

Evaluation of the Troubled Families Programme

Technical report: impact evaluation using survey data

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1 Introduction

In January 2013, Ecorys was commissioned by the Department for Communities and Local Government (DCLG) to lead a consortium¹ providing an independent evaluation of the Troubled Families programme. The evaluation included process, economic and impact strands of work.

This technical report documents the design of the face-to-face survey and the analysis undertaken to assess the impacts of the programme on the outcomes collected within the survey. Bryson Purdon Social Research (BPSR) led on the design and analysis of the survey, which was conducted by Ipsos MORI. Separate technical reports provide an account of the survey design and implementation (Panayiotou, et al. 2016); the findings from the impact analysis using administrative data (Bewley, et al., 2016), and the findings from the process evaluation (White and Day, 2016, and Blades, et al. 2016).

1.1 Programme overview

In April 2012, the Troubled Families Unit at DCLG launched the £448 million Troubled Families programme, with the aim of 'turning around' the lives of 120,000 families with multiple and complex needs in England. At the core was the desire to achieve an overall shift in public expenditure from reactive service provision, based around responding to accumulated acute needs, towards earlier intervention via targeted interventions, where problems can be addressed before they escalate. In seeking to achieve these results, the Troubled Families programme included the following elements:

- a suite of locally designed family intervention programmes
- a network of local Troubled Families Coordinators, tasked with ensuring a joined-up approach for identifying and engaging eligible families
- a Payment by Results (PbR) financial model

As set out within the Troubled Families financial framework (DCLG, 2013a), 'troubled families' can be defined as households who meet the following criteria:

- 1. are involved in crime and anti-social behaviour
- 2. have children not in school
- 3. have an adult on out-of-work benefits²
- 4. cause high costs to the public purse

To qualify for inclusion within the Troubled Families programme, local authorities were required to evidence that families meet all three of the core criteria (1-3), or two of these criteria plus the fourth 'high cost' criterion. DCLG afforded local authorities the discretion to

¹ The evaluation consortium partners include Bryson Purdon Social Research; the National Institute for Economic and Social Research; Ipsos MORI; the Thomas Coram Research Unit at the UCL Institute of Education, and Clarissa White Research.

² This includes: Income Support and/or Jobseeker's Allowance, Employment and Support Allowance, Incapacity Benefit, Carer's Allowance and Severe Disability Allowance.

identify their own local criteria to apply as a proxy for 'high cost' families (4). The financial framework includes a detailed set of metrics to quantify these judgements.

This report covers evidence from families who were supported as part of the phase one Troubled Families programme. The 'early starters' for the expanded programme had commenced their activities at the stage when the final wave of fieldwork took place in autumn 2014 / spring 2016. The process evaluation captured stakeholders' views on the transition to the new programme (White, et al., 2016).

1.2 Evaluation aims and methodology

The aims of the evaluation were to:

- understand how the Troubled Families Programme has made a difference to the lives of families, both in terms of outcomes and experience of services
- learn how the Troubled Families Programme has changed local delivery approaches
- · measure success in terms of monetary savings

In responding to the brief, the evaluation included three main work streams.

An impact evaluation

To quantify the impacts of the Troubled Families Programme for families – and individuals within those families – across a range of outcome measures that the programme aspired to improve. A quasi-experimental research design used outcome data from national administrative datasets and a large-scale face-to-face survey of families, to compare families going through the programme with a matched comparison group.

A process evaluation

This involved a programme of qualitative research with 20 case study local Troubled Families Programmes, tracked over three years. They were purposively selected to understand how a cross section of Troubled Families Programmes were designed and delivered and the impact these were perceived to have on services and systems change at a local level; and telephone depth interviews with a wider sample of 50 local authorities to understand the variation in the local Troubled Families models operating outside of the case study areas. It also included qualitative research with 22 families who were interviewed towards the start and end of their intervention, over a 12 to 18 month period.

An economic evaluation

The evaluation team worked with DCLG to develop a Troubled Families Programme cost savings calculator, and provided guidance for local authorities to conduct their own economic analysis at a local level.

