The Secret Life of Innovation: Replication
Defining success in replicating effective services for children and young people

About this series: This series of Programme Insights shares reflections, learning and practical implications from Realising Ambition: a £25m Big Lottery Fund programme supporting the replication of evidence-based and promising services designed to improve outcomes for children and young people.

Rather than writing a long evaluation report at the end of the five-year programme – which would likely be read by very few people – we are instead producing a series of 12 Programme Insights. Some issues, like this one, are Focus Pieces that describe concepts and share some of our reflections and opinions. Others will be Findings pieces, reporting empirical data emerging from the programme and associated evaluation activities. The last type will be Field Guides: practical ‘how to’ guides for a variety of audiences. By sharing ideas, successes, challenges and even some mistakes we hope to support and inspire others considering, undertaking or commissioning their own replication journey.

Throughout each issue some words are highlighted in blue. For these you will find definitions in the Glossary of Terms box at the end of this piece. There you will also find some key reading we have drawn on in the development of this series.

About us: The Realising Ambition programme is supporting and is powered by 22 organisations – large and small – replicating 25 different services all over the UK. The programme is managed by a consortium of four organisations committed to improving outcomes for children: it is led by Catch22 alongside the Dartington Social Research Unit, Substance and The Young Foundation. This issue was written by the Dartington Social Research Unit with contributions from all partners in the consortium.
Replication and Innovation

What’s not to like about innovation? It suggests momentum and energy, new and better ways of doing things, and efficiencies in both time and money. Innovation in public services has long been and continues to be fashionable. It rests on the premise that not everything that has come before has worked and that services could be better and have a greater impact on outcomes — and who could argue with this?

However one danger with focusing on ‘the new’ is that services or interventions with a strong body of evidence supporting the difference they make are overlooked. Just because something is new does not necessarily mean it is better. Innovation also has a tendency to breed initiatives that are rarely sustained or replicated.

So what if we looked for the things that worked, and tried to replicate them, rather than continuously looking for something different? This is the approach taken by Realising Ambition.

Copying – another word for replication – tends to have a bad reputation. It may be considered unimaginative or, at worst, a form of theft. But done appropriately and respectfully this need not be the case. ‘Copying’ comes from the Latin copia, which means abundance. In the context of Realising Ambition it means spreading good practice, underpinned by strong evidence, to new geographical areas or new groups of people.

Let us be clear at the outset: replication and innovation are not opposing forces, although they are often perceived to be. One of the most exciting things about good replication is that it paves the way for innovation. Innovation is rarely a ‘eureka!’ moment coming out of nowhere. Most innovations – whether social, technological or scientific – are incremental improvements to things that have gone before. Take, for example, most medical advancements or the development of the car. Replication allows us to test things that have worked elsewhere in new areas and with new audiences. In the context of services for children, we can think about what we might try to do differently to improve outcomes for children and young people: How can it reach more young people who might benefit? How might the activities resonate more with young people in this area?

The trick with replication is knowing what to keep the same and what to change, and by how much. Much of our work with the 25 Realising Ambition projects has been concerned with trying to understand what is core to the service they deliver (the things that make it work) and what is surface (the things that make it fit into a new context and make people want to use it). We will return to this theme shortly.

**Why do we need to replicate in children’s services?**

There are a number of reasons why replication should be considered a necessary approach when commissioning and delivering services to children.

**Ethics:** We have a moral duty to use what we know works in children’s services. While most services provided to children are well-intentioned and delivered by people trying to do good, the reality is that only a fraction have good evidence indicating that outcomes are likely to be improved. Why not do more of what we can be confident will improve outcomes?
Focus Piece

**Economics:** We also have a moral duty to use taxpayers’ and donors’ money judiciously. All resources that are invested in services for children should represent value for money. This is especially true in a time of austerity: shrinking budgets mean policy-makers and commissioners need to make every pound count if we want the best for our children. We have growing evidence for the likely financial returns of replicating effective practice; for example, the *Investing in Children* online database provides information about the costs and likely returns on investment over a recipient’s lifetime for 100 evidence-based programmes.

