



## EANF Learning Report 1: Evidence and Data

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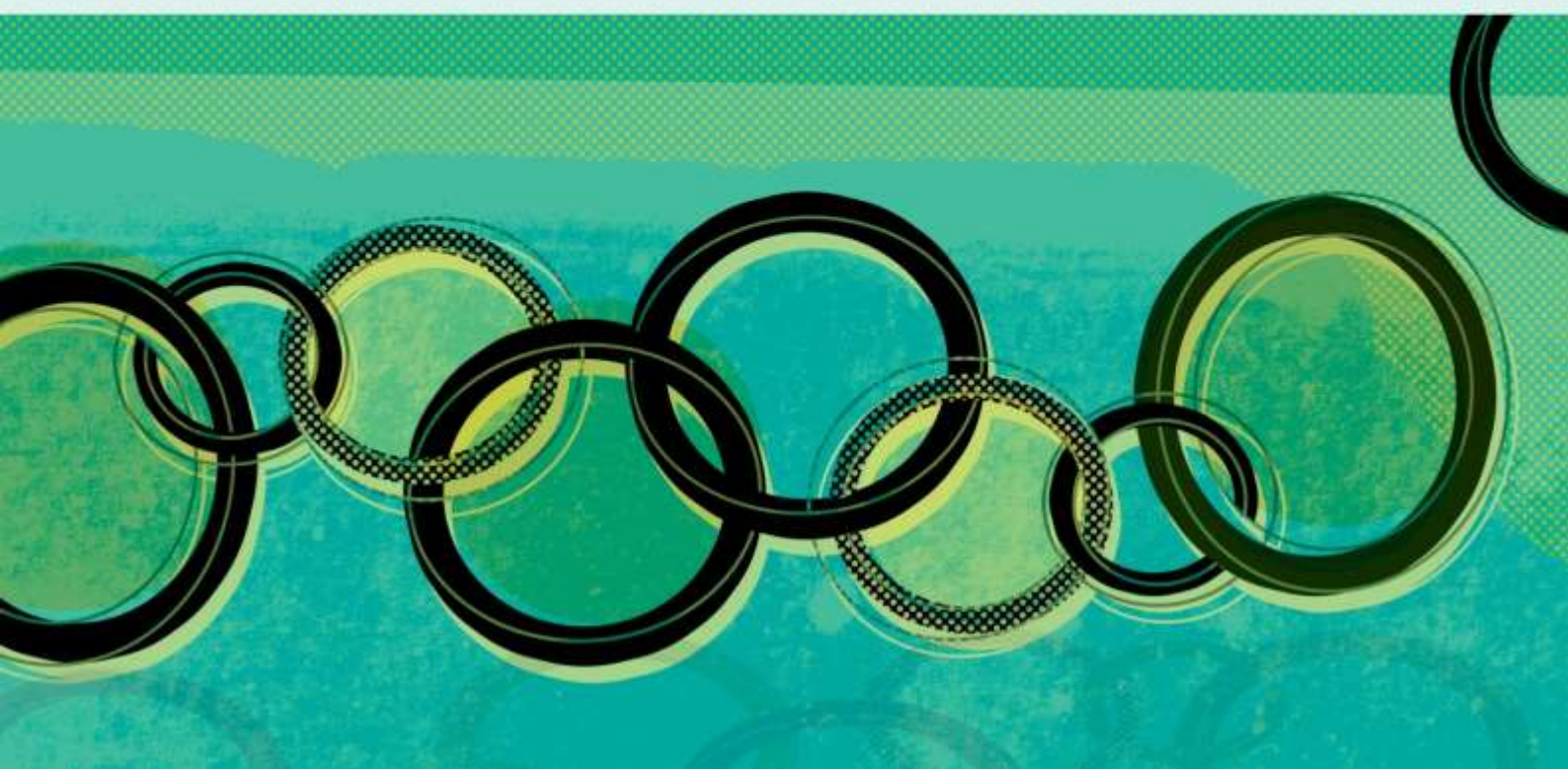
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# **EANF Learning Report:** *Evidence and Data*

July 2016



# EANF Learning Report 1: Evidence and Data - Draft

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# 1. Introduction

The report is an output from the first year of the Early Action Neighbourhood Fund (EANF) learning and evaluation contract. This report is accompanied by a programme evaluation report and an additional learning report which explores an additional aspect of early programme delivery, on building alliances.

