



EARLY
INTERVENTION
FOUNDATION

FOUNDATIONS FOR LIFE

***WHAT WORKS TO SUPPORT PARENT CHILD INTERACTION
IN THE EARLY YEARS***

WHAT THE REVIEW MEANS FOR COMMISSIONERS

The Early Intervention Foundation has published a ground breaking assessment of 75 early intervention programmes aimed at improving child outcomes through positive parent child interactions in the early years. But what does this mean for commissioners of children's, maternity and public health services?

OVERVIEW

Parent child interactions in the early years matter. Parents and care givers lay the foundations for children's ability to develop crucial life skills including the ability to build productive relationships, emotional regulation, communication, problem solving as well as strengthening their self esteem. Young children thrive in environments that are predictable and responsive to their needs. Children can struggle, however, when environments are neglectful, unpredictable or overwhelming.

The EIF review describes a **UK market place of programmes to support parent child interaction which is vibrant and full of potential, but in need of development.** 17 programmes are well-evidenced, and a further 18 have preliminary evidence of child impact. Many others at an earlier stage of development are committed to developing their evidence, but must be supported to do so.

Commissioners of local children's, maternity and public health services have a critical role in both growing and applying the UK early intervention evidence base. They need access to the latest evidence to inform spending decisions, but also to invest in better monitoring and testing of promising and innovative interventions being delivered in the UK to grow the evidence base.

Building evidence of programme impact has a number of stages that take time. Preliminary positive findings do not always lead to substantial outcomes for families. A vital part of this journey is learning from the things that have not worked and adapting interventions in response.

Careful implementation is as important to the success of a programme as evidence that it has worked previously. The quality of a programme's implementation systems and the readiness for change of a local area can combine to make or break a programme regardless of success elsewhere.

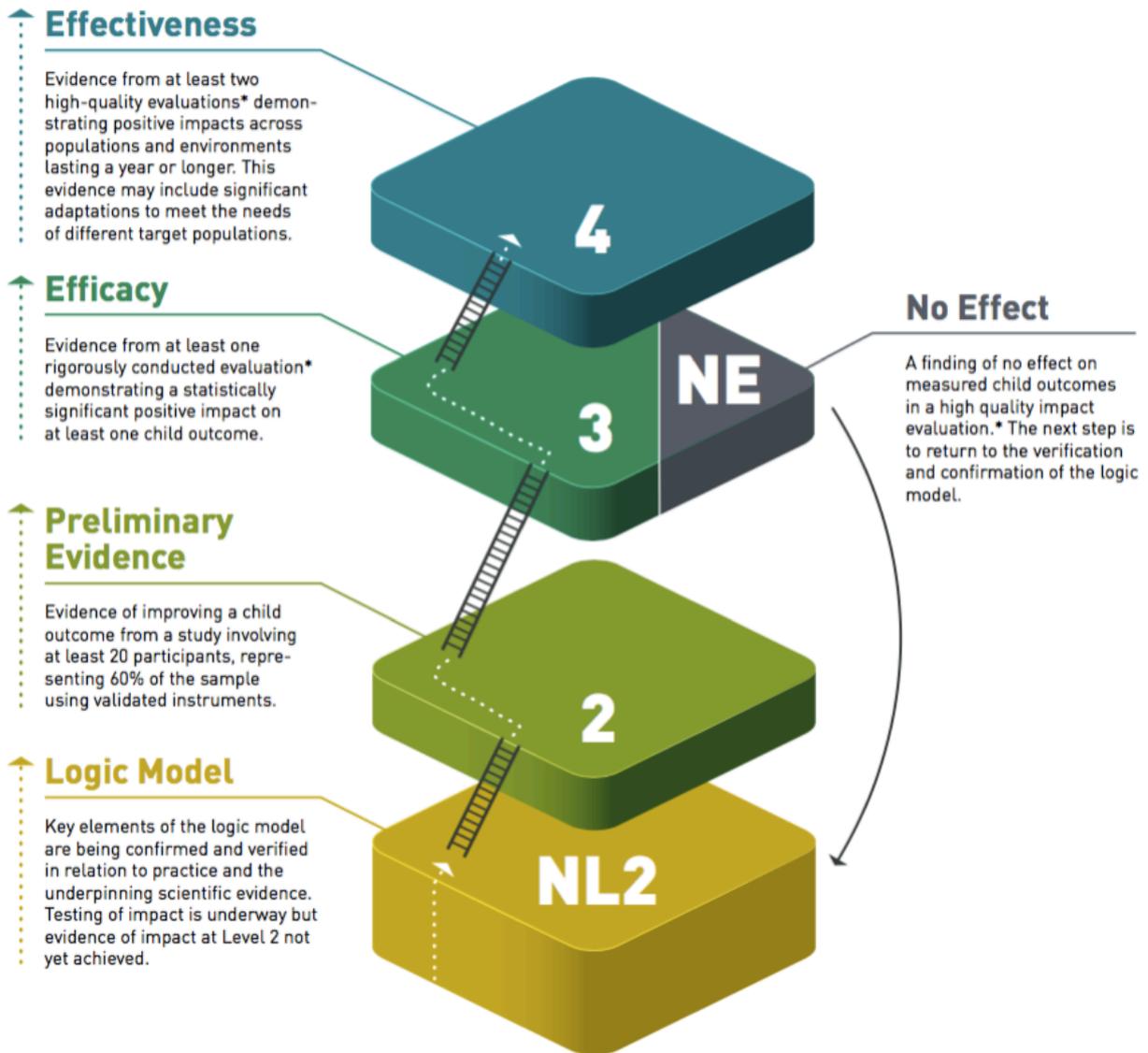
If early intervention is to realise its potential the UK must use evidence to inform commissioning, prioritise evaluation and testing, and incentivise innovation.

