*, 2014). A report by Centre for Mental Health and the LSE Personal Social Services Research Unit underscored the profound impacts of perinatal depression and anxiety on public health, social care, and society at large. The financial toll of perinatal depression on mothers alone amounted to £1,688 in health and social care and £2,514 in productivity losses per case. For children, the costs were equally significant, encompassing £2,831 in health and social care, £3,166 in education, £1,974 in criminal justice, and £5,451 in productivity losses per case (Bauer *et al.*, 2014).

The UNICEF Child-Friendly Cities initiative champions child wellbeing by advocating for cities to adopt early intervention and integrated services (UNICEF, n.d.). Nottingham aims to become a Child-Friendly City in line with this programme, which would foster healthier families and reduce long-term costs through early intervention support for mental health and parent-infant relationships.

Complementing this, the Best Start for Life programme emphasises the crucial importance of early intervention within the first 1,001 days of a child's life (Public Health England, 2021). Moreover, the NHS Long-Term Mental Health Implementation Plan seeks to establish a thoroughly trained workforce to support mental health from birth to 25 years, ensuring that early challenges are addressed promptly and effectively (NHS England, 2019).

There are other national drivers that inform local action, including the Early Years High Impact Frameworks on Parental Mental Health (Public Health England, 2019a), which offer guidance on how to improve the mental health of mothers and babies. These frameworks are designed to equip professionals with the skills needed for early identification of perinatal mental health issues, addressing concerns linked to Adverse Childhood Experiences (ACE) and risk factors such as trauma, previous mental illness, and abuse. The frameworks emphasise comprehensive, ongoing professional development to foster healthier families and, consequently, a healthier society.

It is in this domain that Healthy Little Minds operates and seeks to improve mental health and wellbeing.

# WHAT DOES HEALTHY LITTLE MINDS SEEK TO ACHIEVE?

Healthy Little Minds (HLM) is a service based in Nottingham which offers early support and guidance for families concerned about parent-infant bonding. The programme aims to promote long-term family wellbeing through early intervention, starting from pregnancy and extending throughout the first 1,001 days of a child's life.

HLM is committed to helping parents build strong, healthy relationships with their children. They understand that even small interactions can significantly influence a child's mental health and development. The service provides an adaptable and compassionate approach, ensuring each family receives timely support that feels right for them.

At the core of HLM's work is the commitment to building on parenting strengths, often before challenges or safeguarding concerns arise. Their philosophy focuses on understanding each family's unique circumstances to ensure they feel supported and empowered.

HLM's proactive approach helps prevent potential issues like financial stress, unstable housing, domestic abuse, or parental mental health problems. By considering both the infant's wellbeing and the broader family situation, HLM collaborates closely with other agencies, providing tailored advice to help professionals make informed, compassionate decisions that improve outcomes for families.

Table 1: Examples of interventions offered to parents and infants by Healthy Little Minds

Intervention	Description
Newborn Behavioural Observations and Assessments	Supports parents in understanding and responding to their newborn's cues
Specialist Infant Massage and Yoga	Promotes bonding through physical touch and relaxation
Video Interaction Guidance (VIG) and Watch, Wait & Wonder	Helps parents reflect on and improve interactions with their children by observing and responding thoughtfully
Parent-Infant Psychotherapy	Addresses complex relationship challenges; includes unique, evidence-based therapeutic interventions
Circle of Security (COS-P) and Incredible Years Programmes	Focuses on building secure attachments and enhancing parental understanding of child development
Theraplay, Dyadic Art Psychotherapy, and Parent-Child Play Therapy	Provides playful, creative methods to improve parent-infant relationships and reduce stress
Mellow Babies and Bumps	Supports bonding during pregnancy and early infancy through group-based reflective activities
Cognitive and Emotional Support Therapies	Includes eye movement desensitisation and reprocessing (EMDR), Rewind Therapy, and Compassion-Focused Therapy for parents facing trauma or emotional difficulties
Behaviour Management and Sleep Support	Addresses specific challenges such as sleep and behaviour, providing practical strategies for families
Consultation and Signposting	Offers reflective space and supervision, workforce development, and links to other agencies, supporting complex child protection and Child in Need cases

#### KEY FACTS AND DEMOGRAPHICS OF THE HEALTHY LITTLE MINDS PROGRAMME

Since 2022, a total of 203 families were referred, encompassing 247 parents/carers and 213 infants. The average age of parents or carers was 28, while infants averaged 1 year, with 17 unborn babies. The majority of the parents/carers were female (81.8%), while infants' genders were more evenly split: 39.9% female, 43.1% male, and 11.7% unborn.

Most parents and carers (over 60%) identified as white British, while 38.8% were from racialised communities. These proportions are approximately the same as those found in Nottingham's population overall. Similarly, more than 50% of infants were identified as white British, with 45.3% from racialised communities. Approximately 7% of parents/carers and less than 1% of infants reported having a disability.

