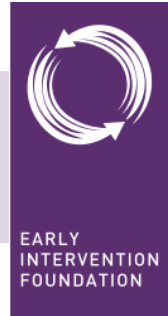


# EIF Guidance for the Feasibility Study of Reach Up Curriculum in England



## Summary

### *Background*

- The Early Intervention Foundation (EIF) is a charity and one of the government's 'What Works Centres'. EIF evaluates the evidence of what works and what does not work in the area of early intervention, for both programmes and innovative local practice. EIF has conducted more than 100 in-depth assessments of the evidence for the effectiveness of programmes designed to improve outcomes for children. These assessments include interventions designed to improve the parent–child relationship, the interparental relationship and children's social and emotional skills.
- EIF has been commissioned by the Institute for Fiscal Studies (IFS) to provide input into the Feasibility Study of the Reach Up Curriculum in the UK. The Reach Up Early Childhood Parenting Programme provides structured training for home visitors to help parents support their child's development. It has a strong evidence base emanating from low- and middle-income countries (see for example Attanasio et al., 2014; Hamadani et al., 2006; Nahar et al., 2012) but has yet to be tested in the UK.
- Peterborough is a promising area to test the intervention as it faces many of the risk factors (such as low levels of employment, high deprivation) that threaten children's development. Peterborough also has an ethnically diverse population which ought to inform the adaptation of the intervention. Ultimately this research fills an important gap in the knowledge base by informing the design of an RCT to test a home-visiting intervention targeted at disadvantaged children starting at 9–12 months.
- Taking empirically supported interventions and adapting them to different subpopulations or cultural contexts is worthwhile when considering the cost of developing new interventions from the bottom up. Despite successful examples of transporting interventions from one context to another, a number of recent UK trials of evidence-based interventions have demonstrated disappointing results. This raises some critical questions about the transfer of the Reach Up Curriculum to the UK, notably:
  - *How does the Reach Up Curriculum fit within the service context in Peterborough?*
  - *How does the Reach Up Curriculum add value over 'business as usual'/usual care?*

### *Method*

- Given the time and resources available, a full systematic review would not have been possible, instead EIF has drawn on its existing reviews and the wider prevention and implementation sciences literature including:

- EIF's *Foundations for Life* review – an assessment of 75 early intervention programmes aimed at improving child outcomes through positive parent-child interactions in the early years
- EIF's *What works to enhance interparental relationships and improve outcomes for children* review
- The Home Visiting Evidence of Effectiveness project from the US
- The UK experience of implementing Family Nurse Partnership
- EIF's *Commissioning Parenting and Family Support for Troubled Families* review and the Getting to Outcomes framework
- EIF's guidance on evaluating early intervention programmes.

#### *Key findings from the evidence on efficacy and effectiveness of home visiting interventions*

- The complex nature of home visiting interventions makes them difficult to implement. Home visiting interventions therefore require good systems for **ensuring they are delivered with fidelity and to a high standard**. These systems include programme manuals, ongoing staff training and clear supervision requirements.
- Many programmes have an insufficiently specified target population. The majority of studies suggest that **home visiting is effective only for the most vulnerable families**.
- It is critical to understand the needs of local families.
- The most effective programmes have **high levels of intensity** – meaning that the programme lasted for a year or longer and averaged four or more visits per month.
- The most effective programmes are **delivered by a master's-level therapist** and/or social worker who taught parents specific skills.

#### *Key findings and recommendations from the implementation of home visiting interventions*

- The implementation literature of home visiting programmes discusses a number of strategies from recruiting and retaining families. These include:
  - Practitioners discussing **barriers to participation with families upon enrolment and developing explicit strategies to overcome these**.
  - Recruitment issues are reported in numerous studies and programmes. Programmes need to **focus on how referral pathways will work** and invest in alternative strategies such as identifying families **through community outreach and through professionals and institutions already working with mothers** such as schools, colleges and social workers.
  - **Group interventions for disadvantaged families face a number of logistical difficulties** discussed in detail in the group Family Nurse Partnership (FNP) trial – this is an important source of knowledge for this trial.
  - Having **good data systems for service user monitoring is an important way of increasing retention**.