## 1.1. The Early Action Neighbourhood Fund

The Early Action Neighbourhood Fund (EANF) is a joint funding initiative emerging from the Early Action Funders Alliance, a collaboration of funders from different sectors with an interest in supporting early action approaches through their work. The Big Lottery Fund, Comic Relief and the Esmée Fairbairn Foundation are investing £5.3m to support three Phase One pilot projects (in Coventry, Hartlepool and Norwich) which are testing early and preventative action approaches in different areas of public service to develop a better case for early action amongst commissioners and funders. The Fund is overseen by a steering group which comprises the three funding organisations, alongside the Legal Education Foundation and the Barrow Cadbury Trust.

Further information on the EANF, including details of the funded projects can be found at: <http://www.earlyactionfund.org/>

# 2. Early action and the importance of evidence and data

## 2.1. The importance of evidence and data

Early Action projects, and broader preventative initiatives, face the challenge of collecting appropriate evidence and data to demonstrate distance travelled towards their goals in the short term, and overall success in achieving them in the longer term. However, this presents a real challenge: even proponents of early action cite the lack of a strong and robust evidence base as a major obstacle to reform (EAT, 2011; Kings Fund 2006). According to the NAO (2013) cost-benefit analysis is particularly lacking, including data on the impacts and costs of successful prevention.

## 2.2. The challenge of evaluation

The Early Action Taskforce (2011) warns that many early action and prevention initiatives are not fully evaluated and that the quality of evaluation that is undertaken is variable. Likewise, the Allen Review found that only eight of the hundreds of schemes it reviewed met the highest standards of evaluation in the UK (in NAO, 2013). Evaluations tend to provide positive feedback from users and practitioners about the benefits of a particular scheme, but not robust cost effectiveness analysis which establishes causation and whether or not there have been long term savings or wider societal benefits relative to the size of the investment (Kings Fund 2006). A particular challenge for early action is to identify the counterfactual scenario: what would have occurred in the future without the intervention (EANF, 2011, NAO, 2013)? This in turn makes it difficult to link long term outcomes and impact to an early action

intervention, particularly whether it limits increases in demand rather than causes a reduction (Plimmer and Poortvliet, 2010) or when scale and coverage of the intervention is relatively small.

### **2.3. Balancing intervention level understandings with the need for broader evidence about early action**

Caution is needed when interpreting what individual evaluations can tell us about the wider benefits of early action as a concept: the lessons of individual evaluations may be limited to the specific circumstances of the intervention(s) involved (Tall, 2015). A critical mass of rigorous evaluative evidence from different policy areas, localities and intervention types are needed to understand if, and in what circumstances, early action can be effective. However, and regardless of the merits of early action and prevention as concepts, a specific business case needs to be made for each individual project, to show projected savings and wider benefits (EAT, 2011). In these circumstances claims of potential cost saving are common and often exaggerated, leading to scepticism from policy makers, as it is rare in practice for a single intervention to achieve a dramatic individual turn around and long term support is often needed (Corry, 2014). Understanding of the potential benefits of early action and prevention therefore needs to be situated in a wider understanding that most social problems stem from deep-seated issues of poverty and inequality, alongside limitations within the embedded systems in which public services operate at a local level, and are very difficult to address with single, cost and time limited interventions (NEF, 2015).

### **2.4. What does good evidence look like?**

If good evidence and data is an essential component of early action then it is important to understand what good evidence looks like. A number of different scales exist against which to judge the quality of evaluation evidence but two have gained particular traction in policy circles in recent years: the 'Maryland scale of scientific methods' (see inset) and the 'NESTA standards of evidence'<sup>1</sup>. Although the two scales differ slightly, one common principle stands-out: the idea that only studies with a robust comparison group design can provide evidence that a programme or intervention has caused the reported impact. This equates to level three and above on both scales.

