

Cost Benefit Analysis of the Inspiring Families programme

Interim findings of the pilot
Inspiring Families Programme
delivered by Slough Children's
Services Trust

Summary

The Inspiring Families (IF) programme saves the taxpayer an estimated £2.62 for every £1 spent in the first 6 months after the start of intervention with an average saving of £4,114 for every family who attended the IF programme, compared to an average cost of £1,572 per family.

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Headline Finding

The Inspiring Families (IF) programme saves the taxpayer an estimated £2.62 for every £1 spent in the first 6 months after the start of intervention with an average saving of £4,114 for every family who attended the IF programme, compared to an average cost of £1,572 per family.

Introduction

The Inspiring Families (IF) programme is an innovative intervention and assessment of families where domestic abuse is an identified component and the families have chosen to stay together.

It provides professionals with a robust framework to assess the parents' behaviour, the level of current risk and the likelihood of future risk. It also identifies the potential for change and reduction of risk within the family, or indeed, whether the risk is too high or the potential for change too low to make working with the family a viable option.

This is an interim cost benefit analysis (CBA) looking at early findings of the fiscal, social and economic savings of the IF programme, working with 10 families in Slough between 4^{th} May -13^{th} July 2016.

Approach & Methodology of the CBA

The approach taken is based on best practice as defined in existing guidance published in HM Treasury Green Book: Appraisal & Evaluation.

Time periods: To assess the benefits of the IF programme we have compared a 6-month period *before* the intervention started (3^{rd} November 2015 – 3^{rd} May 2016) to a 6-month period *after* the intervention began (4^{th} May 2016 – 4^{th} November 2016).

Issues: A search has been carried out for 30 different types of incidents or events (issues) whereby any change could potentially be attributed to the IF Programme, such as the number of domestic violence incidents, visits to Accident & Emergency or the number of days children spent in care.

Unit costs: Unit costs are assigned to each of these issues to estimate the cost of the total number of events for each family and the overall cohort (NB: only HM Treasury agreed unit costs have been used).

Unit costs have mainly been taken from the New Economy Manchester Unit Cost Database.

'Fiscal' unit costs (savings to the taxpayer) have been applied to all issues as well as social and economic unit costs (savings to society and to the economy) where research is available. See the example of different types of costs in Figure 1 below.

Figure 1: An example of fiscal, economic & social benefits

Fiscal Benefits	Savings to the taxpayer – e.g. reduced health services, police or education costs
Economic Benefits	Gains to the individuals/the economy in general – e.g. increased earnings
Social Benefits	Gains to society – e.g. improved health and well-being or increased community cohesion

Inflation rates: As much of the research behind the unit costs is not recent, inflation rates are used to provide more accurate up-to-date estimates.

Counterfactual: 'Deadweight' is applied to the total *gross* savings to estimate what would have happened anyway and what is a potential impact as a direct result of the IF programme, thus producing a *net* savings.

An example of how deadweights work can be seen in Figure 2.

In this example, IF family 9 had 5 children who were on a Child Protection (CP) Plan. The number of days the 5 children spent on a plan reduced from 900 days in the 'before' period to 380 days in the 'after' period (a reduction of 520 fewer days on a plan).

Using national deadweight data, we can estimate that 66% of this reduction would have happened anyway under 'business as usual' i.e. Children's Services were working with that family plus families sometimes sort out their own problems.

In this instance we can estimate that 34% of the success can potentially be attributed to the IF programme, which equates to 177 days.

Issue	Before Intervention	After Intervention	Gross Outcome	Deadweight	Net Outcome
Number of days a child spent on a CP Plan for IF family 9	900	380	-520 (the no. of fewer days after intervention)	66% (what would have happened anyway)	- 177 (the additional impact)

Figure 2: An example of deadweight

Every issue has its own assigned deadweight based on national data. Applying deadweight is not as robust as comparing to a pre-agreed control group but does allow us to estimate net savings and therefore the direct impact of the IF programme.

Costs: The costs/spend of the IF programme are then used to produce an overall estimate of saving, deducting the costs of the programme from the net savings.

Data: Family data and information has been accessed through the Slough Children's Trust Children's Social Care System (ICS).

Costs of the Inspiring Families Programme

A detailed analysis has been carried out on the costs of the Inspiring Families (IF) programme.

This includes the cost of commissioning Rock Pool - the authors and who own the Inspiring Families (IF) programme - to support the implementation and provide guidance to facilitators delivering the programme. This included delivering training to staff, general advice and guidance and specific programme oversight at week 4 and 10 of delivery.