#### *Key recommendations from EIF's commissioning and evaluation guidance*

Referring to EIF's commissioning guidance or another framework such as Getting to Outcomes will ensure that no important considerations are overlooked. Some critical considerations are:

- To understand the **characteristics of the Reach Up Curriculum's target population** and the ways in which they are **similar or different from the population in Peterborough**.
  - This will be achieved by the planned analysis comparing the demographic and cognitive developmental profiles of the children in the extant trials of Reach Up and how they compare with the target population in Peterborough.
- To understand **what parenting and family support is currently being offered in Peterborough and the ways in which they are similar or different from the Reach Up Curriculum**.
  - This will inform if any modifications are to ensure Reach Up adds value in Peterborough, such as the addition of other evidence-based strategies.
- To understand the **current competencies and capacity of the workforce in Peterborough**.
  - This will inform the training needs required in order to be able to deliver Reach Up in Peterborough and the time needed to achieve any upskilling.
- Ensuring a comprehensive approach to evaluation that includes outcomes (parent and child), process data (participation details, fidelity monitoring, monitoring of the implementation plan, participant satisfaction, focus groups and staff perceptions).
- Ensuring there are mechanisms in place to reduce attrition such as case management, a proportional approach to data collection and ensuring participants can be tracked throughout the duration of the trial.

## 1. Introduction

### *Background on the Early Intervention Foundation*

The Early Intervention Foundation (EIF) is a charity and one of the government's 'What Works Centres'. We are the go-to organisation for evidence and advice on early intervention for tackling the root causes of social problems for children and young people. We evaluate the evidence of what works and what does not work in the area of early intervention, for both programmes and innovative local practice.

Our mission is to improve children and young people's life chances and strengthen their resilience and capabilities as early as possible. There is a much greater impact of intervening before problems become more difficult to reverse. We can tackle the inter-generational cycle of disadvantage and support the next generation to raise strong families of their own by intervening early from conception to young adulthood, creating a positive cycle of relationships and behaviour.

EIF's online Guidebook is a key tool for supporting the delivery of effective services. The Guidebook provides independent information on the effectiveness and delivery of early intervention programmes. We assess programmes according to the strength of their evidence – the quality and quantity of data suggesting that a programme has had a positive impact on outcomes for children – and give each programme an evidence rating based on this assessment. EIF has conducted more than 100 in-depth assessments of the evidence for the effectiveness of programmes designed to improve outcomes for children.

### *Background on the Reach Up Feasibility Study*

EIF has been commissioned by IFS to provide input into the Feasibility Study of the Reach Up Curriculum in the UK. The Reach Up Early Childhood Parenting Programme provides structured training for home visitors to help parents support their child's development. It has a strong evidence base emanating from low- and middle-income countries (see for example Attanasio et al., 2014; Hamadani et al., 2006; Nahar et al., 2012) but has yet to be tested in the UK.

Peterborough is a promising area to test the intervention as it faces many of the risk factors (such as low levels of employment, high deprivation) that threaten children's development. Peterborough also has an ethnically diverse population which ought to inform the adaptation of the intervention. Ultimately this research fills an important gap in the knowledge base by informing the design of an RCT to test a home-visiting intervention targeted at disadvantaged children starting at 9–12 months.

### *Issues in the transfer and adaptation of evidence-based early intervention*

Adaptability refers to the extent to which an intervention can be adapted, tailored, refined or reinvented to meet the local context (Damschroder et al., 2009).

In relation to support for parents, adaptation can occur both within and between countries with cultural and contextual factors being relevant to both cases. One critical issue arises from the risk of disseminating evidence-based interventions to diverse populations if these interventions were primarily developed according to European or American cultural norms and expectations (Calzada, 2010; Kumpfer, Magalhães, & Xie, 2017).

Nevertheless, taking empirically supported interventions and adapting them to different subpopulations or cultural contexts is worthwhile when considering the cost of developing new interventions from the bottom up (Wadsworth et al., 2013). This approach has been successfully used for several interventions for parents (see for example Kogan et al., 2016; Parra Cardona et al., 2012).

Whether interventions for parents can successfully be adapted between countries has also been investigated in a number of systematic reviews (Gardner, Montgomery, & Knerr, 2016; Sundell, Beelmann, Hasson, & von Thiele Schwarz, 2016). It is plausible that parenting interventions will be successful in new cultural contexts only if there is an extensive adaptation, and recent meta-analytic findings suggest that cultural adaptations can lead to higher effects of prevention interventions (Sundell et al., 2016). Specifically in relation to parenting interventions, a recent meta-analysis found that parenting interventions can be efficacious when transported to new contexts when delivered with fidelity (Gardner et al., 2016).