KEY REVIEW FINDINGS

Programme Ratings & Costs

1. There is a range of well evidenced and promising interventions that, if carefully commissioned to ensure they fit with local need and context, are likely to be effective in tackling problems identified in the early years. This includes:
 - 17 programmes which can be considered to have good evidence of impact because they have been shown to improve specific outcomes for children in at least one robust study.
 - 18 programmes which have shown positive initial findings in a good pilot study, and, although they do not yet have evidence that they work, are based on sound scientific principles.
2. For the purpose of this review we have classified early intervention programmes as:
 - UNIVERSAL: Available to all families, often taking place alongside or as part of universal services such as health visiting, schools and children’s centres.
 - TARGETED-SELECTED: Applies to programmes which target or ‘select’ families with characteristics that place them at greater risk of experiencing problems.
 - TARGETED-INDICATED: Applies to programmes which target families with a child or parent with a pre-identified issue or diagnosed problem.
3. The evidence is strongest for programmes that target based on early signals of risk, such as child behaviour problems, insecure attachment, delayed development of speech and lack of maternal sensitivity. This doesn’t mean that whole population programmes or programmes that target on the basis of demographic factors are ineffective, but that the evidence in general was not as strong as for the more targeted programmes identified in this review. Universal *services* remain vital to support families and children as a whole and as a means to identify risk and target support on those who need it most.
4. 37 programmes were rated by the EIF review as NL2, or Not Level 2. These programmes cannot yet be considered evidence based, but many are based on good science and robust implementation processes. Given the right kind of support they could become the high quality, evidence based interventions of the future.
5. Five programmes were rated by the EIF review as having ‘no effect’ due to evidence from a rigorous study which failed to show consistent benefits for children. This doesn’t mean that these programmes will never work, but they would need to review their theory of change and adapt and improve their programme model. Demonstrating impact is a journey. It would be unwise to automatically decommission a programme on the basis of disappointing evaluation findings – in fact many of the best evidenced programmes have had evaluation setbacks in the past, and learnt from these to strengthen the programme model. Experimentation of this sort can be the source of breakthroughs and greater innovation.
6. Commissioners must be able to satisfy themselves that the programme is meeting the needs of their local population by carefully monitoring results and ensuring further testing and evaluation. It should be recognised that programmes which do not yet have evidence of impact are at the stage of experimenting, piloting and testing. They are not established and proven. This distinction matters and commissioners share the responsibility of evaluation with providers.
7. EIF have developed a system to assess the relative input costs of early intervention programmes and ranked programmes based on how resource intensive they are per child supported. The majority of programmes fall into the medium-low and low cost categories.