The other side of the economic case for replication is the amount of money that can be wasted in trying to reinvent the wheel. We need only look at the number of parenting programmes on the market as evidence of our desire to always start afresh. Worse still is reinventing ‘square wheels’ – creating something new that has already been developed and tested elsewhere and found not to work.

**Balance:** The scales are tipped heavily against services underpinned by robust evidence of impact on child outcomes. Ideally services provided in one place would include a mixture of evidence-based, promising and early stage innovations. Unfortunately what we typically see is practices that have been used for many years with no evidence of effectiveness and no commitment to use those things that are tried and tested. After mapping expenditure across children’s services in over 20 local authorities across the UK, the Dartington Social Research Unit estimates that typically less than 1% of a total budget – including education – is spent on services that are underpinned by robust evidence of impact.

We are not suggesting that every service that is delivered to children has to go through an experimental evaluation to a very high standard, but we think that the balance should at least start to tilt in that direction.

**Scale:** Services that are underpinned by robust evidence of impact are not close to being implemented at scale. The evidence-based programme with the greatest reach to eligible children and families in the UK to date is arguably the Family Nurse Partnership (FNP); a central government supported intensive nurse home-visiting programme designed for young and first-time expectant mothers. It has a 30-year history and a strong international evidence-base. Yet it currently serves approximately 25% of those that might benefit in the UK. While this in itself is impressive, there is still a long way to go until it is offered to all families who are eligible and might benefit (a separate Big Lottery Fund investment – *Fulfilling Lives – A Better Start* – is supporting replication at scale of this particular service in five communities).

**Innovation:** By replicating we will learn, innovate and improve. If incremental improvements are the primary source of innovation, it follows that by replicating what is already strong there will be a greater likelihood of improving children’s outcomes. It is by replicating that we have seen steady improvements in all sorts of products – from cars to smartphones to healthcare.

These are five good reasons for why we should replicate more. So why don’t we? As we have touched on already, people are attracted to things that are new and perceived as innovative (even if they are not). But there are other reasons: the pool of services underpinned by robust evidence is not large to begin with (there isn’t much to replicate);
replicating a particular practice or way of working may seem restrictive or disempowering to professional autonomy as it requires practitioners to work in a pre-defined way; it may be considered as unhealthy competition to locally developed services which people already like; and the needs of children and families in a given area may be viewed as unique and thus not amenable to a service developed elsewhere. These are all things that need careful consideration when replicating something somewhere new but they hardly amount to a convincing argument for not replicating at all. We acknowledge that replicating well is hard work and we don’t know enough about how to do it, but we also think it makes far more sense to replicate than to start from scratch.

The need to better understand replication

Thirty years ago if you asked a scientist or a policy-maker: ‘What Works to reduce children and young people’s subsequent involvement in the criminal justice system?’, you probably would have been greeted with a resigned ‘We’re not really sure’ because the small amount of accumulated evidence suggested nothing had an effect. Not any more. Our understanding of pathways to offending, and what can be done to interrupt them and promote healthy development has evolved rapidly. The quality and volume of evidence has increased considerably. There is now a growing list of policies, practices and programmes that have been shown to break chains of risk, boost resilience and improve outcomes for children. This is reflected in the preponderance of What Works centres and databases of evidence-based approaches (including the aforementioned Investing in Children website).

Yet whilst our knowledge of what works has grown rapidly, the same cannot be said about our knowledge of putting this science into practice – the skill of implementation. The gap between knowing and doing remains very wide. There are many books and resources about innovation, but relatively few about implementation and replication (at least in the social sector).

However, the tide might just be starting to turn. In recent years the scientific study of implementation and replication has emerged. Spearheaded by Dean Fixsen and Karen Blase – who set up the Global Implementation Initiative – we are seeing a growing appreciation of the need to get implementation and replication right if the promise of evidence-based practice is to be realised. This is coupled with the emergence of organisations such as the International Centre for Social Franchising (ICSF) that support and promote socially orientated replication activities.

It was in this context that Realising Ambition was created as a concerted effort to better understand and share learning about the replication of a range of evidence-based and promising practices.

The ingredients of successful replication

Over the last few years we have been talking to the 25 Realising Ambition projects, doing our best to support each one on their replication journey, and reflecting on what successful replication looks like.