Nevertheless a number of recent UK trials of evidence-based interventions have demonstrated disappointing results, including those of Family Nurse Partnership (Robling et al., 2016), Multi-Systematic Therapy (Fonagy et al., 2018) and Functional Family Therapy (Humayun et al., 2017). Therefore a critical question that needs to be addressed when considering transporting an intervention from one context to another, is how the new intervention fits within the service context and whether it adds value over 'business as usual' or usual care.

This point is especially vivid in the case of Family Nurse Partnership (FNP) in the UK. The equivalent programme, 'Nurse Family Partnership', has been shown to be effective in numerous RCTs in the US (see for example Eckenrode et al., 2010; Olds et al., 2002; Olds et al., 2003). The intervention has also shown positive results in a Dutch trial (Mejdoubi et al., 2013, 2015), but showed somewhat disappointing results when transferred to England. This variability in results for Family Nurse Partnership has illustrated that context matters, so that even the most carefully studied interventions may not exhibit external validity at scale (Leviton & Trujillo, 2017). In the Dutch case, the intervention was modified so that it was focused on high-risk families. In the UK context, usual care already includes universal provision in the form of the Healthy Child Programme and so it has been suggested that the intervention be refocused in terms of the target families and by incorporating other evidence-based strategies (Barlow et al., 2016).

## 2. Summary of evidence on the efficacy and effectiveness of home visiting interventions

The Best Start at Home review identified 16 home visiting programmes (Axford et al., 2015). A number of these programmes underwent an assessment against EIF's standards of evidence, and can be found on the EIF Guidebook. However, EIF's *Foundations for Life* review also included a summary of the wider literature on home visiting which is also relevant here (Asmussen, Feinstein, Martin, & Chowdry, 2016).

A Brookings Institute report compared the efficacy of six home visiting programmes in widespread use across the US and observed that FNP was the only programme to have long-term evidence of improving child outcomes and to have replicated its findings in more than one study (Gomby, 1999). In contrast, the other five interventions failed to confirm any positive child outcomes and on several occasions, observed negative child outcomes, including an increased risk of child maltreatment. The review therefore concluded that much reform was needed to increase the efficacy of home visiting, and made the following recommendations:

- The complex nature of home visiting interventions makes them difficult to implement. *Home visiting interventions therefore require good systems for ensuring they are delivered with fidelity and to a high standard.* These systems include programme manuals, ongoing staff training and clear supervision requirements.
- The majority of home visiting programmes aim to achieve child outcomes through work with the parent. This may not be sufficient for meeting children's educational needs within a relatively short time frame, however. *Home visiting may therefore be more effective if it is combined with centre-based activities.*
- *Some programmes may not be intensive enough.* More frequent home visits (two or more times per month) may therefore increase programme effectiveness.
- Many programmes have an *insufficiently specified target population*. The majority of studies suggest that home visiting is effective only for the most vulnerable families.
- Many outcomes are *contingent upon the quality of other community services* that are beyond the intervention's control. Hence, outcomes that are linked to the community more generally (such as parental access to training and employment, good-quality health care) are vulnerable to external factors.

Despite subsequent reforms and improvements there continues to be huge variation in the benefits home visiting programmes achieve. A recently completed Child Trends systematic review involving 66 interventions observed that only 32 had an impact on a child outcome, 23 had contradictory outcomes and 11 had evidence from a well-conducted study suggesting no benefits to parents or children (Kahn & Moore, 2010). Characteristics shared by the most effective interventions included:

- *High levels of intensity* – meaning that the programme lasted for a year or longer and averaged four or more visits per month.
- *Delivery by a master's-level therapist and/or social worker* who taught parents specific skills.

**Collectively, these findings suggest that home visiting interventions are a promising form of early intervention, but careful evaluation and monitoring is required to understand how and when they are the most effective.**

### 3. Evidence on the implementation of home visiting interventions

The implementation science literature recognises the importance of understanding service user needs, as well as ensuring the barriers and facilitators to meeting those needs are accurately known and integral to the delivery organisation (e.g. Damschroder et al., 2009). Consideration of these needs and resources is an integral part of any intervention implementation that seeks to improve service user outcomes.