1.3 Aims of the survey

A face-to-face survey was carried out by Ipsos MORI with 495 families who had started the Troubled Families Programme around nine months earlier, plus a comparison group of 314 families who were just about to (or had very recently) started the programme. During the analysis, the two groups were matched across a wide range of characteristics to make them as equivalent as possible using propensity score matching, the aim being to generate two groups that were alike with the single exception that the Troubled Families group had been in the programme for at least nine months.

The survey had two primary aims:

- To assess the impact of the programme on outcomes that are largely not captured in national administrative datasets (reported in Sections 2 to 9 of this report);
- To ask families going through the programme about their experiences of doing so, with a particular focus on the role of the Key Worker (reported in Section 10).

1.4 Outcome measures and overview of impacts

The survey analysis suggests that – across nearly all the outcome measures collected – the Troubled Families group did *not* have statistically significantly better outcomes in the three months prior to the interview than the matched comparison group. The exception to this was that more of the Troubled Families group reported they were managing well financially, and managing better than a year ago, compared to the matched comparison group.

In terms of families' levels of confidence and expectations about the future, however, there has been a detectable impact. The Troubled Families group were significantly more likely than the matched comparison families to say that they were in control of their lives and that they knew how to keep on the right track. They were also significantly more likely to say that they were confident their worst problems were behind them and that they were feeling positive about the future. This *may* imply that the Troubled Families Programme is generating changes amongst these families, but that the interview was too early to detect those impacts. Certainly, cross-matching with the Family Monitoring Data (FMD) for a proportion of the families surveyed suggests that 70 per cent of the families were still on the programme at the point of the interview (see <u>Appendix section A.4</u>). This implies that the outcomes for these families may have improved at some point *after* the survey interview³. Thus, the survey data could underestimate the eventual impact of the programme.

³ A comparsion of outcomes for 55 families known to have completed the programme at the time of the survey interview, and 125 families who had not completed the programme, does suggest that the outcomes for the completers were somewhat better than for the non-completers. For instance, 18 per cent of the completers reporting having had a housing issue in the last three months, compared to 23 per cent of the non-completers. This adds some weight to the argument that the interviews were too early and that outcomes *might* have been better on average if the interview had been later.

Furthermore, looking specifically at those families identified by the Troubled Families teams as receiving more intensive services (due to higher levels of need), there is no evidence of an impact on this sub-group of families (see <u>Section 4.2</u> and <u>Appendix B</u>).

The matching of the Troubled Families and comparison groups on all of our available 'matching variables' does not, however, eliminate all possibility of bias in the Troubled Families impact estimates presented in this report. Any difference in outcomes between the two groups could, in principle, be due to other family or personal level differences between the two groups, for which we do not have data on which to match.

The survey questionnaire covered a wide range of outcomes (collected within each family from the main carer (usually the mother) and from young person aged 11 to 25 in the family deemed to be most troubled), with proxy information on partners collected from the main carer including:

Housing:

- Threat of eviction, repossession, arrears
- Satisfaction with housing

Employment, benefits and financial stability:

- Working status
- Jobseeking and work readiness
- Level of debt and financial management

Education of children and young people:

- Behaviour in school
- School attendance
- In employment, education or training

Crime:

- Anti-social behaviour
- Contact with the police and criminal justice system

Health and well-being:

- GP and A&E visits
- Self-reported general health
- Life satisfaction
- Use of non-prescription drugs
- Alcohol use
- Well-being and depression

Family functioning:

- Relationship quality with partner
- Family violence and conflict

Attitudes and confidence

- Self-perceptions of how well family functioning
- Confidence about help-seeking

1.5 Experiences of the key worker involvement

In line with the impacts found on families' confidence and expectations of the future, the vast majority of families who had been part of the Troubled Families Programme for the past year reported positively about their relationship with their key worker and the difference that they perceived the key worker to have had across a range of aspects of their lives.