EIF Evidence Standard: Strength of Evidence



*High quality evaluations do not need to be a randomised control trial if a relevant and robust counter-factual can be provided in other ways.

The EIF standards were developed to assess the impact and cost of interventions. The strength of evidence rating is broadly similar to the Maryland Scale in its higher level ratings, but also recognises stages of development. The scale provide a rational system for describing and assessing evaluation along a continuum ranging from early stages of development to replicated findings in multiple rigorous evaluations. In this respect the schema provides a *summative* system which enables us to advise commissioners about which programmes have good evidence of having been effective.

The schema also provides clear guidelines and advice on the *formative* use of evaluation evidence to develop programmes and practices. From this perspective the standards constitute a set of steps that providers and commissioners can take to develop a programme’s evidence base.

The first five years of life represent a time when children first learn important tasks that lay the foundation for future learning. Children master these tasks through their interactions with their parents and environment within the context of three inter-related domains: the attachment relationship, early behaviour and self-regulatory processes and emerging cognitive and linguistic skills.

ATTACHMENT

Forming a secure attachment with a caregiver is a key to children's social and emotional development and ability to self regulate emotions. Some parents struggle to develop a secure attachment with their child. About 15% of toddlers are classed as having disorganised attachment.

Systematic reviews have identified two categories of effective attachment interventions: short-term interventions that coach sensitive parenting behaviours; and psychotherapy to help parents to alter negative internal representations of their child.

REVIEW FINDINGS:

- EIF has found 5 programmes (18%) with good evidence (Levels 3 & 4) of improving children's attachment security or attachment related behaviours.
- 21 of the programmes assessed by EIF (75%) which aim to improve attachment are yet to test effectiveness using high quality impact evaluation designs (Level 2 and NL2). Of these, 6 programmes have preliminary evidence that they may be effective (Level 2). The other 15 have not been tested for impact (NL2), but many are based on sound science and implementation design and need further testing.

More generally, we have found that:

- Attachment is a very important feature of child development. Programmes that can help enhance attachment have demonstrated substantial reductions in important risks for vulnerable children.
- Attachment can be hard to measure, develops early in life and can change through childhood. Therefore, programmes can find it difficult to demonstrate impact. Some, however, have done so and there are evidence based examples at all 3 of the levels of need considered.
- Four out of the five evidence-based attachment programmes were relatively high cost (in comparison other programmes in this review), involving frequent contact with vulnerable families for a period of a year or longer.
- However, these programme are also relatively high impact, with evidence of improving attachment security, children's early language and reducing child maltreatment.

Aggressive and defiant behaviours are a normal part of a toddler's development and reflect growing independence expressed through immature communication and ability to self-regulate. Over time, most children replace aggressive behaviours with skills of negotiation and impulse control.

A minority (5-15%) of children, however, will tend to carry on behaving aggressively once they enter school. How parents react is critical in determining children's ability to develop alternative ways to deal with their frustrations and anger.

Research consistently suggests that some parenting behaviours increase the likelihood that children will carry on behaving aggressively as they grow older. Parent training programmes teach parents strategies for managing and reducing their child's aggressive behaviour. When targeted and implemented well, some of these programmes have the potential to improve children's behaviour at school and prevent antisocial behaviour when they are older.

REVIEW FINDINGS:

- EIF has found 10 programmes (37%) with good evidence in improving children's behaviour (Level 3 and 4 Evidence).
- 15 of the programmes assessed by EIF (56%) are yet to test effectiveness using high quality impact evaluation designs (Level 2 and NL2). Of these, 5 programmes have preliminary evidence that they may be effective (Level 2). The other 10 have not been tested for impact (NL2), but many are based on sound science and implementation design and need further testing.

More generally, we have found that:

- There a number of programmes with good evidence of improving children's behaviour.
- Their best evidence involves families with a noncompliant child aged 2 or older. Noncompliant child behaviour is a normal part of toddler development. Most children outgrow this by the time they are three, but some children continue to show problems after age three. Parents with a noncompliant three year old child often want and need more help.
- When well targeted, these programmes can keep problems from becoming worse and improve the parent/child relationship. There is less evidence for the effectiveness of programmes that aim to prevent problems emerging in the first place.
- Evidence based programmes to enhance behaviour tend to be relatively low cost, often based on group activity and of relatively short duration (in comparison other programmes in this review).

