My Baby's Brain in Hertfordshire

The independent evaluation of Phase Two
2012 to 2013

Executive Summary

Deborah Ghate
The Colebrooke Centre for Evidence and Implementation

Christine Coe
Warwick Medical School, University of Warwick
Jane Lewis
The Colebrooke Centre for Evidence and Implementation

February 2014

This summary documents the key findings and recommendations arising from an impact and implementation evaluation carried out during 2012 and 2013 by the Colebrooke Centre for Evidence and Implementation, in collaboration with Warwick University Medical School, for Hertfordshire County Council's Childhood Support Services. The full report on the evaluation can be accessed at
http://www.hertsdirect.org/mybabysbrainevaluation
&
http://www.cevi.org.uk/publications.html

Background

1. **My Baby's Brain** has been under development by Hertfordshire County Council's Childhood Support Services since 2011. The initiative was "*conceived in order to convey in simple, accessible language, to parents of very young children, the principles of attachment and the direct impact they have on a baby's brain development*". It is based on a model developed by Kate Cairns Associates (www.katecairns.com), known as *Five to Thrive*, a "5-a-day" style model. It recommends that parents focus on five *'building blocks for a healthy brain'* when interacting with young babies: **Respond, Cuddle, Relax, Play** and **Talk.** These five principles are based in scientific evidence about their importance for positive child development and secure and healthy relationships, as well as their relationship with optimal brain development in the early years.

2. In its second Phase (2012-2013), My Baby's Brain was centred around a one-day structured course delivered by trainers from Kate Cairns Associates to nearly 400 staff working in early years services across the county. Training was delivered in multi-agency groups of around 30 practitioners, comprised of approximately equal proportions of staff from health professions and children's services. Trainees mainly

included children's centres staff and managers; health visitors and their managers; and a smaller group of social workers. The multi-agency approach was a key feature of the design, intended to ensure that all practitioners working in early years across the county would be aware of and able to use the same messages when working with local parents. Training was paid for by the council, backed up by materials for practitioners and for parents, and informal optional 'practice-sharing' events hosted by the council were held as follow-ups to the training. There is also a webpage hosted on the council's main website; www.hertsdirect.org/mybabysbrain.

3. My Baby's Brain was originally conceived as a universal approach, suitable for all parents in the local population, regardless of need. However over time its use has been extended to targeted groups of families with additional needs, particularly by children's social workers and Children's Centre staff. 'Embedded' use was described as the use of the messages and materials of the initiative woven into routine interactions with parents in a low-key, naturalistic way (for example, by introducing one or more of the five messages into conversation with parents during routine work in Children's Centres, home visits and baby clinics); 'structured' use implied the use of planned activities and sessions such as group discussions, and more explicit styles of delivery of the messages and materials. Both styles of delivery were widely used by practitioners irrespective of setting (universal, and targeted) or professional background (health or children's services).

4. The evaluation explored the **outcomes of the initiative for practitioners** from a range of agencies that participated in the training, and collected data from practitioners, parents, and strategic stakeholders from agencies within Hertfordshire. It also explored the **implementation of the initiative** at multiple levels: practitioners, services and the wider system of children's services within the county. Measurable impact on parents was not a strong focus of the research at this stage, in advance of full understanding of the implementation issues.

5. The research and analytic methods were underpinned by the use of theoretical frameworks drawn from intervention research and implementation science, and the methods included:
   - a survey of over 200 practitioners trained in the early part of 2013, using measures of change in knowledge, attitudes and practice repeated at three time points (pre-training, post-training and at 2-4 months follow-up);
   - 28 qualitative in-depth interviews;
   - analysis of costs data.

Outcomes for practitioners, and use in practice

Meeting a need

6. My Baby's Brain proved to be a highly popular initiative with early years staff and strategic stakeholders across the county. The survey of practitioners confirmed that it was meeting an important need. Although nine in ten practitioners already understood the importance of attachment to infant development, and six in ten used that knowledge 'a little' in their work prior to training, only 13% were using that knowledge 'a lot'. A large proportion had relatively little prior training in the theory or science of baby brain development. Children's services staff had least prior exposure to this field of science (40% had no prior training in this area), but health staff also reported gaps (21% had no prior training). Staff attending training were enthusiastic about the initiative, even where they viewed mainly it as a refreshment of existing knowledge rather than as a completely new area of learning.

