1. Executive Summary

1.2 Introduction

The Big Lottery Fund (BIG) is investing £165 million over the next 11 years in the ‘Fulfilling Lives: A Better Start’ programme (referred to hereafter as A Better Start). This investment will facilitate the implementation and testing of different models of early intervention in 3 to 5 areas. Alongside government funded and third-sector providers working collaboratively across health, education and social care, BIG’s funds will allow these areas to make structural changes to the way in which they identify and work with families at risk of poor outcomes, in addition to introducing a range of preventive interventions focusing on pregnancy and the first three years of life. BIG is funding the Dartington Social Research Unit (DSRU) to support the areas in designing their services, using evidence about the effectiveness of interventions both in the UK and elsewhere.

BIG is also investing in an evaluation and learning contract to ensure that the lessons in terms of what works, for whom, and why, are identified and widely disseminated. The substantial budget available for this work will enable the conduct of a robust evaluation of A Better Start, which will run throughout the 11-year period of the programme, and focus on the setup, implementation and effectiveness of the programme within and across the areas, alongside the dissemination of learning across the areas involved and more widely.

This bid describes the proposed evaluation on the part of Warwick Consortium.

1.3 Warwick Consortium Approach

There have been a number of significant evaluations of area-based early-years interventions both nationally (e.g. Sure Start) and internationally (e.g. Early Head Start, US), and our approach aims to build on the significant learning from these studies. Perhaps most importantly, one of the biggest challenges is ensuring that we can demonstrate changes at the level of the family in terms of outcomes for children across the three key outcome domains. This requires a number of key factors to be present:

- The area-based programmes involve the delivery of interventions with sufficient intensity to impact children’s outcomes;
- The evaluation design is structured to optimise the likelihood of detecting changes in outcome.

The evaluation lead for the Warwick Consortium is a member of the Dartington Social Research Unit support and development contract, and she will work with Dartington to ensure that the area-based programmes have sufficient intensity to impact the outcomes that have been built into the current bid.

In terms of optimising the likelihood of detecting small changes in outcome, our evaluation design has been carefully constructed to ensure that we allow for embedding (we will track an early and a late cohort) of the programmes, and that our outcome measures are both comprehensive and sensitive to change. We have, built in a range of objective (i.e. independent and/or biometric) assessments of outcome (e.g. parent-infant interaction; attachment; cortisol levels; epigenetics; activity levels using accelerometers) in addition to parent-report measures,
which will be utilised with a subsample of respondents only. We will utilise a range of local and implementation data in conjunction with this outcome data, to identify what works, for whom, under what circumstances.

1.4 Warwick Consortium: The Team
Warwick Consortium is led by Professor Jane Barlow, and comprises a team that includes both substantive and methodological expertise, and that will enable us to successfully evaluate and disseminate the learning from A Better Start. Jointly, we have a strong track record in conducting multi-strand evaluations of complex programmes, and in combining the methodologies required for this including: longitudinal surveys, impact analysis using survey and administrative data, randomised controlled trials (RCTs), cost-effectiveness measurement, qualitative interviews, and analysis. Our team includes leaders in their fields in terms of socio-emotional development (JB), nutrition (Professor Carolyn Summerbell) and early years education (Professor Kathy Sylva). We have also included academic expertise in biometric measurement (Professor Vivette Glover), childbirth and the perinatal period (Professor Deborah Bick), implementation research (Professor Geoff Lindsay) economic evaluation (Professor Stavros Petrou), and longitudinal evaluation and analysis (Professor Alistair Leyland).

Our core team (responsible to the day-to-day running of the evaluation) includes the Universities of Warwick and Oxford, along with Ipsos MORI, the National Children’s Bureau (NCB) and Bryson Purdon Social Research (BPSR).

In addition to our core team, we have an advisory group that consists of specialist input from Professor Jeanne Brookes-Gunn (Columbia University, USA), who brings extensive expertise in the evaluation of early intervention in disadvantaged populations including the Early Head Start Evaluation; Chris Cuthbert, who is lead for the Under 1’s safeguarding programme at the NSPCC; Jean Gross who will provide us with policy expertise, Mitch Blair, expertise in developmental paediatrics, and Miranda Seymour-Smith (NCT) specialist advice in relation to pregnancy and the perinatal period.