1.6 Outline of the report

This report starts with an explanation of the methods employed in designing and analysing the survey (<u>Section 2</u>), the profile of the families interviewed and the services they received (<u>Section 3</u>), and the approach to the impact analysis (<u>Section 4</u>). In Sections 5 to 9, we turn to the outcome measures collected in the survey and the comparison of the outcomes of Troubled Families and matched comparison group families across:

- Housing, employment and finances (<u>Section 5</u>)
- Education (<u>Section 6</u>)
- Anti-social behaviour and crime (<u>Section 7</u>)
- Health, alcohol and drug abuse, well-being and family relationships (<u>Section 8</u>)
- Attitudes and confidence (<u>Section 9</u>)

In <u>Section 10</u>, we report on the experiences of families going through the Troubled Families Programme, in particular focusing on the role of their key worker.

2 Design of the survey

2.1 Overview of the sample design

The survey covered two sets of families: a Troubled Families group of 495 families who had started the programme around nine months before the survey interview; and a comparison group of 314 families who were just about to start the programme (or had very recently started). All interviews took place within the same fieldwork period, mid-March to mid Oct 2014⁴.

The survey collected outcomes for families in the Troubled Families group at a time when they had been on the programme for a reasonably long period (around nine months). Nevertheless, comparison with the family monitoring data (FMD) for these families did suggest that for around 70 per cent of these families their engagement with the programme was ongoing at the time of interview (see <u>Appendix section A.4</u>). So the outcomes collected reflect the position reached by families mid-programme (rather than post-programme) in the majority of cases.

The comparison group of families generated data on the outcomes of families prior to, or very soon after⁵, starting the programme. After matching the two sets of families, the differences between the outcomes for the comparison group and the outcomes for the Troubled Families group gives an estimate of the change in outcomes that families experience during the nine month period after programme start⁶. (See <u>Appendix section A.1</u>).

The survey involved families from ten local authorities in England, with each area recruiting both Troubled Families and comparison group families, albeit with the balance between the two varying from area to area.

2.4 Selection and recruitment of survey respondents

Staff within the ten local authorities made the initial approach to their eligible families about taking part in the survey. The families were given the opportunity of opting out of their contact details being passed to Ipsos MORI. Where appropriate, families' key workers or

⁴ The time period over which the survey interviews could take place was fairly short and precluded a longitudinal survey approach. Instead all families were interviewed just once.

⁵ In some instances, it proved impossible to carry out the survey interview before any of the Troubled Families programme work started. In those instances, the survey took place as early as possible in the intervention within the first two weeks of the programme. This would be much earlier than any change in outcomes would be expected.

⁶ The survey was initially intended to adopt a 'waiting list design', with the comparison group survey covering families that had been identified as eligible nine months earlier, but had not entered the programme over that period. Interviews would have taken place with these families irrespective of whether they subsequently joined the programme. In practice it proved impractical for local authorities to identify or recruit families defined in this way. The design adopted is closer to a standard before-after study, but with the before and after data collected on different sets of families. For more information on the technical details of the matching analysis see Appendix A.

another service provider working with the family approached them about taking part. Where this was not possible, families were sent a letter and accompanying information containing details about the study and how to opt out if they wished.

For the comparison group, local authorities provided Ipsos MORI with a deadline by which to achieve an interview, in order to ensure that the interviews were complete prior to the Troubled Families teams starting work with the families (although the initial assessments may have been conducted during the survey fieldwork period). This was done to ensure that the comparison group provided pre-programme outcomes, against which to compare the outcomes of the Troubled Families group nine months after the start of the intervention.

Further details can be found in the Ipsos MORI survey background report. That report includes the survey questionnaire as well as full details on the sample selection, fieldwork procedures, and response rates (Panayiotou, et al. 2016).

2.5 Family members interviewed

The main interviews were conducted with the main carer in the family, who was usually the mother. The main carer was asked to provide proxy information about their partner (if they had one) and about other family members. In addition, local authorities were asked to identify which of the children in the family was most in need of Troubled Families services. Where the local authority did not do so, the main carer respondent was asked to identify which of their children they thought this was. Where this child was aged 11 to 25, they were also approached for an interview. Again, further details can be found in the Ipsos MORI survey background report (Panayiotou, et al. 2016).