Outcomes of training

7. My Baby's Brain was a successful and effective initiative in terms of outcomes for practitioners trained. In a few specific areas there were more substantial positive changes in the children's services practitioner group than for health practitioners, but these were matters of degree only and the overall picture was positive for all those trained.

8. Overall, the surveys showed that practitioners reported statistically significant positive changes in all dimensions of knowledge and attitudes. The changes were substantial for all types of practitioners, and notably, all the changes reported were sustained at follow up, which in some cases was at a time point three to four months after the training event. Almost all reported they had learned either 'a lot' (49%) or 'a little' (48%) during the training. After the training, almost all (nine out of ten) said they would use the five messages in their work with parents and would talk to colleagues about the initiative; eight in ten (79%) expected to change the way they worked with parents as a result; and seven in ten (71%) expected the quality of their practice to improve.

9. There were **statistically significant and sustained increases** in the following aspects of **knowledge and confidence**:

- ✓ Understanding the importance of attachment as a critical survival mechanism for small babies
- ✓ Knowledge of how babies' brains develop
- ✓ Understanding of the ways in which parents can affect their babies' development
- ✓ Confidence in knowledge about the theory and science of baby brain development
- ✓ Confidence in talking to parents about baby brain development

10. At follow-up two to four months after the training, there were also encouraging **changes in reported practice:**

- ✓ In the surveys, 90% said they had been able to use the five messages (25% with 'all' parents and 65% with 'some' of the parents they worked with)
- ✓ In the surveys, 50% said their way of working had 'changed', and 58% thought their practice had 'improved'
- ✓ There were numerous examples given in qualitative interviews of how practitioners felt the training had given them both the language and the confidence to talk with parents about this aspect of parenting and infant development.

How My Baby's Brain worked in practice

11. The research very much suggested that practitioners, in creatively and flexibly extending the original universal design of My Baby's Brain, were managing to extract considerable additional value out of the approach. Data from a small number of parents and from the qualitative interviews with practitioners suggested that in a universal setting, the impact of My Baby's Brain was mainly to reassure, reinforce and amplify warm and responsive parenting that was already present. With families in targeted groups, it served to normalise and explain the value of responsive parenting, and to highlight more clearly for struggling parents where they could make positive changes. The data suggested that parents could understand and retain the messages passed on by practitioners, and some had gained confidence and reassurance and even modified their behaviours. In universal settings these findings suggest that especially for first time or anxious parents, or those who have read or heard contradictory information about caring for babies, My Baby's Brain can be a helpful source of clarity and confidence. In addition, practitioners believed they were noticing behavioural changes arising out of having used the Five to Thrive messages with parents, with the clearest observations being reported in relation to families in targeted settings.

12. In targeted work, some stakeholders felt that the Five to Thrive messages might have useful applications in helping parents who were struggling to understand what was expected of them when there were concerns about safeguarding. Some staff were actively blending the Five to Thrive messages with other approaches as part of a toolkit of support for families with complex needs, sometimes in co-ordinated multi-disciplinary ways, and sometimes in relation to children who were well above the 0-3 age range for which My Baby's Brain was initially intended. Some social workers were using their new confidence and knowledge of the evidence on child development to improve the detail and quality of their reports to courts.

Costs of My Baby's Brain

13. Overall the costs of implementing Phase Two were not high. Using data provided by Hertfordshire County Council we were able to calculate the total costs of the whole initiative, to the end of the Phase Two evaluation, including standard hourly 'unit costs' of staff time in different professional groups.

14. Including all the costs of development and evaluation in both Phase One (the pilot Phase 2011 to 2012) and Phase Two, and including all the costs of staff time for development, and the unit costs of trainees to attend training in both Phases, the cost per practitioner trained in Phase Two was **£479.00**.