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<sup>1</sup> See: [http://www.nesta.org.uk/sites/default/files/standards\\_of\\_evidence.pdf](http://www.nesta.org.uk/sites/default/files/standards_of_evidence.pdf)

### **The Maryland scale of scientific methods**

The Maryland Scale of Scientific Methods (MSSM) (Sherman, 1997) is a five-point scale for classifying the strength of methodologies used in evaluation studies. It provides five generic levels of methodological quality that can be applied a wide spectrum of social policy interventions.

#### **Level 1**

Observed correlation between an intervention and outcomes at a single point in time. A study that measured the impact of an intervention using an exit-questionnaire would fall into this category.

#### **Level 2**

Change over time (or distance travelled) between the intervention and the outcome clearly observed and/or the presence of a comparison group that cannot be demonstrated to be comparable. A study that measured the outcomes of people who received an intervention before it was set up and after it finished and compared these to a wider un-matched population would fit into this level.

#### **Level 3**

A comparison between two or more comparable groups, one with and one without the intervention. A matched-area design using two geographical or delivery locations would fit into this category if the individuals in the research and the areas themselves were comparable.

#### **Level 4**

Comparison between multiple groups with and without the intervention, controlling for other factors or using comparison units that evidence only minor differences. A method such as propensity score matching, that used statistical techniques to ensure that the programme and comparison groups were similar would fall into this category.

#### **Level 5**

Random assignment and analysis of comparable groups to intervention and control groups. A Randomised Controlled Trial fits into this category.

Both scales are aspirational, and it would be unrealistic to expect all early action projects, including those funded through EANF, to measure all of the outcomes they hope to achieve at level three or above on each scale. However, each of the three funded projects aware of the importance of counterfactual data and are exploring approaches for incorporating a comparison group design for key evaluation outcome measures.

It is important to note the weight that the Maryland and Nesta scales give to quantitative evidence of outcomes and impact and the lack of recognition of the importance of more qualitative or theory based approaches. Realist or theory of change based approaches provide an alternative methodology for evaluating early action projects that places more emphasis on qualitative data that seeks to understand why problems exist and how specific interventions can affect change within complex systems.



### 3. EANF approaches to outcomes, evidence and data

Each of the EANF pilot projects is seeking to achieve a broad range of outcomes. Some of these outcomes are specific to individual projects and contexts (see table 3.1) but there also a number of common outcome themes across the projects:

- Improving the personal circumstances of people and families with multiple and complex problems.
- An overarching aim to improving mental health and well-being.
- Fewer but more effective engagements with existing public services in a way that reduces spending on reactive services.
- Supporting transformation within wider public services, including recognition of the importance of early action.

There we also consistent approaches to data collection:

- Baseline and follow-up questionnaires with EANF beneficiaries.
- Using existing general and specific tools and questionnaires with high levels of 'external validity'.
- Administrative data on beneficiaries' engagement with public services.
- In-depth qualitative research with beneficiaries and key stakeholders.

Table 3.1: EANF pilot project outcomes

Project	Outcome
Hartlepool	Improved family relationships
	Improved mental well-being of families
	Improved educational attainment
	Increased uptake of Early Help relational services
	Improvement in relational knowledge and functioning within service providers
	Improvement in the quality of relationships within/between service providers
	Reduced demand for social care
Norwich	Improved mental health and well-being of pupils
	Improved educational attainment
	Improved emotional and social behaviour of pupils
	Improvement in young people's social involvement and engagement in school
	Improved delivery of services to young people (and improved satisfaction with those services)
	Reduction in avoidable public service interventions
	Improved data collection across services
Coventry	Improved aspiration and personal expectations
	Improved personal social support networks
	Reductions in people's engagement with acute public services (housing and children's services)



## 4. Lessons

From the first year of the evaluation a number of common lessons have emerged from the three projects funded through the Early Action Neighbourhood Fund. These lessons highlight the challenges Early Action projects face around evidence and data but also some of the ways in which these can be overcome.

### 4.1. Knowing what to measure and how to measure it

During the early stages of their Early Action project each area has been required to identify what they need to measure to demonstrate their achievements and progress towards their goals. A key challenge that each project faced during this process was identifying what they needed to measure and how they should go about measuring it. A common first step in the process was to identify how such things were being measured elsewhere and whether a similar approach could be replicated at a project level. This meant exploring the range of existing tools, frameworks and indicators that purport to measure different outcomes and identifying the most appropriate for their work. 'Expert' advice from the Evaluation team and local partners played an important role in this process, as it helped Early Action projects identify a wider range of options available to them and validation for the decisions they made.