Children’s cognitive development is partly determined by the child’s early environment and parenting. Some children can be disadvantaged in the early years as a result of poverty or the inability of their parents to scaffold their learning effectively.

The focus of many cognitive development programmes is on delivering enriched early learning opportunities to families living in disadvantaged communities, including use of an enhanced preschool curriculum with individual support for parents; home visiting to teach parents scaffolding strategies and help them create a stimulating home environment; and language and pre-literacy programmes.

Studies repeatedly suggest that the length and intensity of the intervention contributes strongly to the size and duration of its impacts. Less intensive activities such as book gifting and short-term parent training typically demonstrate fewer lasting benefits.

REVIEW FINDINGS:

- EIF has found 2 programmes (10%) with good evidence of improving cognitive development (Level 3 and 4 Evidence).
- 17 of these programmes (85%) are yet to test effectiveness in depth (Level 2 and NL2). 7 programmes have preliminary evidence that they may be effective (Level 2). the other 10 have not been tested for impact (NL2), but many are based on sound science and implementation design and need further testing.

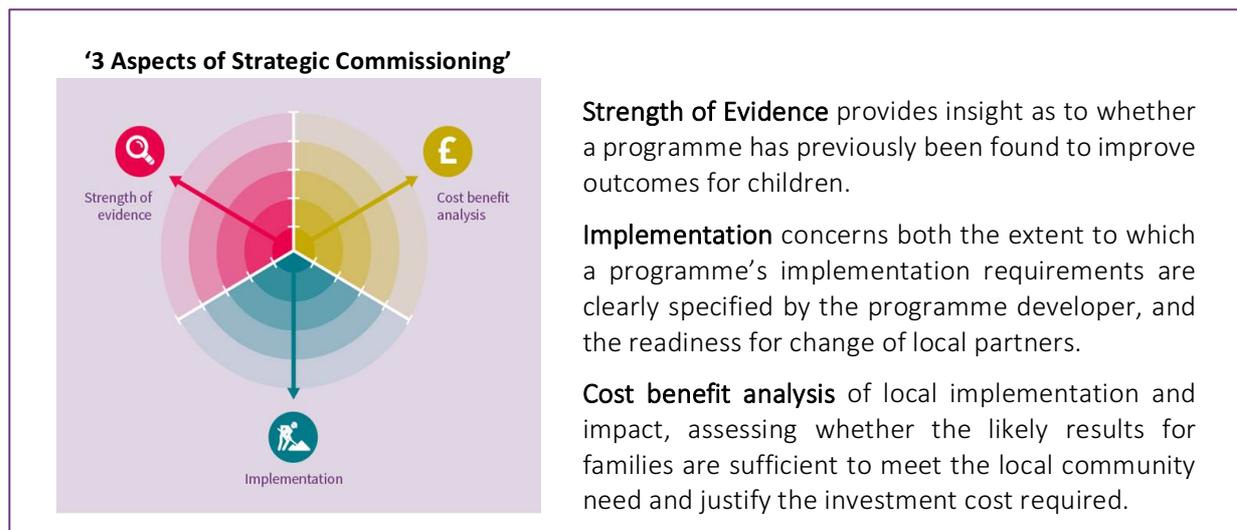
More generally, we have found that:

- Social disadvantage is consistently linked to gaps in young children’s cognitive and language development.
- The best evidenced programmes to improve cognitive development are the well known US programmes such as Abercedarian and HighScope that have been evaluated over long periods but are not readily available in implementable form in the UK.
- Within the domain of cognitive development the review had a particular focus on language and communication skills. The sample was relatively weak on identification of cognitive development programmes and so conclusions must be cautious.
- The evidence base for the programmes we have identified is relatively weak, although there are well evidenced interventions. This is surprising given the importance of the home environment to child cognitive development, the importance of cognitive development to school success and life chances and the considerable investment that has occurred over the last decades. It is clearly an important area for innovation, evaluation and development.
- As children start childcare and enter preschools these settings make substantial contributions to cognitive and social and emotional development and it is important there is good interaction between these settings and parents and carers that recognises the contribution of each.
- The interventions with good (Level 3) evidence of being effective are medium cost, reflecting the fact that they are delivered to families individually over a period of a year or longer.
- These features are consistent with the best evidence from the US programmes, although it is also clear that parenting interventions do not fully replace the need for centre-based provision for young children living in disadvantaged circumstances.