Implementation

15. Research increasingly shows that the quality and effectiveness of the implementation of services and initiatives is a determining factor in outcomes for service users, independent of content. Thus, in addition to outcomes from training, the research also explored the extent of readiness for, and the goodness of fit of, the new innovation amongst staff, services and the wider existing system. This helps us to understand what kinds of challenges could lie ahead when 'scaling up' My Baby's Brain in the next stage of development and roll-out.

16. All stakeholders were emphatic that My Baby's Brain was conceived as an 'approach' rather than as a formal programme or formal model of intervention. Thus, although considerable work had been done to develop the content of the approach in terms of the Five to Thrive messages and their supporting materials, the precise form in which these 'core components' should be combined, and the decisions about what to treat as fixed, and what to treat as variable, was left open. Practitioners were able to experiment and develop their own ideas.

17. The implementation of My Baby's Brain had many strengths. The ethos and broad logic was generally liked and endorsed, with strong credibility or plausibility attached to its basis in scientific evidence. There was wide agreement on the simplicity, clarity and accessibility of the Five to Thrive messages, which were recognised to have condensed a complex area of theory and evidence into a concise set of principles that practitioners and parents alike could comprehend. The flexibility meant that for confident agencies and confident practitioners, there were myriad ways to use My Baby's Brain in practice. The supporting materials that were produced to accompany the training were widely admired, and there was demand for a greater supply.

18. There were, however, some limitations arising from this flexibility. Although the Five to Thrive messages themselves were clear, most interviewees stressed that other aspects of implementation were likely to be key to effectiveness, beyond simply knowing and advertising or repeating the five messages to parents. In other words, the five messages were important content, but it was not always obvious to practitioners how that content should be used. In particular, My Baby's Brain clearly requires sophisticated practice skills to support effective delivery of the content, for example: excellent communication skills; empathy and relationship-skills; the ability to weave in intentional content in practice interactions in ways that seem entirely natural; the ability to identify opportunities 'in the moment' to address key issues; and critically, the ability to model the kind of responsive interactions that My Baby's Brain is advocating to parents. These, too, may be 'active ingredients' of the implementation model that would benefit from specification as part of the approach.

19. The training for My Baby's Brain was generally well received, but there was a clear mandate to deepen and extend the depth and detail of the scientific content, which may not have been equally well-delivered in some sessions. The experience of training in multi-agency groups was widely appreciated, though some felt that the training could have been better tailored to accommodate those with higher levels of career experience. The survey of practitioners showed that variation in the quality of trainers impacted on trainees' intentions to use the training in future as reported immediately post-training, although this seems not to have resulted in major differences in actual use of the messages in practice, when reported in the follow-up period.

20. Analysis of the different dimensions that bear on implementation effectiveness – people, organisations and the system – showed that there was a positive degree of implementation 'readiness' at all levels (except in regards to the lack of readiness of the implementation model, as described above) and that the 'fit' of My Baby's Brain to practice and strategy within the county was largely good. This almost certainly helped to carry the approach successfully forward.

21. At the organisations and systems level, key favourable factors were the low resource requirements; the fact that multi-agency working and partnerships were already familiar modes of working to staff and managers in Hertfordshire; and a generally positive approach to service innovation in general.

22. During Phase Two both children's services and the health visiting service were strongly engaged by the initiative and there was active leadership support both at the organisational and systems level. In children's services, almost everybody could see ways in which My Baby's Brain was or could be coterminous with existing operations and strategy. Children's services staff mostly described feeling confident in having the practice skills necessary to deliver the approach, and there were many vocal champions of the initiative. Child and family social workers, who were not at the outset envisaged as key proponents of the approach, also became keen advocates, seeing many applications for My Baby's Brain in their work with more vulnerable families. This may have been less true for health staff and agencies. Although findings were mixed, there were hints that even though health visitors were actively mandated to attend the training in Phase Two, the overall on-going commitment of health might be more fragile than that of children's services. There appeared to be more lukewarm or arms-length support by team leaders and a lack of widespread availability of strong champions. There were also some suggestions that some health visitors struggled with the necessary time and opportunity, and perhaps also the skills, to weave the My Baby's Brain approach into their other routine daily practices. This may raise challenges for retaining the engagement of health visitors in the future.