We believe that the Warwick Consortium is unique for the following reasons:

- The above expertise means that we will be able to ensure that the significant investment that BIG is making will add to the science not only in terms of what works in the field of early intervention (i.e. nutrition, socioemotional and educational development), but more widely in terms of key issues such as toxic stress; attachment; and epigenetics. Our inclusion of measures of these outcomes (in addition to the other standard outcome measures) means that our proposal has the capacity to go beyond a simple measurement of impact;
- Our expertise has enabled us to offer the possible inclusion of some additional work evaluating intervention effectiveness, using randomized controlled trials, for which we would work alongside BIG to seek additional funding;
- We will be able to produce academic papers that can contribute to the existing science through the publication of the findings in high impact factor national and international journals;
- Our shared commitment to improvement the lives of disadvantaged children is reflected in our pricing, such that the time for all senior level consortium members (e.g.
professorial level), have been costed significantly below what we anticipate the input of each member will actually be.

We have provided further information about the project management of the evaluation in Section 8, but in essence the philosophy underpinning our proposed programme of work is focused on establishing and maintaining excellent working relationships utilising the following approach:

✓ Strong leadership
✓ Integrity
✓ Clear and effective communication
✓ Flexible and proactive working
✓ Collaborative and collegiate relations

1.5 The Evaluation Design

Our evaluation design involves dovetailing four consecutive strands of work which, in combination, will enable us to provide a robust evaluation of *A Better Start*, and which will make effective use of the available budget:

- **Workstream 1**: *Implementation evaluation* of the setup and delivery of the programme;
- **Workstream 2**: *Impact and economic evaluation* of the area programmes;
- **Workstream 3** (Optional): *Effectiveness evaluation* of specific interventions used within the area programmes conditional upon us securing additional funding;
- **Workstream 4**: A programme of *learning and dissemination* that will extend across the three to five areas, and beyond.

Although we have outlined our preferred methodology for each workstream, we propose to take a flexible approach that will enable us to adapt to the needs of the five areas as they evolve over time, particularly in deciding when and how to engage with the service providers and families.

**Workstream 1: Implementation Evaluation**

Our implementation evaluation will be conducted in two phases, which will enable us to optimize the areas programmes, prior to conducting an assessment of the implementation of the programmes in the later years:

✓ Phase 1: In the first two years of the contract, when the areas are still setting-up and beginning implementation, we will utilize a 'participatory action approach', which will enable us to work collaboratively with the areas and with Dartington to ensure that their models of delivery are functioning optimally, in order to maximise the effectiveness of the programme in subsequent years;

✓ Phase 2: In years three to seven of the evaluation, the implementation evaluation, will enable us to identify objective levels of *inputs, activities, and outputs* in addition to collecting wide-ranging quantitative and qualitative data from stakeholders about *implementation systems* (i.e. service providers and users), in order to get a better understanding about the effectiveness of the different models of working adopted by the five areas. The information from this workstream will be combined with information
collected as part of Workstreams 2, 3 and 4, to enable us to understand why particular methods of working have improved outcomes, and for which groups of users.

**Workstream 2: Impact and Economic Evaluation**

We will measure the impact of *A Better Start* by tracking two cohorts (an early and a late cohort) of families in the service areas in addition to matched cohorts of similar families living in carefully selected comparison areas. The use of an early (beginning in 2nd year of the contract and tracking children until they are 7 years of age) and a late cohort (beginning in the 5th year of the programme and tracking children until they are five) will ensure that we are able to identify any benefits from *A Better Start* that are not detectable until the programmes are thoroughly embedded (i.e. after four years).

We will assess the following:

- Individual trajectories in the intervention and control cohorts (3 matched areas for each intervention area) using both data that is collected directly from parents and children; and also administrative data that is available on individual families;

- Population level outcomes: across the five intervention and comparison sites again using administrative data, which will enable us to assess the impact of *A Better Start* at an area level.

We will assess the impact of *A Better Start* using a range of measures to identify short-, medium- and long-term changes in parental (both mother and father) functioning, and in children across the following three domains:

- Socio-emotional health;
- Nutrition;
- Speech, language and learning.

In addition to a range of standardized parent-report and teacher assessment data, we have also included a number of objective assessments, which will be measured on a sub-sample only, because of the cost of their delivery and processing. These include a number of biometric measures (e.g. hair samples to assess cortisol levels at 2 years; buccal - cheek - swabs to assess epigenetic changes at 3 years; accelerometers to assess activity levels at 7 years), in addition to videotaped coding of parent-child interaction at 12 months; and story-stem measures of attachment at 3 years), and a range of assessments of the home learning environment.

Data on costs and services from the five areas will be combined with our findings on impact, which will allow us to measure the cost-effectiveness of the programme, both overall and for each area. This will enable us to report on the unit costs of producing positive outcomes for children and their families, and we will ensure that this workstream aligns with the cost-benefit analysis being undertaken as part of the separate economic evaluation contract.