COMMISSIONER CHOICES

Aspects of Strategic Commissioning

This review was developed to help commissioners to apply research evidence to decisions about real world delivery. Evidence ratings are important because they can help commissioners judge how likely an intervention is to deliver a benefit for families. However, evidence ratings do not guarantee a result and EIF does not kitemark programmes. Just because a programme has previous evidence of impact does not mean that it will work in every place. Commissioners have to balance the strength of evidence with implementation capability and cost benefit analysis.



To be certain that a programme has delivered the intended results in a new context, commissioners must allow for the monitoring of both implementation quality and the impact on children and families.

There are signals of risk which are associated with insecure attachment, early childhood aggression and delays in cognitive development. These signals should be well understood in universal and targeted services and used to trigger early intervention support. EIF will be publishing further work on signals of risk in the early years and measurement tools in early 2017.

Universal prevention services such as midwifery, health visiting and childcare have a fundamental impact on demand for early intervention services. They play a crucial role in identifying children and families that are struggling and need early intervention support and they prevent early issues from turning into problems.

A balanced commissioning portfolio to support parent child interaction in the early years should include programmes which are promising or innovative as well as those with good evidence. Commissioners should ensure that where there is a greater the degree of experimentation, there is more focus on monitoring and evaluation.

Commissioning at different evidence levels

EIF EVIDENCE RATINGS		WHAT COMMISSIONERS SHOULD DO
Level 4 Evidence-based (replicated)	These programmes have been consistently shown to improve specific outcomes for children in multiple sites, often in different cultures and languages and so are considered to have established evidence of impact. This doesn't mean they will necessarily work in every place.	Commissioners can have confidence that these programmes should work if well implemented and appropriate to the local context, and so it would be recommended that these programmes might form the core of the local area's early intervention commissioning portfolio where they match with the local area's population needs and strategy for change.
Level 3 Evidence-based (single)	These programmes have been shown to improve outcomes for children in one place, but have yet to show that the positive evidence can be replicated or to test adaptations to local circumstance. There programmes are considered to have good evidence of impact.	Commissioners can have confidence that these programmes may work again if well implemented and appropriate to the local context, but should expect to contribute to a robust evaluation to demonstrate programme effectiveness. Along with programmes rated at level 4 it would be recommended that these programmes form the core of the local area's early intervention commissioning portfolio where they match with the local area's population needs and strategy for change.
Level 2 Preliminary	These programmes have shown positive initial findings in a good pilot study. They are not yet, however, able to show a causal impact on child development and so cannot yet be considered evidence based.	Commissioners should recognise that these programmes have potential, but do not yet have evidence of impact. They offer the opportunity to innovate, and a choice of different approaches, but this must be based on a careful assessment of fit with local needs and context, and a commitment to monitor, test, evaluate and adapt. These programmes are particularly important to commissioners where there is no existing well evidenced programme which fits the local requirements and budget.
Level NL2 ('not level 2')	These programmes do not yet have positive preliminary evidence of impact on child development, for a whole range of different reasons, including evidence of parent outcomes rather than child outcomes. EIF does not draw any conclusion about the likely effectiveness of these programmes. Some may in future prove to be very effective or important innovations. Others may not. Some have a very rigorous grounding in the underpinning science and theory, even if they have not yet been tested. Others are innovations that are just starting a journey of evaluation	These programmes are at an early stage of development when it comes to demonstrating that children will benefit. Commissioners should support experimentation and testing where there is no existing well evidenced programme which fits the local requirements and budget. Commissioners should assure themselves about the scientific and theoretical underpinning and logic model for a programme, the arrangements for robust implementation, and the expectations for monitoring and evaluation of implementation and child outcomes.
Level NE ('no effect')	These programmes have been judged by at least one rigorously conducted evaluation to have no positive effect for children. This does not mean that the programme will never work, but is a clear indicator that key aspects of the programme's logic model require re-specification and further evaluation.	It would be unwise to automatically decommission a programme on the basis of disappointing evaluation findings – in fact many of the best evidenced programmes of today have had evaluation setbacks in the past, and learnt from these to strengthen the programme model. Experimentation of this sort can be a source of breakthroughs and greater innovation. Commissioners, however, must be able to satisfy themselves that the programme is meeting the needs of their local population by carefully monitoring results and being involved in further testing and evaluation. It should be recognised that programmes which do not yet have evidence of impact are experimenting, piloting and testing, rather than established and proven, and commissioners must share the responsibility of evaluation with providers.