2.6 Matching programme and comparison families

The Troubled Families Programme survey respondents and comparison group survey respondents are not automatically comparable. There are some considerable differences in the profile of the two groups. For instance, 67 per cent of programme families are lone parents compared to just 58 per cent of the comparison group families. These differences have to be controlled for in analysis before comparisons in outcomes for the two groups can sensibly be made.

To allow for this 'controlling', a range of profiling data on the families was collected during the survey interview. These profile, or matching, data were used to (propensity score) match the survey respondents in the comparison group to the Troubled Families group. After the matching, the two groups (Troubled Families and matched comparison) are much closer in terms of their profiles. This in turn means the two groups are more comparable, in the sense that the two groups represent similar profiles of families.

The 'matching variables' collected cover:

• Personal characteristics of the main carer: gender; age; ethnic group; qualifications; whether a lone parent; age when had first child;

- Household characteristics: number of adults and children in household; ages of the children; tenure at baseline; number of times moved in the last three years; whether any children living outside of the household;
- Economic characteristics: summary of work history for main carer and partner; whether household was workless one year previously; benefits received one year previously (the one year previous acting as a retrospective baseline for the families);
- Health characteristics: whether main carer or other household members have a disability or health condition; and child with SEN;
- Criminal convictions of family members;
- Past experiences of the main carer: problems in family of main carer when growing up (family break-up; domestic abuse/violence; sexual abuse; drugs; alcohol); problems experienced by main carer since becoming an adult (family break-up; domestic abuse/violence; sexual abuse).

As noted earlier, the matching of the Troubled Families and comparison groups on all of the 'matching variables' available does not eliminate all possibility of bias in the Troubled Families impact estimates presented in this report. Any difference in outcomes between the two groups could, in principle, be due to other family or personal level differences between the two groups for which we do not have data on which to match. For instance, we cannot match on pre-programme levels of well-being. If the survey respondents in the Troubled Families group happened to have lower levels of well-being at the time they joined the programme than their matched comparison counterparts. then any observed difference in well-being between the groups could, in part, be a reflection of this preexisting difference. Furthermore, the comparison group excludes families who ought to have been in the sample but could not be included for practical reasons, namely those who were known to be eligible around nine months earlier but whose outcomes improved sufficiently over that period to render them no longer eligible⁷. The assumption we have made in this report is that by having matched our two groups across a very wide range of variables, the possibility of there being any major biases in the estimates of impact is reasonably small.

Further details on the matching and analysis are included in <u>Appendix A</u>, including tables showing the profile of the comparison group before and after the matching.

⁷ An attempt was made to estimate the numbers of such families, but data from which to make the estimate was difficult to source. The assumption is that if the programme is tackling entrenched problems the number of families that move from eligible to ineligible over a nine month period would be very small.

3 Profile of the survey respondents

In subsequent sections we present the outcomes for the Troubled Families and matched comparison families, together with our estimates of impact. As context, we include here a summary of the profile of the two groups, with the comparison group profile being presented here before the matching exercise. Neither of these groups should be read as completely representative of all families going through the programme, but they do give a picture of the types of families the programme teams are working with. To reiterate, the first group (the Troubled Families group) covers families starting the programme between Spring and Autumn 2013, whereas the comparison group covers families starting later (between Spring and Autumn 2014). Differences in the profile *may* reflect survey non-response bias, but more plausibly represent genuine changes in the profile of families over time. Across the range of characteristics shown in Sections 3.1 to 3.4 below, it appears that the families starting the programme in 2013 were, on average, somewhat more disadvantaged that the 2014 starters, although the differences are not very large.

3.1 Personal and household characteristics

Table 3.1 details the person characteristics of the main carer survey respondents. The vast majority were women (92 per cent of the Troubled Families group and 87 per cent of the comparison group). Around 40 per cent had no formal qualifications. The majority (67 per cent of the Troubled Families group and 58 per cent of the comparison group) were lone parents. A notable percentage had had their first child before the age of 18 (25 per cent of the Troubled Families group and 19 per cent of the comparison group).

Table 3.2 covers household characteristics. Around a third of the families in each group (29 per cent in the Troubled Families group and 35 per cent in the comparison group) had three or more children, and the majority of the families had at least one teenager. Most families were social renters (75 per cent of the Troubled Families group and 67 per cent of the comparison group).