The analysis also includes the costs of delivering the 10-week programme including: a Senior Social Worker; two Family Support Workers; a Team Leader and the project management team which included administrative support. These costs are based on the *maximum* possible staff costs to ensure the overall savings are not over-estimated in any way.

Additional costs such as stationary and refreshments have also been included.

The total cost of delivering the 10-week pilot programme in Slough was £15,717.

Benefits

Now that we have analysed the cost of delivering the programme, in order to assess the overall savings, we need to calculate the fiscal (and where possible social and economic) benefits. This allows us to compare costs and benefits and make an accurate estimate of overall savings.

A search has been carried out for 30 different types of issues whereby any change could potentially be attributed to the IF programme.

14 different types of issues occurred within the 10 families on 1 or more occasions during either the before or after intervention periods.

Across these 14 issues, 13 issue types saw a decrease or improvement including:

- a reduction in DV incidents (down from **10 to 0**);
- a reduction in the number of arrests (down from **7 to 0**);
- a reduction in the number of days every child in every family was classified as a Child in Need (CIN) (down from **1439** days to **315** days);
- a reduction in the number of days every child in every family was on a CP Plan (down from 1601 days to 1280 days).

One child in one family was taken into foster care just before the intervention began resulting in an increase in the number of weeks spent in foster care across the whole cohort.

Figure 3, overleaf, provides the full breakdown.

Figure 3: Comparing the before and after periods for key issues

Indicator	6 months before	6 months after	Gross outcomes
No. of domestic violence incidents	10	0	▼ 10
No. of convicted offenders - over 18	1	0	▼ 1
No. of arrests where individual is detained	7	0	▼ 7
No. of days in Crown Court	3	0	▼ 3
No. of individuals engaging in alcohol misuse	8	2	▼ 6
A&E visits resulting in investigation/subsequent treatment	1	0	▼1
No. of ambulance call-outs	2	0	▼2
No. of general practitioner (GP) visits	3	0	▼ 3
No. of adults suffering from depression/anxiety disorders	4	0	▼ 4
No. of Common Assessment Frameworks undertaken	4	0	▼ 4
No. of weeks children were in local authority foster care	2	22.8	▲20.8
No. of weeks children were in LA residential care home	0.5	0	▼0.5
Number of days CIN	1439	315	▼ 1124
Number of days CP	1601	1280	▼321

Once unit costs and inflation rates have been applied to the data presented in Figure 3, we can assess the benefits (savings).

We also need to take into account the **deadweight** (what would have occurred anyway) to estimate the **net savings** (savings attributed to the IF programme).

Figure 4 details the **net fiscal, social and economic savings** per **issue type**. As we can see from this breakdown the reduction of 10 fewer domestic violence incidents has the biggest impact to the taxpayer (fiscal), the economy (economic) and society (social).

Significant social savings are also evident for the reduced number of days in Crown Court (£4,846), reduced number of arrests (£4,063) and the reduced number of individuals engaging in alcohol misuse (£2,736).

Despite significant decreases in the number of days' children spent on CP Plans (321 fewer days) and classified as CIN (1124 fewer days), savings were relatively small due to the low daily cost of these issues and the high level of deadweight.

Any blank cells mean no agreed economic or social unit cost for that issue type were available.

Figure 4: Fiscal, economic & social savings per issue type

	Fiscal	Economic	Social
Indicator	Net benefit 6 months	Net benefit 6 months	Net benefit 6 months
No. of domestic violence incidents	£ 25,358	£ 15,122	£ 69,759
No. of convicted offenders - over 18	£ 340	f -	£ -
No. of arrests where individual is detained	£ 4,063	£ -	£ -
No. of days in Crown Court	£ 4,846	£ -	£ -
No. of individuals engaging in alcohol misuse (per year)	£ 2,736	£ -	£ 1,062
No. of Accident & Emergency attendances resulting in investigation and subsequent treatment	£ 120	f -	f -
No. of ambulance call-outs	£ 412	£ -	£ -
No. of general practitioner (GP) visits	£ 103	f -	£ -
No. of adults suffering from depression/anxiety disorders (per year)	£ 878	£ 4,063	£ -
No. of Common Assessment Frameworks undertaken	£ 2,139	£ -	£ -
No. of weeks children were in local authority foster care	-£ 5,094	£ -	£ -
No. of weeks children were in local authority residential care home	£ 523	£ -	£ -
Number of days CIN	£ 3,249	£ -	£ -
Number of days CP	£ 1,470	f -	f -
	£ 41,142	£ 19,185	£ 70,822

In figure 5 we can see a detailed assessment of the **fiscal, social and economic savings for each family.**

These are also **net savings** (the estimated savings because of the IF programme using the deadweight calculations described earlier in this report).