Here is our conclusion thus far:

Successful replication may be defined as: a tightly defined service; effectively and faithfully delivered to those who can benefit from it; that provides confidence that outcomes have improved; that is cost-beneficial and scaleable; and is delivered by an organisation that uses evidence to learn and adapt as required. As such, it is not just about replicating a particular practice; rather, it is a way of replicating a positive social impact.

Let’s dig a little deeper into each element of this definition.

1. A tightly defined service

A tightly defined service is one that has a clear
focus on the **outcomes** it is seeking to achieve. It is supported by a **logic model** describing the connections between the **core** components of the service and the desired outcomes. The service is underpinned by a manual or implementation handbook that clearly specifies the activities involved: what needs to be done, how, when and by whom.

2. **Effectively and faithfully delivered to those who need it**

Effective delivery means replication of a service in an area where the need for it has been identified and to the number of beneficiaries expected by the people who commission it. Faithful delivery means it is delivered to those individuals for whom it was designed by motivated and appropriately qualified staff or volunteers. It means that the **core** components of the service are identified and delivered as intended and that there are mechanisms for ensuring this. Faithful delivery is often referred to as **fidelity**.

3. **There is confidence that outcomes of children and young people have improved**

There is confidence that **outcomes** of children and young people are likely to improve if there is good **evidence** in support of the service’s underlying logic model. There needs to also be robust evidence of its impact when evaluated in other places. Confidence that children are actually better off in new replication areas will increase when delivery organisations routinely monitor outputs and outcomes. These providers must also have the capacity to analyse and communicate evidence they generate locally.

4. **The service is cost-beneficial and scaleable**

The delivery organisation has appropriate systems, processes and capacity to replicate the service more widely. The service is **cost-beneficial** and scaleable: it has the potential to be delivered to all those who could benefit in any given place, and it is economically worthwhile and sustainable to do so. All of this requires good information about costs and benefits, a compelling business case and an appropriate replication model.

5. **Evidence is used to learn and adapt, as required**

Successful replication will be determined, in part, by the ability of a delivery organisation to generate and use **evidence** to know what is working well, when things are veering off-track and how to course-correct. The ability to motivate people to want a service, rather than for it to be imposed upon them, and to ensure that it is scaleable, rests on the ability to test the effectiveness of adaptations made to **surface** elements while maintaining **fidelity** to the **core**. As we also know, involving the users of services in conversations about improving services greatly increases the chance that others will want to use those services.

This definition of what successful replication looks like is the product of engaging with the emerging science of implementation and with the 25 Realising Ambition projects over the last few years. It is one thing to define success but it is another to measure it. We are, however, trying to walk the talk. We are using data to hold ourselves to account and to judge how successful we have been in supporting effective replication after five years of
investment. It is this definition of success – and a set of associated metrics to be discussed in the next issue of the Programme Insights series – that we will use to assess the degree to which the Realising Ambition projects have succeeded or struggled in replicating their services at the end of this five-year Big Lottery Fund investment.

Replication is tough. It would be unreasonable to expect every organisation embarking on a replication journey to shine against every element of the definition. At the outset of the Realising Ambition programme we expected a degree of failure. But what we hoped to do was learn from both the challenges and successes and share this learning in order to support others in their own replication journey.

**Stages of replication**

We have defined what we think successful replication looks like. So how do you go about actually replicating a service for children and young people, or commissioning someone to do this? What are the steps and things you need to think about? We will delve into these questions in more depth in two forthcoming Field Guides in this series, so here we introduce some of the foundations.

Rather predictably, we believe there is not just one route to successful replication. The journey depends on what is being replicated, how well developed the evidence-base for the service is, who is doing the replicating, from and to where the replication is happening.

That said, there are some common features in the approach. We have been reflecting on these and sharing our thoughts with others grappling with the issues. Our most basic take on replication, which in many ways is not that different from most attempts to pilot and test services, is:

1. **Start with something good, grounded in good theory and evidence**;
2. **Test, refine and improve it by taking it somewhere new – with scale in mind; and**;
3. **Spread it until saturation-point is reached.**

The points of difference to most other approaches are, first, the emphasis on utilising evidence and, second, the potential for scale. This is what defines the Realising Ambition approach.