Over three-quarters of families resided in the most deprived areas of Nottingham. Just over 25% were assigned a severe (red) safeguarding rating, with the most common referral reason being caregiver's mental health concerns (48.8%), followed by bonding difficulties (15.9%). More than three-quarters of families participated in multiple interventions, with an average waiting time of 17 days from referral to assessment, and 21 days from assessment to first intervention.

# WHAT THE EVALUATION SOUGHT TO UNDERSTAND

The evaluation aimed to understand the overarching effectiveness of the Healthy Little Minds programme. Specifically, it sought to assess how well the programme supported families in terms of mental health, parent-infant bonding, and overall family wellbeing. The evaluation also explored the extent to which HLM's interventions succeeded in addressing key issues such as financial stress, unstable housing, domestic abuse, and parental mental health challenges. Additionally, the research aimed to identify the unique needs of the families served and to evaluate the programme's ability to make a positive, measurable impact on the lives of parents and infants alike. By understanding these dimensions, the evaluation intended to provide actionable insights that could guide future improvements and ensure the long-term sustainability of the programme and other similar programmes across the UK.

# **HOW WE DID THE RESEARCH**

We combined quantitative and qualitative methods to ensure a comprehensive and balanced evaluation, capturing both the breadth and depth of the programme's impact.

Quantitative data – including data about service use and costing, and a questionnaire for professionals – provided measurable evidence of programme reach, utilisation, relevance, and economic impact. By analysing financial and resourcing data, we assessed cost-effectiveness and resource utilisation, evaluating the programme's sustainability and scalability. This included cost-benefit analysis and return on investment (ROI) calculations to determine the programme's economic impact, and provided insights into the financial justification for programme continuation and expansion.

Qualitative data – collected through interviews, workshops and focus groups – offered nuanced understandings of families' and professionals' experiences. They also helped bring to the surface a range of contextual factors which influenced programme outcomes. We analysed the qualitative data using thematic analysis to identify recurring themes and patterns, and narrative analysis to understand the stories and experiences shared by participants.

#### **LIMITATIONS AND MITIGATIONS**

The mixed methods evaluation of Healthy Little Minds was a complex process that required significant resources in terms of time, personnel and funding. To manage this, a detailed project plan was developed, with clear timelines and allocation of resources. The integration of data from multiple sources and methods was challenging, requiring careful planning and methodological rigour. Data integration software was used to facilitate the merging of quantitative data, and a clear framework for data analysis was established.

Qualitative data collection methods, such as interviews and workshops, could be subject to bias from participants and researchers. To maintain objectivity and minimise bias, we engaged expert researchers, used standardised interview guides and protocols, and implemented participant verification processes. However, findings from qualitative data may not be generalisable to all populations.

The findings of this evaluation might not apply to other situations because they are based on specific contexts and experiences. To address this, we carefully selected our sample group and added service users' and professionals' insights to the numerical data to make the results more broadly applicable.

By addressing these limitations and leveraging the strengths of a mixed methods approach, the evaluation provided a comprehensive understanding of the programme's impact on mental health and wellbeing. Confidentiality, consent, and safeguarding were paramount considerations throughout the evaluation process, with participants providing informed consent and adhering to strict confidentiality protocols.

# **HLM'S WORK WITH FAMILIES**

The findings presented here show the role that Healthy Little Minds plays in addressing parental bonding and attachment issues, enhancing parental confidence, and improving mental health outcomes through timely and specialist support. For many parents, particularly those with complex backgrounds and Adverse Childhood Experiences, early intervention was welcome and had value. HLM's approach helps parents face challenges and build on their strengths as caregivers, laying the foundation for positive relationships with their children. It also demonstrates how even the smallest interactions can make a difference to a child's mental health and development.

Unlike statutory services, which are often overstretched and time-limited, HLM provides community-based, specialised support that allows families to take the time they need to build stronger relationships with their children. However, the timing of referrals is also influenced by other agencies' processes, such as Health Visitors' review points.

Dedicated key workers provide focused, personalised support, assisting families in tackling challenges and establishing new, positive behaviours. By involving families in creating their support plans, HLM ensures that the focus remains on what is most important to them, making interventions meaningful and practical for each family as they engage with the service.

The service holds regular staff meetings to prioritise families based on their needs and to discuss the best course of action and collaboration strategies. Each family is assigned a consistent key worker who conducts a thorough assessment, ensuring continuity and a personal connection from the outset. Support plans are co-designed with families, tailored to their unique needs and cultural backgrounds through goal-setting and reflective discussions.

HLM's collaborative approach considers the infant's wellbeing as well as the broader family situation, often involving close collaboration with other agencies. Its offer is wide and includes group sessions for parents, parental education programmes, and tailored interventions to help parents understand their baby. HLM collaborates with them to co-design goals that address specific relational needs, fostering secure attachments and positive parent-child relationships.

By focusing on early intervention, HLM aims to prevent situations from reaching crisis levels and manage potential risks by providing timely support to families. Practical interventions like baby massage and Newborn Behavioural Observations – which help parents understand and respond to their baby's cues, fostering strong parent-infant relationships – are designed to enable parents to respond better to their babies' needs, and increase confidence in caregiving. By fostering strong relationships from the outset, HLM enables parents to support their children more effectively, leading to a more stable and supportive family environment.