This assessment is provided for each family, as well as the average across the cohort and the total savings across all 10 families.

Fiscal savings per family for the first 6 months after the intervention started averaged **£4,114** per family and totalled **£41,142** across the cohort.

Economic savings per family for the first 6 months after the intervention started averaged **£1,919** per family and totalled **£19,185** across the cohort.

Social savings per family for the first 6 months after the intervention started averaged **£7,082** per family and totalled **£70,822** across the cohort.

Figure 5: Savings per family, average savings and total savings for net fiscal, economic and social benefits

		NET SAVINGS	
	6 month net fiscal	6 month net	6 month net social
	benefit	economic benefit	benefit
Family IF1	£4,863	£7,088	£14,660
Family IF2	£1,491	£0	£0
Family IF3	£1,944	£1,512	£6,976
Family IF4	£5,802	£1,512	£6,976
Family IF5	£3,165	£1,512	£6,976
Family IF6	£4,098	£0	£0
Family IF7	£4,716	£1,512	£7,330
Family IF8	£3,375	£1,512	£6,976
Family IF9	£5,452	£1,512	£6,976
Family IF10	£6,236	£3,024	£13,952
AVERAGE	£4,114	£1,919	£7,082
TOTAL	£41,142	£19,185	£70,822

Overall CBA Results

In figure 6 we can see a summary of the costs and savings for the IF programme. Considering the costs of the programme, the benefits because of the reduction in issues, and what would have likely occurred anyway, we can estimate that the IF programme saves the taxpayer (net fiscal savings) £2.62 for every £1 spent. This calculation is often referred to as the cost benefit ratio.

This ratio provides an indication on the value for money of the IF programme. Anything above a net fiscal saving of £1 demonstrates a value to the public purse. A saving of more than £2 for every £1 spent demonstrates excellent value for money.

We can also estimate that the programme saves the **economy** (net economic savings) £1.22 for every £1 spent and society (net social savings) £4.51 for every £1 spent.

It should be noted that this is based only on the first 6 months since the intervention began and is therefore an interim analysis.

To carry out a fully robust CBA we would need to estimate the savings over at least a 12-month period after the intervention ended.

It would not be robust to double the 6 months' savings to provide an estimate for 12 months. However, it is likely that savings will increase over time.

Figure 6: Summary of overall costs and savings of the IF programme

Inspiring Families Cost Benefit Analysis: O	verall Summa	ry	
FISCAL ANALYSIS: Average costs of the programme & savings	to the taxpayer <i>pe</i>	r family	,
		6 m	nonths
Average cost of every family who attended the IF programme		£	1,572
Average saving to the taxpayer for every family who attended the IF p	orogramme	£	4,114
FISCAL ANALYSIS: Overall costs of the programme compared to o	overall savings to th	ne taxpa	ayer
		6 m	nonths
OVERALL NET COCTO & FISCAL DENEFITS	Costs	£	15,71
OVERALL NET COSTS & FISCAL BENEFITS	Benefits	£	41,142
Overall savings to the taxpayer for every £1 spent		£2	2.62
ECONOMIC ANALYSIS: Overall costs of the programme compared to	o overall savings to		
ECONOMIC ANALYSIS: Overall costs of the programme compared to		6 m	nonths
ECONOMIC ANALYSIS: Overall costs of the programme compared to OVERALL NET COSTS & FISCAL BENEFITS	c overall savings to Costs Benefits		15,71
	Costs	6 m £ £	15,71
OVERALL NET COSTS & FISCAL BENEFITS	Costs Benefits	6 m f f f o societ	15,71 19,18 1.22
OVERALL NET COSTS & FISCAL BENEFITS Overall savings to the economy for every £1 spent	Costs Benefits to overall savings to	f f £ f f f f f f f f f f f f	15,71 19,18 L.22
OVERALL NET COSTS & FISCAL BENEFITS Overall savings to the economy for every £1 spent	Costs Benefits to overall savings to	6 m	15,71 19,18 1.22 15,71 19,18 15,71
OVERALL NET COSTS & FISCAL BENEFITS Overall savings to the economy for every £1 spent SOCIAL ANALYSIS: Overall costs of the programme compared to	Costs Benefits to overall savings to	f f £ f f f f f f f f f f f f	15,71 19,18 L.22