Making an Early Intervention Business Case: Evidence and resources

This factsheet provides a simple illustration of some of the evidence that might be used to inform early years (EY) and early intervention (EI) business cases. In any assessment of the costs and benefits of EY/EI, the starting point is usually the impacts that are expected, which fall into two broad categories:

- Improvements in indicators and outcomes for the individuals concerned, such as mental health, family relationships, attainment in school, offending or substance use;
- Reductions in demand for service provision of a more acute and reactive nature, such as care placements, alternative schooling, health service admissions, or prison and probation.

In the case of economic appraisal, these outcomes have to be forecast in advance of any policy decision; the most robust approach is to rely on existing evidence from previous EY/EI practices on the chosen outcomes. A number of online resources have been reviewed, providing authoritative guidance on which practices work, and (in some cases) the magnitudes of their impact.

Evidence on the benefits of intervention programmes

One of the most well-known resources is <u>Blueprints for Healthy Youth Development</u>. Programmes listed on this database, such as Functional Family Therapy (FFT), have been validated by multiple peer-reviewed studies adhering to the highest standards of evidence. This resource therefore highlights an 'elite' set of EY/EI practices for which the evidence base is the strongest.

For many programmes a social benefit-cost ratio (BCR) has been calculated. This is the total value of the benefit to society per dollar or pound spent on the programme: a BCR of 3, for example, means that the benefits of a programme were found to be three time as large as the costs; for every £1 spent, £3 of social benefits are generated. The BCRs, where available, have been produced by the Social Research Unit through its Investing in Children project.²

Table 1 provides this information for a selection of evidence-based EY/EI programmes. Each programme listed links to the relevant *Investing in Children* or *Blueprints* webpage; the BCR, where available, is also given. The programmes are generally grouped by outcome area, but a programme may appear more than once if it has had multiple impacts across different outcomes.

Clearly there are important caveats with which these figures are presented. The BCRs relate to the original studies, many of which were carried out in a specific local context in the US, in previous decades. While the programmes have been established to be successful, the costs, impacts and monetary value of those impacts could easily differ if the programmes are implemented locally, for a number of reasons. Sensitivity analysis is advised to explore the implications of that variation.

¹ This typically requires multiple studies, including at least one randomised control trial (RCT), demonstrating a consistent and sustained improvement in outcomes.

² This project has built on previous work by the Washington State Institute for Public Policy (WSIPP), which originally calculated the BCRs for the programmes listed. The SRU has translated these cost-benefit calculations for the UK policy and economic context.

Table 1. Some examples of evidence-based interventions and programmes

	Programme	Target group	Setting	Outcomes	Social
				improved ^a	BCR ^b
Positive relationships	Family Nurse Partnership	First-time teen mothers	Home	Disruptive behaviour	1.94
	Parent-Child Interaction Therapy	Age 2-12	Social services	ADHD Disruptive behaviour	2.37
	Incredible Years Parent Training	Age 2-12	Community	ADHD Disruptive behaviour Internalising behaviour	1.37
	Raising Healthy Children	Age 5-11	School	Crime Teen pregnancy School completion	
	Functional Family Therapy	Age 11-18 at risk of delinquency	Youth justice Social services	Crime	12.32
	Good Behaviour Game	Age 6-8	School	Alcohol/drug use	26.9
	Project Towards No Drug Abuse	Age 14-18	School	Drug use	8.61
Risky behaviour	Guiding Good Choices	Age 9-14	School	Alcohol/drug use Crime	2.92
	Life Skills Training	Age 11-14	School	Alcohol/drug use Crime	10.67
	Multidimensional Treatment Foster Care	Adolescents at risk of care	School	Crime Teen pregnancy	2.64
	Multisystemic Therapy for Juvenile Offenders	Age 12-17 with previous arrests	Community Home	Crime	2.04
Child welfare	Triple P Positive Parenting Programme	Age 0-16	Community Home Clinic	Child abuse/neglect Care placements	5.05
	Family Nurse Partnership	First-time mothers	Home	Child abuse/neglect	1.94
P	Good Behaviour Game	Age 6-8	School	Depression	26.9
Chi	Individual Cognitive Behavioural Therapy	Age 12-18	Various	Depression	2.18
	Good Behaviour Game	Age 6-8	School	Suicide risk	26.9
Physical health	Bright Bodies	Age 5-18	Home Clinic	BMI Body fat percentage Insulin resistance	
	Positive Action	Age 5-14	School	Diet Exercise	
Education	HighScope Perry Preschool	Age 0-5 in poverty	Home School	Test scores Special education	1.61
	Targeted Reading Intervention	Age 5-7 with reading difficulties	School	Test scores	7.98
	Behavioural Monitoring and Reinforcement Programme	Age 12-14 with school problems	School	Test scores	1.56
	Early Learning and Literacy Model Overting in Children and Riversiate	Age 4-5 with low income	Home School	Letter recognition Emerging literacy	

Source: Investing in Children and <u>Blueprints for Healthy Youth Development</u>. Programmes listed are an indication of the available evidence, and do not constitute an EIF recommendation.

^a These are outcomes for which the programme had an impact, which are not always the same outcomes the programme was designed to affect.

^b Social benefit-cost ratio: the estimated value of total benefits to society as a whole, per £1 or \$1 spent. BCRs relate to the original study, time period and context; they may differ if the same intervention is delivered elsewhere.

Costs of different types of service provision

The information presented in Table 1 may have limited capability to inform business cases in the current environment, for three reasons:

- 1. The evidence presented relates a tightly- defined group of established practices which may already be in place.
- 2. As seen in Part 1, the proposal in a business case might be a new delivery or commissioning framework intended to improve the effectiveness of EY/EI services, rather than an intervention itself.³
- 3. As seen in Part 1, business cases tend to focus on the fiscal returns from the proposal the expected future savings to the commissioner rather than the social returns.