This basic premise has been explored by our colleagues at the International Centre for Social Franchising (ICSF) and their recently published Social Replication Toolkit. Given that so many of our experiences chime with theirs – and in the true spirit of replication! – we have agreed not to reinvent the wheel, but instead consolidate and build upon our respective learning, emphasising in particular the role of evidence.

The Social Replication Toolkit outlines five stages: prove; design; systemise; pilot; and scale. We think these are helpful stages and align with our broad thinking and experience. In short:

1. **Prove**: make the case for what is being replicated, who is doing the replicating, and where the replication will take place.
2. **Design**: develop the replication and business model, firm up who is best-placed to undertake the replication, and refine or make any necessary adaptations to flexible components of the service.
3. **Systemise**: put the systems and processes in place – such as creating a manual, training, and fidelity monitoring – to ensure that replication occurs as planned.
4. **Pilot**: test the approach to replication and put in place a monitoring, learning and evaluation framework.
5. **Scale**: aim for the lofty goal of replicating to saturation point via a series of achievable goals.

*Image Credit: ICSF Social Replication Toolkit 2015*
This sequence is helpful in developing some necessary foundations that are required before systemising and piloting: starting with something worth replicating and having an agreed replication strategy. Yet we’ve found that in reality the process is not linear. Often some stages – in particular the ‘systemise’ and ‘pilot’ stages – occur in tandem, with each impacting on the other. The process of piloting or replicating will, in turn, highlight opportunities for further design, refinement and systemisation.

As ICSF also stress, sustainability and scale must be considered carefully right from the outset: scale is not necessarily a natural consequence of replication. You can scale ‘deep’ – try to reach a saturation point in a given place, or you can scale ‘wide’ – spread the practice or product to new territories. Replication is just one of the ways to scale wide.

**Fidelity and adaptation**

As we indicated previously, we think part of the skill in replication is knowing what to copy or what not to change (the core of the service: the things that make it work) and where to adapt (the surface changes that make it fit into a new context and make people want to use it). This is our working hypothesis, which we will be testing and revising throughout this series of Programme Insights. We think attention to the balance between what is core and adaptable should be maintained throughout each of the five stages of replication (although knowing what is core and adaptable in the first place is one of the greatest challenges).

Much of the advice given to potential replications is focused on consistency and **fidelity**: on keeping the product exactly the same to ensure quality. This is important if, for example, you are serving fried chicken coated in a secret blend of herbs and spices, or manufacturing pharmaceuticals and need to ensure safety. But success in replicating effective services for children depends not only on faithful replication of the core but also what might be superficial or fundamental changes to the surface or the way in which it’s delivered.

Our favourite example to demonstrate this idea is a smartphone. The core is formed by a lot of complex electronics in the back that we couldn’t change even if we wanted to, and if we did would cause the device to malfunction. The core is what makes it work. The surface is made up of the picture we choose to put on the screen, the settings we tweak and the apps we buy, all of which make the phone personal. The surface makes it yours. Approximately 975 million smartphones are sold each year, but if you buy one it will be made yours by all the surface adaptations you make to it. This creates the ‘pull’ we referred to earlier.

Let us apply this analogy to a service for children and young people. We have great theory and evidence that acknowledging and breaking cycles of coercive parenting (from Gerald Patterson, Tom Dishion and colleagues) coupled with learning from peers rather than ‘experts’ (Bandura’s social learning theory) helps parents of young children exhibiting oppositional behaviour to parent more effectively. These two basic tenets underpin the logic models for many evidence-based parenting programmes that exist. Yet most parenting programmes run in a fairly typical arrangement: a series of group-based sessions, not always run at the most convenient of times or places for families, and usually using materials and analogies developed in places that do not necessarily reflect the local delivery context.

What if we stuck to the core principles and components (breaking cycles of coercion, using social learning theory) but delivered them in ways that created ‘pull’? At the most basic level this might be creating culturally relevant materials, running groups at times that worked for the families, or, more radically, by experimenting with entirely new delivery models. For example, we could make use of technology – web-based, smartphone or tablet apps – to deliver some of the core ideas that underpin the service.