#### **Understanding the impact of EANF on organisational culture**

In Hartlepool, Changing Futures North East wanted to measure and understand their impact on relationships within the teams they were working with: did they communicate better, did they manage conflict better, and did this result in improvements in the way they assessed family's needs? The teams they were looking to affect included their own delivery and management teams but also those of local statutory partners whose practice they are seeking to change. Although such changes can be evidenced qualitatively Changing Futures also wanted to use a quantitative measure of organisational and team culture that could be monitored for the duration of the EANF project.

After extensive research, and following consultation with the Evaluation Team, Changing Futures identified the Team Climate Inventory as a possible measure they could use. The Team Climate Inventory is a 38-item questionnaire based tool that has been developed for use in small healthcare teams. It measures team function across 4 subscales: vision, participative safety, task orientation, and support for innovation (Bosch et al., 2008).

Changing Futures have begun piloting the Team Climate Inventory in their own teams before rolling it out to key partners later in the year.

That the projects chose not 'reinvent the wheel' when it came data collection is important. Because they are using 'tried and tested' tools and measures with high levels of validity they can be confident that they are accurately measuring the outcomes they hope to achieve. Where these measures are drawn from national surveys or performance frameworks it also provides an opportunity for benchmarking outcome progress against the wider population (and sub-populations).

### **A common approach to measuring mental health and well-being**

All three EANF projects are seeking to improve mental health outcomes for beneficiaries and have adopted a common approach to measuring mental health by using the Warwick Edinburgh Mental Well-being Scale (WEMWBs). WEMWBs is a scale of 14 positively worded items, with five response categories, for assessing a population's mental wellbeing that is commonly used for project level evaluation. A shorter seven item version of the scale has also been developed.

WEMWBs has recently been added as a measure of 'personal well-being' of the Office for National Statistics Measuring National Well-being Programme. This means national levels of mental well-being will be reported on an annual basis, providing a regular and readily available benchmark for evaluation purposes. WEMWBs is included in Understanding Society - the UK Household Longitudinal Survey - which means more detailed statistical matching is possible for comparative evaluation purposes.

## **4.2. Collecting primary quantitative data**

In each of the Early Action projects their plans for measuring outcomes require significant amounts of primary quantitative data collection. In practice this means collecting quantitative 'baseline' data from participants at the beginning of the intervention and following this up at regular intervals to observe change. In an ideal world such data would be collected independently, for example by a specialist survey company, but this type of approach is too expensive for the Early Action projects, as it would be for most third sector and public sector early action and prevention projects.

Instead, the Early Action projects are collecting primary quantitative data themselves, typically through frontline workers. This is an increasingly common approach across the third sector and public sector but it is not without challenges. Frontline workers are not experienced in collecting this type of data and may lack the skills and confidence to do it effectively. It also has the potential to detract from their frontline role provide help and support to people in need. Similarly, if data collection is not resourced sufficiently or collected robustly it can undermine the quality of the data and the ability of evaluation to demonstrate outcomes.

Balancing these demands represents a real challenge for the Early Action projects and progress will need to be monitored closely.

## **4.3. Access to administrative data**

Each of the Early Action projects will need access to administrative data to demonstrate outcomes and achievements, particularly in relation to changes in service user's use of public services. The majority of the data projects need is 'controlled' by local statutory bodies such as local authorities and Clinical Commissioning Groups who are not automatically required to share this data. To date, the projects have been relatively successful securing commitments from their local partners to access this data but the specifics of how and when it will be provided have not been agreed. In addition to local data, Early Action projects are exploring the potential of certain national administrative datasets such as the National Pupil Database administered by DfE.

There are particular information governance and data protection challenges associated with gaining access to administrative data, as well as practicalities in analysing it, that will need to be worked through if it is to be available to projects in a way that is useable and useful for evaluation. At local level the strength of local partnerships will be important for securing buy-in from local statutory bodies but at a national level there may be a role for EANF partners in brokering access to certain datasets.