Commissioners are more likely to need to make an informed judgement about the likely outcomes achieved by the proposal, under scenarios reflecting varying degrees of success. They would then need to estimate the budget savings that might be achieved as a result of those outcomes. For example, if the proposal is a new child protection strategy, the outcomes that might be expected could include fewer emergency hospital admissions and fewer placements into care. Plausible assumptions would be required around the scale of these potential effects, but also around the costs to the health service per admission and the cost to the local authority of a care placement.

A variety of databases and 'cost calculators' exist to provide such estimates:4

- <u>The Unit Costs of Health and Social Care</u> produced by the Personal Social Services Research
 Unit (PSSRU). This contains detailed cost estimates for a range of services such as care
 placements, NHS services, social work, mental health, and some family interventions. For
 each service, a range of costs are presented including building and land costs, salaries and
 overheads.
- The Department for Education's (DfE) <u>Family Savings Calculator</u>, which enables commissioners to estimate the potential savings achieved by interventions for families with complex needs.⁵
- The <u>Troubled Families Cost Database</u> created by New Economy Manchester (NEM), which
 provides a range of unit costs (sourced from administrative data and research studies), for
 crime, education, employment, fire, health, housing and social services.

Table 2 provides examples of estimated unit costs from these sources, for a selection of relevant services. The estimates tend to be stylistic national averages or estimates taken from a specific local area; in practice, an area's *actual* cost can vary due to local and intervention-specific factors. While actual service cost information based on analysing local budgets and outturns is of course preferable, the figures contained in these resources may provide a useful starting point if a detailed cost collection exercise has not been undertaken. As with Table 1, appropriate sensitivity analysis is advised.

³ Multi-agency partnerships or community budgeting would be examples of this.

⁴ The Cost Calculator for Children's Services, produced by the Centre for Child and Family Research (CCFR) at Loughborough University, is another option. However, this is currently under development and was not available for review at the time of writing.

⁵ The costs and, the assumed reduction in negative outcomes achieved by a family intervention, are sourced from the <u>Think Family toolkit (Guidance Note 03)</u>.

Table 2. Some examples of unit costs for early intervention business cases

	Activity/outcome	Cost	Source	Notes			
Crime		£1,930	DfE				
	Arrest (each)	£2,241	NEM				
	4000 (1)	£5,350	DfE				
	ASBO (each)	£7,805	NEM	From Westminster and Hammersmith & Fulham.			
		£3,608	DfE	Cost to police, CJS, NHS and social services.			
	Domestic violence (per incident)			Cost to police, CJS and NHS. Covers full range of			
		£18,730	NEM	severity.			
	Magistrates' court proceeding	£550	DfE				
	iviagistrates court proceeding	£768	NEM	1997/98 figures.			
	Probation Order (each)	£2,610	NEM				
	Prison place (per year)	£36,266	DfE				
		£45,171	NEM				
	A&E visit (each)	£105	DfE				
		£53	NEM	2011/12 figures. Assumes no treatment.			
				2010/11 figures. Assumes treatment. Lower			
Health		£146	PSSRU	(upper) quartile £114 (£171).			
	Inpatient (per day)	£286	DfE	222425			
	Inpatient (per stay)	0000	DCCDII	2010/11 figures. Lower (upper) quartile £460			
	1 11 77	£680	PSSRU	(£837).			
	Inpatient drug/alcohol (per day)	£205	DfE	2011/12 Figures			
		£150	PSSRU	2011/12 figures.			
	CAMHS team (per case)	£2,923	DfE	2011/12 figures. Based on generic single-			
		£4,549	PSSRU	disciplinary team.			
	LA mental health care (per week)	£783	PSSRU	2011/12 figures.			
	Mental health nurse (per hour)	£35	PSSRU	2011/12 figures. Excludes qualification cost.			
	Health visitor (per hour)	£43	PSSRU	2011/12 figures. Excludes qualification cost.			
	CAF (per assessment)	£1,493	NEM	2011/12 ligarest Excidence qualification cost.			
		£949-	142141				
Š		£2650	PSSRU	Range based on alternative case study scenarios.			
services	Foster care place (annual)	£27,813	DfE	Comprises initial and ongoing monthly cost.			
2		£28,660	NEM				
_		£33,124	PSSRU	2011/12 figures.			
Socia	LA care home place (annual)	£181,499	DfE	Comprises initial and ongoing monthly cost.			
So		£132,652	NEM				
		£155,948	PSSRU	2011/12 figures.			
	Child Protection Plan (each)	£6,381	DfE	Comprises initial and ongoing monthly cost.			
	Clinic-based group parenting	£500	DfE				
	programme (each)	£580	NEM				
us.	Incredible Years Parenting			2011/12 figures. Assumes 12 children per group. Includes set-up costs.			
Interventions	Programme (per child)	£1,612	PSSRU				
	Multisystemic Therapy (per			2011/12 figures.			
	session)	£116	PSSRU	· ·			
	Cognitive Behavioural Therapy	6404	DCCDII	2011/12 figures. Based on CAMHS treating			
	(per session)	£104	PSSRU	adolescents with depression.			
	Multidimensional Treatment Foster Care	£33,132	PSSRU	2011/12 figures.			
No	Notes: Unit costs are estimated national averages or taken from a specific area; in practice, costs will vary due						

Notes: Unit costs are estimated national averages or taken from a specific area; in practice, costs will vary due to local factors. Estimates are indicative only and not a substitute for local budget outturns or 'deep dive' analyses of fixed and variable costs.