HLM recognises that families facing complex challenges might struggle to stay engaged with support services. To address this, HLM offers a "here for as long as you need us" approach, reassuring families that they can reach out whenever they are ready without fear of judgement. Clear communication and practical advice are provided by HLM's team, who take the time to understand complex family dynamics, and ensure that guidance is practical and easy to follow.

# **PARENTS' EXPERIENCE OF THE SERVICE**

Our fieldwork told us that HLM's family-centred, flexible support was especially impactful for those facing traumatic or complex situations, offering them a sense of normality even in difficult times. One grandparent, who stepped in as the primary caregiver, shared how reassuring it was that HLM understood their unique situation without judgement. Indeed, parents told us that admitting that there were problems in their parenting was difficult. As one parent noted, "no one wants to admit they're struggling to bond with their baby". The approach of HLM sought to dispel any sense of shame, embarrassment or humiliation a parent might feel.



"[Healthy Little Minds] should be the first service for families to be referred to, even for families that are not experiencing any bonding difficulties, as HLM would benefit every family" - Parent

One of the most popular activities – especially for parents who were unsure or anxious - was baby massage, which helped parents and babies connect through simple touch and eye contact. It created a comforting sense of trust and closeness with their baby. As one parent shared, the massage classes made them feel much more connected and in tune with what their baby needed. Psychotherapy was also welcome as it helped parents understand their emotions, and their responses to their child, as well as their feelings about being a parent. One parent offered high praise saying, "The Parent-Infant Psychotherapy that we do with [the therapist], that's just been really... incredible".

HLM's focus is on building understanding of what each family needs to feel supported and empowered. The process starts with an initial chat and a home visit, where the HLM team works with families to set goals they genuinely want to achieve. By involving families in designing their own support plans, HLM ensures the focus is on what matters most to them, making the whole experience feel more meaningful and practical.



"They've not only supported me with my goals of bonding and time with my daughter, they were also supporting me with a process with work as well." - Parent

The service strove to be inclusive. For example, it used accessible visual resources to make complex ideas about trauma and attachment more understandable. This approach was valuable for first-time parents, young parents, and those with learning difficulties, as it broke down concepts in a practical, relatable way. One of the practitioners shared, "It supported me to explain trauma and attachment in early life [...] due to the practical resources and visuals we can use to support understanding." This focus on accessibility was intended to make engagement easier for all parents, regardless of background, to increase knowledge and confidence to support their baby's emotional needs.

# **MEASURING CHANGES IN INDIVIDUALS**

Healthy Little Minds employs a range of assessment tools to evaluate the mental health and wellbeing of their service users. Each tool measures specific aspects of mental and emotional health, enabling a comprehensive understanding of the impact of their interventions. The findings from these tools are crucial as they provide insights into the effectiveness of the programme and inform future improvements.

Here is a summary of the impact observed through these assessments:

Tool	Description
ASQ:SE (Ages and Stages Questionnaires: Social-Emotional)	This tool assesses social and emotional development in children. The findings indicated no significant change in social and emotional development issues.
PHQ-9 (Patient Health Questionnaire-9)	This is a widely used tool for measuring the severity of depression. The results showed a minor decrease in depression, but this change was not statistically significant*.
EDPS (Edinburgh Postnatal Depression Scale)	This scale measures perinatal and postnatal depression. There was a significant decrease in depression levels among the participants.
GAD-7 (Generalized Anxiety Disorder-7)	This tool assesses the severity of anxiety. The findings revealed a significant decrease in anxiety from moderate to mild.
MORS (Mothers' Object Relations Scales)	This scale measures mothers' perceptions of their infants on two scales – warmth and invasion. A parent who sees their infant as unduly invasive or lacking in warmth towards them is at risk of experiencing difficulties with establishing a mutually satisfying relationship with the infant. The results showed a decrease in mothers' perception of warmth, but this change was not statistically significant.
GBOs (Goal-Based Outcomes)	This tool measures progress towards personal goals set by the participants.  The findings indicated significant progress towards achieving these goals.

<sup>\*&#</sup>x27;Statistically significant' means that the observed effect or relationship in data is unlikely to have occurred by random chance alone, indicating that the results are reliable and can be generalised to a larger population or context.

Less than half (44.3%) of the families supported by HLM had recorded primary outcomes. Of these, 46.7% reported having their needs fully met. Positive outcomes were recorded for 30.5% of families supported by HLM, with 82.3% of these showing improvements.

These results highlight the areas where the programme is making a positive impact, as well as areas that require further attention. By continuously assessing and refining their approaches, HLM aims to enhance the mental health and wellbeing of their service users.

#### **CHANGES IN ANXIETY AND DEPRESSION**

A total of 39 women were assessed using the GAD-7 tool pre- and post-intervention to measure changes in their anxiety levels. The average score pre-intervention was 11, and the average score post-intervention was 9, indicating an 18% reduction in anxiety due to the HLM intervention.

For depression, the average pre-intervention score was 14, and the average post-intervention score was 11, resulting in a 21.4% reduction in depression levels.