An important body of research in understanding service user barriers to accessing parenting interventions comes from the Home Visiting Evidence of Effectiveness project, a systematic review of early childhood home visiting research launched in 2009 (Paulsell, Del Grosso, & Supplee, 2014). The table below presents the main barriers to receipt of services. Sixteen studies cited mothers' work and education schedules as interfering with receipt of services. A further common barrier was high family mobility and frequent changes in telephone numbers, making it difficult to schedule visits. Families may also move out of the area, ending participation; families refusing or losing interest in a service was also a commonly reported barrier.

Understanding these barriers to meeting service users' needs are of critical importance in improving service delivery, informing implementation agencies' efforts to monitor service user recruitment and retention (Paulsell, Del Grosso, & Supplee, 2014: 38; Wandersman et al., 2000: 31). Data systems for service user retention are an important aspect of this. Nevertheless, determining effective strategies for recruiting and retaining high-risk families remains an area in need of further research.

Types of Threat	Studies (n=178), No.	Models (n=22), No.
Mothers' work or school schedules	16	6
High family mobility and frequent changes in telephone service	12	5
Relocation of family from service area	11	4
Family refusal or loss of interest in the programme	11	3
Appointments and other demands on families' time	7	4
Family crises and financial stress	6	4
Homelessness or poor living conditions	5	5
Objection to visits by other family members	5	3
Lack of family motivation	5	5
Family illnesses and accidents	4	3
Family disorganisation	2	2
Families' desire for services other than those offered by programme	2	2
Lack of trust in programme staff	2	2

The summary of implementation studies reported in the US clearing house 'Home Visiting Evidence of Effectiveness' (HomVee) contains a number of important insights relevant to the planning of future evaluations of home visiting interventions. The sections below present edited extracts of these summaries. **It should be noted that these lessons are all based on US implementations of the interventions.**

HIPPY



In one of the studies reviewed, the intervention experienced challenges related to low levels of participation. The authors recommended that practitioners discuss participation barriers with families upon enrolment and develop strategies to try to overcome those barriers. The authors also noted that the families with the greatest needs were more likely to attend the group meetings than to participate in the home visits. The authors speculated that the families attended the meetings in the hopes of obtaining resources and information related to their specific issues. As a result, the authors recommended that the meetings are tailored around the identified needs of the participants even if unrelated to the HIPPY curriculum.

Another study reported that the parent groups were particularly well received by staff and parents. The authors provided a number of possible explanations for this finding.

1. Families were able to focus solely on the instruction provided and did not also have to supervise their children as during the home visits.
2. The group meetings were a nonthreatening forum in which issues could be raised.
3. Topics discussed were often based on parents' suggestions.

A third study found that the addition of the family support specialist in the second year of the intervention was an important factor in parent satisfaction. The family support specialist was able to focus on addressing the basic necessities of the participants, enabling the home visitors to concentrate on delivering the curriculum.

#### *PAFT*

Three studies described lessons that were learned during implementations of the intervention in both the US and New Zealand. Across these studies the main lessons were:

- mothers tended to value their parent educators and felt more connected to them than to the PAT intervention
- both beneficial activities, such as employment or attending school, as well as detrimental circumstances, such as instability in the families served, hindered parent engagement in PAT, although employment and school attendance was not related to dropping out
- intervention participants that received the expected level of intensity tended to experience the greatest gains.

#### *FNP*

The FNP model has been evaluated extensively in the US in both efficacy and effectiveness studies and also implementation studies. HomeVee summarises several lessons about implementation on the basis of eight studies and relating to fidelity, attrition, nurse support, and intervention sustainability.

##### *Fidelity*

- Nurses should be encouraged to spend equal time on all aspects of the intervention model and not shy away from topics about which they are not as comfortable (two studies).
- Nurses might be better able to implement NFP as they gain more experience with the model (two studies).