We have to find out what works, for whom, when and why, but we also need to find out who will use what, when and why. Our attempts at replication must reflect both sides of this equation. Over the
Focus Piece

coming two years we will be putting these ideas to the test, drawing on data generated by the projects and through our conversations with them and others.

**Evidence and the stages of replication**

As well as the concepts of replication, fidelity and adaptability, another defining feature of Realising Ambition is the emphasis on evidence. We and the 25 Realising Ambition projects have worked hard to generate and use evidence at each stage of the replication journey, not only when identifying what to replicate in the first place, but throughout each subsequent stage of design, refinement and delivery.

The figure below provides an overview of the stages of replication and introduces the types of evidence that may feed into each stage.

<table>
<thead>
<tr>
<th>Stage</th>
<th>Goals</th>
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<tbody>
<tr>
<td>PROVE</td>
<td>- Work out if replication is right for you&lt;br&gt;- Assess whether you are ready to replicate&lt;br&gt;- Improve your replication readiness</td>
</tr>
<tr>
<td>DESIGN</td>
<td>- Understand the options for replication&lt;br&gt;- Select the replication model that works for you&lt;br&gt;- Design your replication model</td>
</tr>
<tr>
<td>SYSTEMISE</td>
<td>- Develop recruitment and support functions for replication&lt;br&gt;- Document systems and processes&lt;br&gt;- Develop legal documentation</td>
</tr>
<tr>
<td>PILOT</td>
<td>- Understand the vital elements needed to be in place for your replication pilot to be a success&lt;br&gt;- Develop a plan for communicating with your implementers&lt;br&gt;- Put your Monitoring &amp; Evaluation (M&amp;E) framework into practice and instil a feedback loop for continuous improvement of the replication process</td>
</tr>
<tr>
<td>SCALE</td>
<td>- Develop a clearer picture or organisational changes needed to achieve scale&lt;br&gt;- Consider other areas important to scaling successfully</td>
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**Evidence of:**

- A logic model underpinned by evidence
- A well-defined core
- Clearly specified activities
- Impact on outcomes
- Co-production
- Compelling business case and replication model
- Manual or implementation handbooks
- Need and eligibility criteria
- Qualified and well-trained staff
- Delivery targets and reach
- Retention
- Routine outcome monitoring
- Robust outcome evaluation
- Fidelity monitoring
- Quality assurance
- Testing of flexible components
- Cost-benefit analysis
- Proportion of eligible population served
- Market receptivity
The next issue of *Programme Insights* will focus specifically on the role of evidence in replication. We will argue that a proportionate and wider palate of evidence (over and above just evidence of impact) at each stage of the replication journey will provide greater confidence in the service in the eyes of the people commissioning and delivering the services. Subsequent issues in the *Programme Insights* series will address in greater detail some of the organisational and external forces that influence the ability to replicate.

### Key Learning Points

- **There are moral, economic and policy arguments in favour of replication**
  These include providing services for which there is good evidence that children will most likely be better off as a result (when otherwise the impact of many services are unknown), an economic case to achieve value for money, and creating the foundation for scale.

- **Replication paves the way for innovation**
  Incremental improvements are the primary source of innovation, and replication creates the foundation for improvement.

- **There are five key ingredients of successful replication**
  A tightly defined service; effectively and faithfully delivered to those who can benefit from it; that provides confidence that outcomes have improved; that is cost-beneficial and scaleable; and that is delivered by an organisation that uses evidence to learn and adapt, as required.

- **There are five main stages in the replication journey**
  Prove; design; systemise; pilot; and scale. These stages are not necessarily sequential; replication requires iteration, testing and refinement.

- **Successful replication requires a degree of careful adaptation**
  The trick – and greatest challenge – with replication is knowing what to keep the same and what can change. This requires a good understanding of what is core to the service that is being delivered (the things that make it work) and what is surface (the things that make it fit into a new context and make people want to use it).

- **Replication is just one of the ways to achieve impact at scale**
  Scale needs to be considered and built into the design stages right at the outset.
Focus Piece

Glossary of Terms

Here are some definitions of key terms introduced in this Programme Insight.