The HLM intervention has been found to have positive improvements and outcomes resulting from its implementation in families. However, the reach and impact of HLM may be constrained by strict eligibility criteria, misunderstandings among practitioners about specialist services available, and a need for broader awareness of the service. Expanding eligibility, reaching diverse communities, and providing more targeted support for young parents and fathers could help HLM achieve broader and stronger outcomes.

# **HLM'S WORK WITH PROFESSIONALS**

Healthy Little Minds collaborates with other professionals, including social services, health visitors, and family or maternity mentors (specialists who guide families through pregnancy and early parenthood). This collaboration ensures that support is both comprehensive and coordinated.

We were told that, without the programme, professionals would face much greater pressure as they would lose a critical avenue for supporting families, leaving families without access to specialised early intervention services that focuses on bonding and mental health. This would create capacity issues, with health visitors and midwives having to manage increased caseloads.

HLM hosted a range of training workshops for a broad spectrum of professionals including nurses, foster carers and assistant psychologists. For example, they offer sessions on "Attachment and Baby Brain Development" (how babies form emotional bonds and how their brains grow) and "Trauma-Informed Practice in the Early Years" (understanding and responding to the impact of traumatic experiences on young children). These sessions aim to enhance professional knowledge and practice by providing tools for promoting behavioural changes in families and guiding practitioners through challenges and frustrations.

The HLM training programmes also provide a shared language within the sector in relation to early years social and emotional development and concerns; a clearer and more standardised approach for referrals to parent-infant relationship support services; increased confidence in their practice with families; and a greater understanding of early development milestones. Overall, the HLM training programmes have contributed significantly to the professional development and wider system of early years social and emotional development professionals in Nottingham.

Professionals who work with families in Nottingham City can also book consultations with HLM to discuss challenging cases and seek professional, specialist advice from a member of the HLM team. This collaborative approach not only helps families directly but also builds a strong network for sharing knowledge and best practices across the city.

HLM's long-term impact includes developing a skilled and confident workforce. As a result, parents reported that they felt more connected to their children and more confident as they move on to use general health services.

#### WHAT IS THE IMPACT OF HEALTHY LITTLE MINDS ACCORDING TO LOCAL PROFESSIONALS?

A survey of 25 professionals in the health and social care sector revealed that 52% (13 respondents) had completed at least one HLM training programme in the last year, while 68% (17 respondents) had worked directly with HLM. The survey found that 55.6% (14 respondents) felt that HLM provided professional advice and guidance to help them in their role.

A third (33.3%) felt that the existence of HLM helps shorten the timeframe in which they work with families due to the team's holistic approach and focus on providing early intervention to young families. Over 27% agreed that referring families to HLM helps reduce the risk of the families they work with, which subsequently reduces their caseload.

A small proportion of respondents felt that the interventions available at HLM reduced the need for children to go into care, as the variety of interventions helps parents build secure and healthy attachments with their babies, reducing the likelihood of neglect, abuse, and mental health problems that often result in children needing to go into care.

Of the 18 respondents who completed the HLM service and training survey, 14 provided insights into the types of families that they believe would benefit from a referral into HLM. All 14 respondents agreed that they would refer medium to high risk cases into HLM, while all but one (92.9%) would refer low risk families into HLM. Some respondents noted that alternative options are available, such as the GP, perinatal mental health team, social care, NSPCC, and family hubs. However, several respondents felt that HLM offers a unique service that fills a gap in the wider system in Nottingham City, focusing deeply on the parent-infant bond and infant brain development.

The HLM training programmes have significantly increased the knowledge and skills of professionals in the field of early years social and emotional development. Most respondents (92.9%) found the training programmes informative and professional, enhancing their understanding and awareness of the importance of the first 1,001 days of a baby's life. They also reported that they had been able to apply the knowledge and skills learned from the HLM training programme in their own work and practice.

Over half of the respondents felt that the training had made a positive impact on their role and professional development, while just under half stated that the training had made a positive impact on the wider system in Nottingham City. Over three-quarters of respondents agreed that the training programmes had increased their confidence in leading challenging conversations with families, while over half felt that the training had improved their support skills to encourage positive behaviours and attachments within the families they work with.



# WHAT IS THE ECONOMIC IMPACT OF HEALTHY LITTLE MINDS?

Healthy Little Minds has emerged as an important service, known for its positive impact on families facing significant challenges in bonding with their babies. Its commitment to fostering strong parent-child relationships and offering specialised support has made HLM an important element of early childhood mental health interventions in Nottingham.

We calculated, using methods detailed in Appendix 1, that the annual costs of HLM amount to £471,631 while its accrued benefits are likely to be around £4,643,073. This demonstrates that HLM offers significant value for money. Some operating costs were unavailable and therefore not included in the analysis, and it is not possible to accurately ascribe a monetary value to all the social and emotional impacts of the work. However, even with these limitations, HLM shows a likely return on investment of up to £9.84 for each £1 spent. This indicates an efficient and beneficial use of resources and underscores the programme's effectiveness and contribution to the mental health and wellbeing of parents and infants. HLM also brought generational benefits, helping to break cycles of poor parenting and improving outcomes for future generations. Through their early intervention and prevention approach, the programme has economically benefited the wider system by reducing the need for additional mental health and educational interventions, which are typically more costly.