- The Early Intervention Foundation website hosts an online Guidebook with a Programmes Library which was created in 2014 to provide an accessible overview of the evidence. Later this year a subset of the programmes from this review will be added to the Guidebook as will programmes from other reviews. We will also upgrade the Guidebook so it provides clearer advice about the meaning of the evidence standards and about how to improve evidence, and with more ways for programmes to be registered.
- EIF will publish individual programme reports with detailed information about the evidence, implementation requirements and costs. These programme reports will be available from www.eif.org.uk.
- EIF has published an explanatory note explaining the EIF ratings systems for strength of evidence and costs, which is available here: <http://www.eif.org.uk/wp-content/uploads/2016/07/What-do-the-EIF-ratings-mean.pdf>.
- EIF has published a series of case studies which illustrate programmes at different levels of evidence. These are available here: <http://www.eif.org.uk/the-evidence-journey-case-studies-and-testimonials/>.
- EIF will publish a template slide deck which can be used to disseminate the findings of the Foundations for Life review, and be adapted to include locally bespoke information.

Keeping in touch with EIF

- EIF will run a dissemination programme to engage commissioners in the learning generated by this review, with a series of regional seminars and commissioner masterclasses between October 2016 and February 2017. To register an interest in attending contact info@eif.org.uk.
- EIF is launching a new network to bring together the local areas that have worked with EIF to champion early intervention programmes, practices and systems. The network will engage early intervention leaders with the evidence of what works and latest promising practice, support practical implementation and generate peer-to-peer learning.
- EIF has a monthly early intervention newsletter. To join the EIF mailing list contact info@eif.org.uk.

Further publications

- EIF will report later this year on what measures exist to best assess or identify risk, so as to provide advice to local Councils and others about how to identify the trends in development that signal a need for early intervention.

CONCLUSIONS AND RECOMMENDATIONS FOR COMMISSIONERS

- Commissioners should use this evidence to inform spending decisions

Direct spending towards programmes with a strong evidence base, and in promising and innovative programmes where there are currently gaps. At local level we would like to see a greater proportion of resource being directed towards well evidenced early intervention services.

- Consider this evidence alongside wider factors such as population need and local context

It is important that commissioners, when making decisions about which programmes might be most suitable, pay close attention to the age and the stages of child development for which programmes have been found to be appropriate. Effective targeting is not only about low socio-economic group, or other group differences such as gender, ethnicity, but also about the specific development achieved and issues of risk and delay. Local commissioners need to use this evidence alongside their knowledge of their local population and context to make carefully judged commissioning decisions.

- Develop clear and consistent approaches to assess risks across the early years system for children at key stages of development

This review shows that the evidence of effectiveness is strongest for programmes that target interventions based on early child signals of risk, such as child behaviour problems, insecure attachment, delayed development of speech or specific family factors such as lack of maternal sensitivity. It is crucial that practitioners across the universal and targeted system are clear about the signals of risk to child development and the most effective responses and interventions. For example, this review highlights the importance of being able to identify the children aged 3 who are not making the transition from aggressive behaviours to more sophisticated methods of negotiation and impulse control.

- Supporting the development of a 'test and learn' culture of evidence use

Local leaders in the early years system have an important role to play in creating a local culture which values and uses evidence. This means taking up opportunities to understand the latest evidence and consider its application; investing in skills development; and sharing promising practice and innovation.

- Supporting the development of the UK evidence base for early intervention

Local children's services, maternity and public health commissioners have a critical role in growing the UK early intervention evidence base, something which needs to happen if early intervention is to realise its potential. It is important that those commissioning and delivering services locally incentivise innovation and smaller scale evaluations to test promising and innovative interventions being delivered in the UK. Co-design with providers and the testing of interventions is needed, particularly in areas where the evidence base is less well developed such as attachment and support for cognitive development.