■ **Core components**
The key activities that make the service work. Put another way, the specific aspects or mechanisms of a service that lead to the desired change in outcomes. For a service to be replicated successfully, providers need to be clear about what can and cannot be changed.

■ **Cost-benefit analysis**
The estimation of financial returns on an investment or service. Returns are typically estimated for individual recipients of service, agencies providing the service and the state. Cost-benefit analyses rely upon accurate cost information and robust evidence of impact (ideally from experimental evaluations). Cost-benefit analysis may produce a calculation of net cost (benefits minus cost) or the ratio of costs and benefits.

■ **Evidence**
Generally speaking evidence is information that acts in support of a conclusion, statement or belief. In children’s services this tends to be information indicating that the service works, i.e. is achieving the intended change in outcomes. We take a broader view in that evidence may support or challenge other aspects of service delivery, such as quality of implementation, reach and value for money.

■ **Evidence-based programme**
A discrete, organised package of practices or services – often accompanied by implementation manuals, training and technical support – that has been tested through rigorous experimental evaluation, comparing the outcomes of those receiving the service with those who do not, and found to be effective, i.e. it has a clear positive effect on child outcomes. In the Standards of Evidence developed by the Dartington Social Research Unit, used by Project Oracle, NESTA and others, this relates to ‘at least Level 3’ on the Standards.

■ **Experimental Evaluation / Robust Evidence of Impact**
An evaluation that compares the outcomes of children and young people who receive a service to those of a control group of similar children and young people who do not. The control group may be identified by randomly allocating children and young people who meet the target group criteria – a randomised controlled trial or RCT –, or by identifying a comparable group of children and young people in receipt of similar service – a quasi-experimental design or QED.

■ **Fidelity / Faithful delivery**
The faithfulness to the original design and core components of a service. This can be assessed by fidelity monitoring tools, checklists or observations.

■ **Implementation**
The process of putting a service into practice. Implementation science explores theory and evidence about how best to design and deliver effective services to people.
Glossary of Terms

- **Innovation**
  The process of translating a new idea into a service that creates value for the intended beneficiaries and which can be funded or commissioned.

- **Logic model**
  A typically graphical depiction of the logical connections between the resources, activities, outputs and outcomes of a service. Ideally these connections will have some research underpinning them. Some logic models also include assumptions about the way the service will work.

- **Outcomes**
  Outcomes refer to the ‘impact’ or change that is brought about, such as a change in behaviour or physical or mental health. In Realising Ambition all services seek to improve outcomes associated with a reduced likelihood of involvement in the criminal justice system.

- **Promising service / intervention**
  A tightly defined service, underpinned by a strong logic model, that has some indicative – though not experimental – evidence of impact. In the Standards of Evidence developed by the Dartington Social Research Unit, used by Project Oracle, NESTA and others, this relates to ‘Level 2’ on the Standards.

- **Replication**
  Delivering a service into new geographical areas or to new or different audiences. Replication is distinct from scaling-up in that replication is just one way of scaling ‘wide’ – i.e. reaching a greater number of beneficiaries in new places. (See definition of ‘scale’).

- **Surface adaptations**
  Aspects of the service that can be adapted to fit local contexts. These are peripheral components that do not directly alter the core aspects of the service that make it work. Surface adaptations may allow providers in other areas to make the service ‘their own’ and better serve the needs of local populations.

- **Scale**
  A service is ‘at scale’ when it is available to many, if not most, of the children and families for whom it is intended within a given jurisdiction. Usually this requires that it be embedded in a public service system. Service delivery organisations can scale ‘wide’ by reaching new places, or scale ‘deep’ by reaching more people that might benefit in a given place. Replication is one approach to scaling wide.

A more expansive glossary of key terms related to Realising Ambition may be found at the Realising Ambition website: catch-22.org.uk/realising-ambition. This will grow as the series of Programme Insights develop.
We have drawn on many sources in the production of this Programme Insight. Our top picks for further reading on the themes discussed are listed below.


You can find a full list of additional resources we have drawn on at the Realising Ambition website: catch-22.org.uk/realising-ambition. This list will grow as the series of Programme Insights develop.