23. System mapping also showed that not all parts of the wider system engaged equally well in Phase Two. Midwifery in particular proved impossible to engage, and other services that might in future be important (GPs, early education, nursery and child minding services) had also not yet been reached by the end of the evaluation. Phase Three will benefit from exploration of how better to influence the unreached parts of the wider system of early years services in Hertfordshire.

Key recommendations

Several specific recommendations arose from the research:

1. There is strong support from this research for continuing to develop and refine what has clearly shown itself to be a successful and low cost approach for improving practitioner knowledge, confidence and practice in working with parents of very young children.

2. The multi-agency framework should be retained and extended, preferably with energetic attempts to draw in champions from health who can help to craft the approach to achieve the best possible fit with health professionals' existing practice skills and health services' ways of working. There appears to be a less optimal 'fit' for health, and the concern is that if mandatory and free attendance at the training for health staff is withdrawn, health as a sector may gradually disengage.

3. Although further efforts to engage midwifery and GPs should be made, the development team may need to secure influential champions in these professions first and foremost.

4. The great flexibility of the approach that has so far developed is a valuable strength, allowing the use of My Baby's Brain in multiple settings and circumstances. This strength needs to be retained. However, before scaling up in Phase Three, we recommend that further work is undertaken to clarify and specify more clearly what are the 'active ingredients' (or 'core components') of the approach and how these ingredients can be combined together within different implementation or delivery models. For example, beyond understanding and communicating the five messages, what specific skills are required in order for practitioners to deliver them successfully? How should the five messages be combined, and how should this vary across different professional settings? When is embedded, as opposed to structured use most appropriate? Differences in the implementation model for preventive universal settings as opposed to the model that is emerging when working with higher-need, targeted groups of parents should also be specified further.

5. This process of specification will be aided by the development of a logic model that captures the 'theory of change' for My Baby's Brain. This should be co-constructed by staff from the different sectors and job roles who are involved in its delivery. The products will undoubtedly introduce new elements into the existing model, and will enable the approach(es) that is/are 'My Baby's Brain' to be quality assured and robustly evaluated for impact in the future. Some detailed questions that may be

useful to consider as part of this process are further discussed in the conclusions of the main report.

6. The training will also benefit from a review, and consideration to the possibility of training beyond 'basic' to more 'advanced' levels may be timely. It will be useful to specify what specific skills and qualities are required of My Baby's Brain trainers. Access to resources (for example, further reading) should be maintained and continuously updated, and the My Baby's Brain website, which was not well-known to or well-used by practitioners at the time of the research, should be the main hub for this activity.

7. There were many calls for more structured opportunities for the sharing of practice experience in using My Baby's Brain, post-training. Participants suggested these could be done in single agency or even single-team settings as well as in multi-disciplinary contexts, in order to maximise the development of shared and mutually supportive ways of implementing My Baby's Brain at both basic and advanced levels, and reflecting the different settings in which practitioners are working.

8. Multi-agency engagement was largely regarded as having been a success story for My Baby's Brain. However, it may be that in the next Phase of the project, a specific and very active strategy to reach other parts of the system will be required. Whilst universal and even targeted children's services had taken the approach thoroughly to their hearts, health possibly have not, and could easily find that other competing priorities in the coming months and years push their commitment to My Baby's Brain into the background. This will probably require a deeper analysis of the fit of the approach to the practice as usual of health staff (both community and acute services), especially those who feel very time-pressed. It will also require closer attention to the specificity of the implementation model and how it can be used in all the different contexts of early years and family work to add value to existing practice across the county.

The Colebrooke Centre for Evidence and Implementation

55 St John Street

London EC1M 4AN

United Kingdom

www.cevi.org.uk

e: colebrookecentre@cevi.org.uk

t: +44 203 551 7666