### *Participant attrition*

- Adapting the intervention to the participants' needs and goals and addressing their specific concerns about pregnancy and parenting may facilitate participant retention (five studies).
- Nurses need support individualising the intervention for families (two studies).
- Reassessing mothers' needs during the intervention and discussing the relevance of future visits may help prevent attrition (three studies).
- Developing a strong therapeutic relationship with participants is also important for preventing attrition (two studies).
- Common strategies for establishing trust included assuring participants that the information they shared was confidential, involving other family members in the visits, sharing selective information about their experiences as a parent, and adapting the intervention to suit participants' needs (one study).
- Mothers who dropped out reported valuing the intervention and regretted leaving. Encouraging mothers to reach out to nurses during times of crisis may help improve retention. Increased outreach to mothers who drop out may facilitate re-engagement (one study).
- To address problems related to external distractions such as unstable or crowded housing, meeting in another location may be helpful to bridge a time of housing instability and may also improve visit focus and communication compared to a visit in a crowded home (one study).
- Developing maternal organisational and communication skills early in the intervention may help mothers manage visit appointments and facilitate consistent engagement (one study).

### *Supporting practitioners:*

- Sites should support nurses in managing families' mental health needs. Supervision should address the importance of setting boundaries to avoid overinvolvement with families.
- Sites should assess nurses' level of satisfaction and job stressors to develop targeted supports to sustain and enhance nurses' skills and enjoyment of their work.

### *The UK experience of implementation of group FNP*

In the UK context, group Family Nurse Partnership was developed in response to requests for an intervention that could be offered ineligible for FNP. It was developed with the following unpinning logic:

- group care prenatally can improve pregnancy outcomes
- group care may be less costly than individual support
- postnatal groups have been proposed as a way to support potentially vulnerable mothers
- meeting in a group with other mothers can be perceived by non-teenage mothers as more helpful than one to-one support – however, young mothers can be uncomfortable in groups and are less likely than older mothers to attend, especially if they include predominantly older mothers

The feasibility of gFNP addressed the following questions:

1. Are there barriers to reaching the intended population?
2. Are any client factors related to attendance?
3. Can programme delivery be sustained over 18 months?
4. Is the programme acceptable to different stakeholders?

Pertinent findings and conclusions include (Barnes & Stuart, 2016).

### 1. Are there barriers to reaching the intended population?

- Names of referrals were received relatively slowly which posed a problem meaning that groups sometimes started without the target figure of eight members, but added more clients whose expected delivery dates were within the required 10-week range in the second or third week of the programme, meaning that they missed some of the earliest content.
- If too few referrals were received, the group dynamics such as the agreement to group 'terms of reference', the formation of friendships and initial sharing of personal information could be disrupted when the group started with a small number of women, but recruitment continued, adding additional clients in the second or third week, until it reached a sufficient size.
- Recruitment for programmes such as this, initiated early in pregnancy, may need to develop additional routes for identifying potential clients rather than relying on booking information, such as community outreach and extensive outreach with professionals working with young mothers, such as schools or colleges and social workers. Once reached, client refusal of the programme offer can be a further barrier.
- It has been demonstrated that *giving more attention to client accessibility and engagement* can lead to positive outcomes of parenting interventions for the most vulnerable families, demonstrated in a UK trial of the Incredible Years programme with parents of pre-schoolers living in disadvantaged neighbourhoods.
- Phone calls were made to gFNP clients who missed sessions and many clients received financial support to cover travel, but it may be necessary to use more outreach, or possibly involve group members in supporting each other to attend, coordinating their travel or making 'buddy' telephone calls prior to meetings.

### 2. Are any client factors related to attendance?

- Taking both pilot studies into account and including all relevant client factors in a multiple regression, the only significant predictor of total low attendance was having never been employed (versus employed full-time) while attendance in pregnancy was significantly lower for women living alone compared to those living in a household with other adults.

### 3. Can programme delivery be sustained over 18 months?

- Issues with transport to sessions and educational or employment commitments were all cited as reasons for missing sessions.
- Group services are often conceived as a means to limit social isolation for young mothers, but those living alone may not always have the personal resources to organise themselves for regular group attendance. To increase viability, group sessions might need to be supplemented by some home visits from nurses for the more vulnerable group members.

### 4. Is the programme acceptable to different stakeholders?

- The FNP professionals found the programme acceptable; they liked working in a group context.
- Nevertheless, this style of programme had disadvantages compared to their home-based work when attendance was poor or erratic. While they were skilled in 'agenda matching', if too many were absent then too much time could be taken up with 'catch-up' when clients re-attended.