# **CONCLUSIONS**

The Healthy Little Minds (HLM) intervention exemplifies cost-effective early childhood mental health support, delivering a return on investment of £9.84 for every £1 spent. HLM offers immediate benefits to families while generating significant long-term economic savings. The programme's focus on early intervention and prevention reduces the need for more expensive mental health and educational services, thereby alleviating future financial burdens on the health care system.

Although HLM is a relatively new service, we have observed significant improvements in family outcomes. It provides professional workforce training, extending support across Nottingham City. Collaborating with the Parent-Infant Foundation, HLM aligns with Nottingham's goal of becoming a UNICEF child-focused city, demonstrating its commitment to supporting families' and infants' mental health.

HLM operates efficiently through a holistic approach, offering diverse and inclusive support mechanisms which address the unique needs of children and parents. This model ensures that the service reaches a broad spectrum of the population, providing essential support and fostering improvements in mental health and wellbeing across generations.

A notable aspect of HLM is that it is not perceived as a children's social care service, which can help parents feel more comfortable seeking support. Universal services often struggle to build trust due to intergenerational fears and general distrust of statutory services. However, HLM is seen as a trusted resource, with positive word-of-mouth within communities. The service has received high satisfaction ratings, with all respondents indicating they would recommend HLM to others. Additionally, HLM's coproduction model involves families in treatment planning and goal-setting, enhancing the personalisation and effectiveness of interventions. This collaborative approach improves individual outcomes and strengthens the wider community.

As a result, HLM contributes to improved emotional stability, school performance, and long-term mental health for children, providing economic benefits and reinforcing its importance as a service. The value HLM delivers extends beyond immediate returns, supporting a healthier, more resilient future generation.

For professionals like health visitors, midwives, and social workers, HLM is a useful resource. Without it, these professionals would face greater pressure and increased caseloads.

#### **KEY STRENGTHS OF THE MODEL**

Stakeholders and service deliverers across the UK can learn from the experiences of HLM in Nottingham and incorporate the strengths of the approach into their services. The key strengths of the HLM approach include:

- Providing specialised early intervention focused on parent-infant relationships and mental health
- Offering flexible support pathways that are not limited by the number of sessions or long waiting lists
- Ensuring quick response times to help families access timely support
- Adopting an inclusive approach that supports diverse families and provides interpreters when needed
- Building strong relationships with families through personalised and trusted support
- Using evidence-based interventions such as Video Interaction Guidance and Newborn Behavioural Observations
- Providing professional workforce training to create a ripple effect of support across the community
- Adopting a coproduction model that places families at the heart of treatment planning and decisionmaking
- Implementing robust monitoring and evaluation processes to track clinical improvements and outcomes.

The economic case for adopting these approaches is compelling, as early intervention and prevention can lead to significant cost savings by reducing the need for more expensive mental health and educational interventions in the future. By integrating these strengths into their services, stakeholders and service deliverers can make a meaningful impact on the wellbeing of families and children across the UK.

# **REFERENCES**

Bank of England (n.d.) *Inflation calculator*. Available from: https://www.bankofengland.co.uk/monetary-policy/inflation/inflation-calculator [Accessed 29 October 2024]

Bauer, A., Parsonage, M., Knapp, M., Iemmi, V. and Adelaja, B. (2014) *The Costs of Perinatal Mental Health Problems*. London: Centre for Mental Health and Personal Social Services Research Unit. Available from: https://www.centreformentalhealth.org.uk/publications/costs-perinatal-mentalhealth-problems [Accessed 6 February 2025]

Carlson, K., Mughal, S. and Azhar, Y. (2025) *Perinatal Depression*. In: StatPearls. Treasure Island, FL: StatPearls Publishing. Available from: <a href="https://pubmed.ncbi.nlm.nih.gov/30085612/">https://pubmed.ncbi.nlm.nih.gov/30085612/</a> [Accessed 24 February 2025]

Institute for Health Metrics and Evaluation (2021) *Anxiety disorders*. Available from: https://www.healthdata.org/gbd/methods-appendices-2021/anxiety-disorders [Accessed 15 October 2024]

MacAlister, J. (2022) *Independent review of children's social care: Final report*. London: GOV.UK. Available from: https://www.gov.uk/government/publications/independent-review-of-childrens-social-care-final-report [Accessed 21 October 2024]

McCabe-Beane, J. E., Segre, L. S., Perkhounkova, Y., Stuart, S. and O'Hara, M. W. (2016) The identification of severity ranges for the Edinburgh Postnatal Depression Scale. *Journal of Reproductive and Infant Psychology*, 34 (3) 293-303. doi: 10.1080/02646838.2016.1141346

NHS England (2019) NHS Long Term Plan. Available from: https://www.longtermplan.nhs.uk/ [Accessed 6 February 2025]