Although we have specified a range of outcomes that we would ideally measure, we recognize the need for flexibility and will review these in consultation with BIG and in light of the content of the workplans of the five areas selected.
Workstream 3 (Optional): Intervention Effectiveness

Our proposal also includes the methodology for the evaluation of the effectiveness of individual interventions using randomized controlled trial (RCTs), which would enable us to provide additional evidence about the benefits of specific interventions for which there is no UK evidence available, or for which there is a need of further evidence with specific groups of families. We have not been able to cost to undertake this work within the existing available budget, but we have an excellent track record in securing funding for the conduct of RCTs to evaluate early preventive interventions, and if Warwick Consortium was funded we would work alongside BIG to locate additional funding to undertake this work (e.g. through applications for example, to the NIHR Research for Patient Benefit program or Nuffield Foundation).

Our evaluation design therefore includes methodology and timing (but not costing) for the conduct of two small-scale RCTs to test the effectiveness of two brief interventions being delivered to children during the postnatal period (to be decided). We have noted the BIG requirement not to withhold interventions from families, and have structured these RCTs to include wait-list control groups.

It is anticipated that these trials would be conducted in the early stages of the programme, and that the results would feed into future area developments, and help to explain the findings from the impact study (Workstream 2), in addition to contributing to the learning more widely. The timing would, however, be conditional upon the success of our application to other organisations for additional funding.

This team is uniquely placed to conduct RCTs and has a number of academics with expertise in using this methodology, alongside support from Warwick Clinical Trials Service Unit.

Workstream 4: Learning and Dissemination

The learning and dissemination work will be conducted by the NCB who are well placed in terms of their reach both locally and nationally in the UK. This part of the consortium will also ensure that there is significant user involvement in all aspects of the evaluation. This workstream will operate at four levels:

Level 1: Within the intervention sites across all partners including service users, voluntary and community sector organisations, the local authority/ies and health providers, including, for example, Clinical Commissioning Groups, health watch groups and health visitors;

Level 2: Across and between the intervention sites including all agencies – voluntary and community sector, local authority and health - involved in delivery in each site.

Level 3: Outside of the immediate delivery zone of each site to other areas and parts of the delivery local authority, the local voluntary sector and health provider.

Level 4: Above and beyond the local area to key national influencing targets and stakeholders and to wider groups of practitioners and academics.

The learning and dissemination will consist of an enduring programme of engagement, peer learning and development, knowledge transfer and support for all agencies involved in the intervention sites, and will comprise three core elements:
✓ Connecting for Change: a supernetwork of connections, networks and groups, though which we will facilitate linking and exchange/networking for organisations and agencies within and across the sites, providing action learning, peer advice and support, analysis and feedback on developments and trends from the programme.

✓ Knowledge Exchange: online learning and resource hub, and a bespoke information service, through which to facilitate excellence in learning and knowledge exchange. We will showcase learning about existing and new practice from each of the sites, presenting innovative practice from across all the sites, and to the wider local authority areas as well as other interested practitioners. The bespoke information service will also ensure that each site has access to the latest practice and research evidence to support their delivery.

✓ Influencing to deliver a step change in policy and practice: a powerful influencing and communications strategy targeted at national and local stakeholders, aiming to extend the learning from the sites in order to embed new approaches and ensure a lasting legacy from the programme.

Although the above workstreams have been described separately, there will be significant cross-fertilisation for all elements of the evaluation. In practical terms, this will involve the evaluation team members working closely together over the period of the evaluation. We anticipate that our existing working relationships and the planned project management structures, will enable us to do this successfully.

1.6 Working with local areas

Evaluations involving extensive local-level programme delivery require the evaluation team to work closely with local areas (both those involved in the programme and areas acting as comparators), alongside other contractors (e.g. Support and Development contract and the Economic Evaluation contract).

Members of Warwick Consortium have considerable experience of working together to do this, and significant experience of building collaborative relationships, whilst maintaining our neutrality as evaluators. In order to facilitate working with local areas we have taken the following steps:

✓ Ensured that we have close links with local Heads of Midwifery, through Professor Debra Bicks, and the inclusion of CLRN costs to ensure that recruitment by midwives is successful;
✓ Designed the evaluation to minimise as much as possible, the burden on both individuals and areas;
✓ Included mechanisms and funding to ensure that cohort families enjoy taking part in the study and receive a financial reward for doing so;
✓ Developed an exciting ‘offer’ for local sites in terms of the planned programme of learning and dissemination.

A detailed description of our plans for working with all stakeholders are provided in section 8.