## 4. Summary of EIF's commissioning and evaluation guidance

### *EIF's Commissioning Parenting and Family Support for Troubled Families and the Getting to Outcomes framework*

It may also be worthwhile drawing on existing frameworks that guide the commissioning, implementation and evaluation. Here we draw upon the guidance EIF produced for commissioning parenting and family support in the context of the Troubled Families Programme (Asmussen et al., 2017), alongside the Getting to Outcomes framework (Wandersman et al., 2008, 2000). Here we provide a short summary of the most salient points.

- When selecting interventions, commissioners should balance considerations about the strength of impact evidence with other considerations of cost and fit with the local context.
- It is crucially important to understand the needs of local families in terms of their parenting capacity and wider problems affecting this.
- Outcomes are only likely to be achieved if interventions are carefully matched to family needs.

The commissioning process can be described in different ways but commonly follows the 'Analyse, Plan, Do, and Review' cycle:

#### 1) *Analyse:*

- Understanding population need
- Identifying available resources, including:
  - a thorough understanding of what parenting and family support is currently being offered.
  - the quality of current referral and assessment processes
  - the competencies and capacity of the workforce
  - how much money is available and where it is available
  - other factors that could impact an intervention's effectiveness, including changes in local demographics, geography, physical assets, cultural needs and political goals.

#### 2) *Plan:*

- Determining a direction for change
- Identifying potential evidence-based programmes
- Ensuring sufficient resource for effective implementation.

#### 3) *Do:*

- Practical implementation
- Implementation fidelity and quality assurance
- Good referral and assessment processes.

#### 4) *Review:*

- Programme monitoring and evaluation.

More practical steps and discussion can be found in the Troubled Families guidance. This guidance has much in common with the Getting to Outcomes framework (GTO) (see box 1).

### Box 1 - A tool for achieving outcomes in a complex world

#### The Getting to Outcomes approach

- Getting to Outcomes (GTO) is a 10-step results-based approach to accountability. It is a comprehensive approach that includes strategic planning, implementation, evaluation, continuous quality improvement and sustainability (Wandersman et al., 2008, 2000).
- GTO provides a detailed roadmap for the implementation of interventions in community settings and has been shown to be effective using a variety of different evaluation methods.
- GTO involves asking and answering the following ten questions:
  1. What are the needs and conditions to address? (*needs/resources*)
  2. What are the goals, priority populations and objectives (desired outcomes)? (*goals*)
  3. Which science (evidence-based) models and best practices can be useful in reaching the goals? (*best practices*)
  4. What actions need to be taken, so that the selected interventions fit with the community context? (*fit*)
  5. What organisational capacities are needed to implement the interventions? (*capacity*)
  6. What is the plan for the intervention? (*plan*)
  7. How well is the intervention being implemented? (*implementation/process evaluation*)
  8. How well did the intervention work? (*outcomes evaluation*)
  9. How will continuous quality improvement strategies be incorporated? (*cqi*)
  10. If the intervention is successful, how will it be sustained? (*sustain*)
- GTO has been adapted for a variety of different settings, including home visiting interventions and recent evidence supports its efficacy in improving capacity to implementation.
- In the context of an RCT, use of the GTO led to higher fidelity ratings and youth outcomes in community sites that were implementing an evidence-based teen prevention intervention, in comparison to sites implementing the same intervention but without the GTO (Chinman et al., 2015)

The benefit of GTO is that it has practical exercises that can be followed to help an area ensure it has taken the necessary steps to successfully implement a home visiting intervention. Given the recent lessons from the implementation on FNP in the UK, an especially useful element is guidance on thinking through the adaptations that might be required to an evidence-based intervention to ensure it fits the local context (see box 2). Following the audit of current services in Peterborough, it will be useful to consider what green- and yellow-light changes might be necessary in order to ensure that the Reach Up Curriculum adds value over and above current service provision in Peterborough.

**Box 2. A guide for making changes to evidence-based interventions**

- *Red-light changes:* Changes that substantially compromise the core components of the programme. These changes, such as reducing or eliminating elements, are highly discouraged because they compromise the integrity of the original programme. For example, often home visiting programmes will provide a chance for parents to practise new skills. This is a critical step in changing behaviour, and these skills should be practised for the full amount of time that the programme states. The activity should not be reduced or eliminated to save time.
- *Yellow-light changes:* Changes that should be made with the help of an expert in home visiting or parent support, such as a researcher or professor. Some of these changes, such as changing the sequence of activities or adding new elements to the home visits, are more substantial and require expert assistance so that alterations don't compromise the integrity of the programme.
- *Green-light changes:* Changes that should be made, as long as they don't change or diminish the core components, to fit the programme to the participants' culture and context. This includes changing things like the wording of programme material to better match the cultural background of participating families. Most programmes can be improved by tailoring materials to better reflect the population you plan to serve. You should feel comfortable making these types of changes for most programmes.