OECD Public Health Explorer (2019) 2.3. Calculating disability weights. Available from: http://oecdpublichealthexplorer.org/ncd-doc/disease/disability\_weights.html#section-dw-depression [Accessed 15 October 2024]

Patient (2024a) *Generalised anxiety disorder assessment*. Available from: https://patient.info/doctor/generalised-anxiety-disorder-assessment-gad-7 [Accesse: 15 October 2024]

Patient (2024b) *Patient health questionnaire: PHQ-9*. Available from: https://patient.info/doctor/patient-health-questionnaire-phq-9 [Accessed 16 October 2024]

Public Health England (2019a) Early Years High Impact Area 2: Supporting maternal and family mental health. Available from: https://www.gov.uk/government/publications/commissioning-of-public-health-services-for-children/early-years-high-impact-area-2-supporting-maternal-and-family-mental-health [Accessed 6 February 2025]

Public Health England (2019b) *Guidance: Perinatal mental health*. London: GOV.UK. Available from: https://www.gov.uk/government/publications/better-mental-health-jsna-toolkit/4-perinatal-mental-health#:\_:text=This%20should%20allow%20at%20least,social%20outcomes%20of%20the%20child [Accessed 10 November 2024]

Public Health England (2021) Best Start for Life: A Vision for the 1,001 Critical Days. Available from: https://www.gov.uk/government/publications/the-best-start-for-life-a-vision-for-the-1001-critical-days [Accessed 6 February 2025]

UNICEF (n.d.) Child Friendly Cities and Communities. Available from: https://www.unicef.org.uk/child-friendly-cities/ [Accessed 6 February 2025]

# **APPENDIX 1: HEALTHY LITTLE MINDS ECONOMIC EVALUATION**

Economic benefits in this context include the positive outcomes associated with the Healthy Little Minds service, such as reduced service usage and positive impacts on anxiety and depression. These benefits contribute to a holistic assessment of the service's economic impact and its value to the community.

#### 1. ECONOMIC BENEFITS: REDUCED ANXIETY

A total of 39 women were assessed using the GAD-7 pre- and post-intervention to identify changes in levels of anxiety. The average score pre-intervention was 11 and the average score post-intervention was 9. The duration of said decrease was not reported. If we assume this decrease is permanent, this translates into an average 18% reduction in anxiety as a result of the Healthy Little Minds intervention.

In order to monetise the changes in anxiety levels, we estimated the Disability-Adjusted Life Years (DALYs) change as a result of this. DALYs are a measure of overall disease burden, expressed as the number of years lost due to ill health, disability, or early death. In this context, a DALY would represent the impact of anxiety on a person's quality of life, considering both life expectancy and life quality.

Using data from the 2019 Global Burden of Disease study, the 'disability weight' associated with anxiety is estimated at 0.03 for mild anxiety, 0.133 for moderate anxiety, and 0.523 for severe anxiety (Institute for Health Metrics and Evaluation, 2021). Disability weights are used to represent the severity of disability that a specific health condition imposes on an individual. It is represented as a numerical value ranging from 0 (perfect health) to 1 (equivalent to death), providing a standardised measure to assess the overall burden of a disease on a population.

Based on the calculation of an 18% decrease in anxiety levels, and therefore on the disability weight associated with it, and assuming linearity in the distribution of disability weight, there would be a 0.0054 decrease for mild anxiety, a 0.02394 decrease for moderate anxiety, and a 0.09414 decrease for severe anxiety. Using the value of a DALY as equivalent to GDP per capita in 2023, at £33,497, it follows that an 18% decrease in mild anxiety would be worth £181.88, a decrease in moderate anxiety would be worth £802.92, and a decrease in severe anxiety would be worth £3,153.41.

The GAD-7 states that a score of 0-4 signifies 'no anxiety', a score of 5-9 signifies 'mild anxiety', a score of 10-14 signifies 'moderate anxiety', and a score of 15-25 signifies 'severe anxiety'. (Patient, 2024a). According to the data, at the assessment stage, 9 women (23.1%) had mild anxiety, 12 women (30.8%) had moderate anxiety, and 10 women (25.6%) had severe anxiety. Note: 20.5% of women had no anxiety and will not be included in this analysis.

Combining the DALY values with the prevalence data of the cohort, the associated decreases in mild, moderate and severe anxiety following Healthy Little Minds intervention would be worth £1,627.95, £9,623.02, and £31,534.08 respectively. The total decrease in anxiety associated with the Healthy Little Minds programme can therefore be estimated at £42,785.05. This figure is likely to be higher but was impacted by missing data.

#### 2. ECONOMIC BENEFITS: REDUCED DEPRESSION

A total of 8 women were assessed using the PHQ-9 pre- and post- intervention to identify changes in levels of depression. The average pre-intervention score was 12 and the average post intervention score was 11. The duration of this decrease was not recorded. If we assume the decrease is permanent, this translates to an average 8.3% reduction in depression as a result of the Healthy Little Minds intervention.

As we did with anxiety levels, to monetise changes in depression levels, we estimated the DALYs change as a result of this. In this context, a DALY would represent the impact of depression on a person's quality of life, considering both life expectancy and life quality.