#### **4.4. Making the economic case for early action**

The hypothesis that their particular approach to early action will have economic benefits, and that these benefits will persist beyond time limited interventions, provides an underpinning rationale for each of the projects. This means demonstrating reductions in the demand for costly public service interventions in the short, medium and long term. It also means demonstrating the links between the intervention(s) provided through the Early Action projects, the outcomes they achieve, and any reductions in public service use that might be associated with them. Each Early Action project is aware that this evidence will provide important 'proof of concept' for their work at a local level and that demonstrating impact on local public sector resources is crucial if their approach is to be incorporated, or 'mainstream', in the longer term.

##### **A common approach to cost-benefit analysis**

All three EANF projects plan to undertake some form of cost-benefit analysis. A local level, the public sector is being encouraged to adopt the New Economy Manchester model of cost-benefit analysis which has been specifically developed to identify the costs and benefits of new ways of working to deliver public services. The model draws on database of common indicators that can be applied to identify the fiscal, economic, and social value of project outcomes, and specify which public agency sees this benefit.

The three projects are currently exploring how the New Economy model can be utilised to demonstrate the cost-benefits of their EANF funded activity. This requires close working with their local statutory partners as the model requires relies on data from statutory bodies about service users' engagement with and requirement for a range of public services over an extended time period.

#### **4.5. Understanding cause and effect**

The wider literature on early action and intervention highlights the importance for early action of identifying the counterfactual scenario for specific interventions. This means understanding what would have occurred without the intervention and the extent to which it can be claimed that this was caused by the intervention. Methodologically, the 'gold standard' approach to counterfactual analysis is the randomised control trial (RCT) through which potential beneficiaries are randomly assigned to an intervention group (policy-on) and a non-intervention group (policy-off), and their progress against a series of outcome measures tracked over time. If the policy-on group is observed to have made more progress than the policy-off group, it would be reasonable to assume that the intervention has had some effect on this change. However, none of the Early Action projects are being implemented under RCT conditions and the complex public services environment in which they are operating would have made RCTs unfeasible.

An alternative to the RCT is the 'natural' or 'quasi' experiment in which policy-on and policy-off scenarios occur naturally due to the way that an intervention is implemented. One of the main challenges in the natural experiment is how to collect data from people not in receipt of the policy intervention, particularly when these people do not come into contact with the service provider. One solution is to observe changes in administrative data where this is collected universally and consistently by statutory bodies. Each of the Early Action projects is exploring the feasibility obtaining policy-on and off data from administrative and secondary data sources. In addition, the Norwich project have developed a longitudinal comparison group for measuring mental health outcomes through the Warwick-Edinburgh Mental Well-being Scale (see box inset).

#### **Developing a longitudinal comparator group**

In Norwich MAP have developed an innovative quasi-experimental evaluation by establishing a comparison group for their study of mental health using Warwick Edinburgh Mental Well-being Scale (WEMWBS). In the three schools in which they are working MAP have secured agreement to collect comparison group data that will add rigour to their evaluation.

Every pupil receiving a MAP intervention will complete WEMWBS at the beginning of their intervention and again at the end to provide an understanding of how pupil's well-being changes following receipt of support. In parallel, a WEMBS 'baseline' has been measured for all pupils in the current year seven year group and WEMWBs will continue to be measured for all pupils in this year group on a regular basis until the end of year 11. These 'population' level scores will provide longitudinal data against which pupils from the same year group who receive a MAP intervention can be compared. In addition, WEMWBS will be measured for each year group when they reach year 10, providing a cross-sectional comparison against which the impact on population level mental well-being of pupils can be measured.

#### **4.6. Analysing data**

Each of the Early Action projects has a member of staff whose role it is to co-ordinate the data collection process and analyse the data on a regular basis. The Norwich and Hartlepool projects have dedicated 'Data Analysts' but in Coventry it falls under the project manager's remit. In addition, the Evaluation Team is able to provide projects with advice and guidance about data collection on an ad hoc basis and will undertake some analysis of local data to inform programme wide reports. However, the volume of data collected and the complex nature of some of the analysis required, means that the projects may not be sufficiently resourced - in terms of capacity and skills - to do this effectively. A particular gap is around cost-benefit analysis and the associated economic and statistical modelling approaches needed to demonstrate impact.