Another aspect of GTO that is worth exploring is the focus on evaluating the implementation process, to answer questions such as:

- What are the characteristics of the families who received the programme?
- How many families participated?
- How often did families participate?
- How did families hear about the programme?
- Were the programme activities implemented with fidelity?
- How satisfied were the participants with the activities?
- What do home visitors and other staff think of the programme delivery?

GTO strongly recommends collecting the following types of process data:

- 1) *Participation* – Keeping track of each participant over time by creating a roster and list of the dates of each session for each participant, along with other key characteristics.
- 2) *Fidelity monitoring* – Checking to see that the programme is being delivered as intended. This includes determining whether home visitors received the appropriate training and technical support, whether participants are receiving the appropriate number of sessions specified by the programme, and whether home visitors are touching on all of the required topics during their visits.
- 3) *Monitor your work plan* – You should be following your work plan as you implement your programme.

If there are available resources and time, GTO also suggests collecting the following information on the programme's implementation:

- 4) *Participant satisfaction* – Participants' perceptions of your programme can be collected using brief surveys.
- 5) *Feedback through focus groups* – Focus groups are a good way to solicit feedback on programme satisfaction and gather suggestions for improvement. Focus group participants might include participating families, staff of referring organisations, the home visitors or other individuals.
- 6) *Staff perceptions* – Solicit ideas from your home visitors, supervisors and other staff on perceived successes and challenges in implementing your programme. This will help you to identify which factors facilitated the programme's implementation and which factors may have emerged as barriers. The information can be tracked over time to determine whether the barriers identified have been adequately addressed.

In terms of 1, 2, 4 and 6, the Reach Up Curriculum may already have some existing measurement tools to investigate these issues.

#### *EIF's guidance on evaluating early intervention programmes*

The Early Intervention Foundation has now conducted over 100 in-depth assessments of the evidence for the effectiveness of programmes designed to improve outcomes for children. On the basis of the learning from this work, EIF has recently produced a guide to help address six common pitfalls in the planning, delivery and write-up of evaluations (Martin et al., 2018). The six pitfalls are:

1. No robust comparison group
2. High drop-out rate
3. Excluding participants from the analysis
4. Using inappropriate measures
5. Small sample size
6. Lack of long-term follow-up.

In our view, the majority of these issues are already being addressed in the plans for the feasibility study and RCT and so we do not repeat all the details here. Nevertheless, given that issues with drop-out appear in a number of the studies reviewed and that this was a question of interest for IFS, we focus on this issue.

Attrition can occur for various reasons, including researchers losing track of study participants and participants refusing to take part in data collection. Attrition can have two major types of consequences for the robustness of the evaluation:

- *Unrepresentativeness*: This is an issue if certain types of participants are more likely to leave the study than others, meaning that the evaluation sample becomes less representative of the programme's target population, and that the findings can only tell us about specific groups of people rather than a broader population.
- *Bias and non-equivalent groups*: Random assignment or quasi-experimental techniques are designed to produce study groups that are equivalent on key demographic and outcome variables. However, attrition may undermine this if certain types of participants are more likely to leave the intervention group than the control group, or vice versa. This is problematic, as any differences between the groups on outcomes may reflect differences between the types of participants retained in each group, instead of the true impact of the programme.

Due to these risks listed above, researchers should always aim to minimise attrition. Attrition can be lessened by using a range of measures to increase participants' cooperation with data collection and reduce logistical challenges (Brueton et al., 2013):

- clear communication of the benefits of taking part in the research
- case management, such as assigning research team members to follow up with participants
- maintaining detailed contact information, to maximise the likelihood of being able to track down all participants
- compensation, such as cash, vouchers or equivalent gifts
- reminding participants, by letter, phone, email or other forms of electronic messaging
- ensuring data collection is proportional and not overly burdensome.



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