Using data from the Organisation for Economic Co-operation and Development (OECD) Public Health Explorer (2019), the disability weight associated with depression is estimated at 0.145 for mild depression, 0.396 for moderate depression, and 0.658 for severe depression (OECD Public Health Explorer, 2019). Based on the calculation of an 8.3% decrease in depression levels, and therefore on the disability weight associated with it, and assuming linearity in the distribution of disability weight, there would be a 0.012035 decrease for mild depression, a 0.032868 decrease for moderate depression, and a 0.054614 decrease for severe depression. Using the value of a DALY as equivalent to GDP per capita in 2023, at £33,497, it follows that an 8.3% decrease in mild depression would be worth £403.14, a decrease in moderate depression would be worth £1,100.98, and a decrease in severe depression would be worth £1,829.41.

The PHQ-9 states that a score of 0-4 signifies 'no depression', a score of 5-9 signifies 'mild depression', a score of 10-14 signifies 'moderate depression', and a score of 15-27 signifies 'severe depression' (Patient, 2024b). For this analysis, we have separated out the 'moderately severe' scale and assigned scores of 10-17 to signify 'moderate depression' and scores of 18-27 to signify 'severe depression'. According to the data, at the assessment stage, 1 woman (12.5%) had mild depression, 5 women (62.5%) had moderate depression, and 1 woman (12.5%) had severe depression. Note: 12.5% of women had no depression and will not be included in this analysis.

Combining the DALY values with the prevalence data of the cohort, the associated decreases in mild, moderate and severe depression following Healthy Little Minds intervention would be worth £403.14, £5,504.90, and £1,829.41 respectively. The total decrease in depression associated with the Healthy Little Minds programme can therefore be estimated at £7,737.44. This figure is likely to be higher but was impacted by missing data.

#### 3. ECONOMIC BENEFITS: REDUCED PERINATAL AND POSTNATAL DEPRESSION

A total of 34 women were assessed using the Edinburgh Postnatal Depression Scale (EPDS) pre- and post- intervention to identify changes in perinatal and postnatal depression. The average pre-intervention score was 14 and the average post-intervention score was 11. The duration of this decrease was not recorded. If we assume the decrease is permanent, this translates to an average 21.4% reduction in perinatal and postnatal depression as a result of Healthy Little Minds' intervention.

In this context, DALY would represent the impact of perinatal and postnatal depression on a person's quality of life, considering both life expectancy and life quality. Although perinatal depression and postnatal depression do not always present in the same way as depression and they are not always treated in the same way, they often share similar symptoms and can both be acute or long-term (Heger, 2022). For this reason, and due to a lack of disability weights associated with perinatal and postnatal depression, we have used disability weights associated with depression for this valuation.

Using data from the Organisation for Economic Co-operation and Development (OECD) Public Health Explorer (2019), the disability weight associated with depression is estimated at 0.145 for mild depression, 0.396 for moderate depression, and 0.658 for severe depression (OECD Public Health Explorer, 2019). Based on the calculation of an 21.4% decrease in depression levels, and therefore on the disability weight associated with it, and assuming linearity in the distribution of said disability weight, there would be a 0.03103 decrease for mild depression, a 0.084744 decrease for moderate depression, and a 0.140812 decrease for severe depression. Using the value of a DALY as equivalent to GDP per capita in 2023, at £33,497, it follows that an 21.4% decrease in mild depression would be worth £1,039.41, a decrease in moderate depression would be worth £2,838.67, and a decrease in severe depression would be worth £4,716.78.

McCabe-Beane *et al.* (2016) states that a score of 0-6 on the EPDS signifies 'no or minimal depression', a score of 7-13 signifies 'mild depression', a score of 14-19 signifies 'moderate depression', and a score of 19-30 signifies 'severe depression' (Patient, 2024b). According to the data, at the assessment stage, 11 women (32.4%) had mild depression, 8 women (23.5%) had moderate depression, and 8 women (23.5%) had severe depression. Note: 20.6% of women had no or minimal depression and were not included in this analysis.

Combining the DALY values with the prevalence data of the cohort, the associated decreases in mild, moderate and severe perinatal and postnatal depression following Healthy Little Minds intervention would be worth £11,433.53, £22,709.36, and £37,734.24 respectively. The total decrease in perinatal and postnatal depression associated with the Healthy Little Minds programme can therefore be estimated at £71,877.13. This figure is likely to be higher but was impacted by missing data.

#### 4. ECONOMIC BENEFITS: SOCIAL SERVICES

The economic benefits stemming from reduced usage of critical public services such as family social services are multifaceted. Service usage decrease translates into a lower call on public resources, allowing for a more efficient allocation of both funds and labour force. The financial costs associated with family social services are alleviated, potentially resulting in substantial savings for both government and individuals.

Using the red-amber-green (RAG) rating system implemented at Healthy little Minds, we can identify families who are either being supported by social services or at risk of needing support from social services.

In 2022, the average cost of a child in need of a social worker was £26,900 per year (MacAlister, 2022). A total of 46 families, which included 52 infants (7 unborn) accessing Healthy Little Minds' services were rated as red (or severe). These are families who may have experienced previous removal of children from their care, may not be meeting their basic needs, and whose environment may present a safeguarding concern. Additionally, a total of 86 families, including 92 infants (10 unborn) were rated as amber (or moderate).

We do not know the exact number of children who needed the support of a social worker. If all 52 infants in the families rated as red or severe either no longer needed support from social services or avoided needing support from social services due to intervention from Healthy Little Minds, this could translate to a cost savings of £1,398,800. Additionally, if all 92 infants in the families rated as amber or moderate were prevented from reaching a red or severe RAG rating and avoided needing support from social services due to intervention from Healthy Little Minds, this could translate to a cost saving of £2,474,800. This could amount to a total cost saving of £3,873,600. As we do not know the exact numbers of how many children were both in contact with social services and Healthy Little Minds, this could be an overestimation or underestimation and it should be taken with caution.

#### 5. ECONOMIC BENEFITS: WIDER COSTS OF PERINATAL MENTAL HEALTH PROBLEMS

It is estimated that perinatal mental ill health costs the UK between £1.2 billion to £8.1 billion annually (Public Health England, 2019b). A joint report by Centre for Mental Health and the LSE Personal Social Services Research Unit (2014) outlined the potential impacts of perinatal depression and anxiety on public health and social care and the wider society.

In 2014, the impact of perinatal depression on mothers was estimated to cost the public sector, per case, £1,688 in health and social care and cost the wider society £2,514 in productivity losses per case. In addition, the impact of perinatal depression on children includes costs to the public sector and wider society, per child:

- £2,831 in health and social care costs
- £3,166 in education costs
- £1,974 in criminal justice costs
- £5,451 in productivity losses

This amounts to a total of £4,202 per mother and £13,422 per child. When adjusted to 2023 inflation figures, these cost £5,557.27 per mother and £17,750.98 per child to the public sector and wider society (Bank of England, n.d.). As mentioned previously and according to the EPDS, 11 women had mild depression, 8 women had moderate depression, and 8 women had severe depression at the assessment stage (27 in total). These women had 28 children between them. With an average reduction of 21.4% as a result of Healthy Little Minds intervention, we can estimate cost savings of £150,046.29 per parent/carer and £497,027.44 per child; a total cost saving of £647,073.73 to the public sector and wider society.

#### **ECONOMIC COSTS**

Economic costs in this context encompass the expenditures associated with running the service, including salaries and operational expenses such as facilities and other running costs. These financial outlays are important to evaluating the overall economic impact and efficiency of the service provision.

#### 1. Operating costs: Staff salaries

The following breakdown provides a comprehensive understanding of the staffing structure and associated costs. For Healthy Little Minds, the staffing composition is as follows: 1 x Project Administrator, 5 x Maternity and Family Support Workers, 4 x Specialist Practitioners, 1 x Senior Specialist Practitioner, 1 x Team Manager, and 1 x Service Lead.

We calculated the average total running costs associated with the total staff employed at Healthy Little Minds and their average annual salaries. We have not shared salary information in this report for confidentiality reasons. The total cost is £471,514 per year.

#### 2. Operating costs: Healthy Little Minds training programme

Training is free to attend for professionals within Nottingham City. The time cost for the team is somewhere between 3-6 hours a month on average, depending on the number of sessions booked in that month. There is minimal printing costs associated with each session, and in the PIR toolkit workshop resource packs cost around £4.50 to make.

We know from training outcomes data that at least 26 professionals took part in the PIR workshop and were therefore provided with resource packs costing around £4.50. This translates to a total minimum cost of £117.00. This figure is likely to be an underestimate.

Additionally, between November 2022 and May 2024, Healthy Little Minds ran a total of 38 training sessions. To estimate the average number of sessions run per year, we used the number of sessions run in 2023, which was 25. These training sessions were delivered by three Specialist Practitioners and one Senior Specialist Practitioner. We divided the 25 training days between the four practitioners which amounted to 12.5 training days each. The average daily rates of each practitioner were multiplied by the 12.5 training days. This amounted to a total of £6,605.35 training costs per year. These costs would be included in the annual salary costs and are, therefore, not included in the final cost figure.

#### 3. Operating costs: Any other operating costs

Healthy Little Minds were not able to provide other operating costs, such as building costs, due to working from shared service centres within the city.

#### **COST-BENEFIT WEIGHTING**

Weighing up the costs (a total of £471,631 a year) and benefits (total of up to £4,643,073 a year) quantified for the present evaluation, Healthy Little Minds is likely to provide good value for money. Importantly, some operating costs were not available and were therefore not included; and it is not possible to accurately monetise the impact on social and emotional developments and perceived warmth. Taking this into consideration the Healthy Little Minds service exhibits a return on investment of around £9.84 for each £1.





# 'HERE FOR AS LONG AS YOU NEED US' AN EVALUATION OF THE HEALTHY LITTLE MINDS PARENT AND INFANT PROGRAMME

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