	Troubled Families group	Comparison group (unmatched)
	%	%
Gender:		
Female	92	87
Male	8	13
Age:		
Under 26	1	4
26-34	19	19
35 and older	80	77
Ethnic group:		
White British	92	75
Other	8	25
Highest qualification:		
No formal qualifications	43	39
GCSE/O-level/CSE	24	28
Vocational qualification	18	18
A level or above	15	15
Lone parent:		
Yes	67	58
No	33	42
Age when had first child:		
Under 18	25	19
18-19	27	30
20 or older	48	51
Bases: all main respondents	495	314

Table 3.1 Personal characteristics of main carer respondents

Table 3.2 Household characteristics

	Troubled Families group	Comparison group (unmatched)
	%	%
Number of children:		
Up to two	71	65
Three or more	29	35
Age of oldest child:		
17 or over	11	9
15-16	42	42
13-14	22	19
11-12	9	9
10 or under	16	21
Any children living outside of household?:		
No	83	91
Yes, with other parent	6	4
Yes, with other adult	9	3
Tenure:		
Owner occupier	10	14
Social renter	75	67
Other	16	19
Number of times moved in last three years:		
None or one	95	96
At least twice	6	5
Bases: all main respondents	495	314

3.2 Economic circumstances

The intention of the profiling/matching variables is that they broadly capture the circumstances of the family at 'baseline'. That is just before starting the programme for the Troubled Families group and one year before starting the programme for the comparison group. For circumstances that are not expected to change rapidly or to change as a consequence of the programme (such as age, household structure, tenure) current circumstances are used as a proxy for baseline. But for economic variables, such as

employment and benefit receipt, the survey included questions about those circumstances 12 months previously. The survey also included a summary variable for main carers and partners about their lifetime history of employment.

Two-thirds of the Troubled Families group respondents reported that no adults in the household were in paid work 12 months earlier. The percentage was somewhat lower in the comparison group (55 per cent). More than half of the Troubled Families group (57 per cent) said they were in receipt of a disability-related benefit one year earlier.

	Troubled Families group	Comparison group (unmatched)
	%	%
Whether any adult in paid work one year ago:		
Yes	33	44
No	67	55
Working history of main carer:		
Never been in paid work	12	15
Spent most of time out of paid work	43	36
Spent about as much time in paid work as out	19	22
Spent most of time working	26	28
Working history of partner (where applicable):		
Never been in paid work	6	7
Spent most of time out of paid work	23	20
Spent about as much time in paid work as out	16	11
Spent most of time working	55	61
Household in receipt of IS or JSA one year ago		
Yes	48	38
No	52	62
Household in receipt of a disability-related benefit one year ago:		
Yes	57	42
No	43	58
Bases: all main respondents	495	314

3.3 Disability and SEN

Very high percentages of survey respondents reported that at least one household member had a limiting long-standing illness or disability (75 per cent of the Troubled Families group and 67 per cent of the comparison group). Around half of each group said they had at least one child with an SEN or other special needs.

Table 3.4	Health of household members and SEN
-----------	-------------------------------------

	Troubled Families group %	Comparison group (unmatched) %
Anyone in household with a limiting long-term illness or disability:		
Yes	75	67
No	26	33
Any child with SEN or other special needs:		
Yes	52	47
No	49	54
Bases: all main respondents	495	314

3.4 Criminal convictions of family members and history of family or personal problems

The survey respondents were asked about whether they, or other family members, had any criminal convictions⁸. Fourteen per cent of the Troubled Families respondents said that they personally had a criminal conviction (and 12 per cent of the comparison group). The family members with the highest rate of criminal convictions appears to be sons, with 17 per cent of respondents in the Troubled Families group, and 12 per cent in the comparison group, saying they had a son with a criminal record.

Survey respondents were also asked about the problems they experienced in their families when they were growing up, and since becoming an adult. Almost a third of respondents had experienced family break-up as a child, and close to a fifth had experienced domestic

⁸ These variables have been used as matching variables, on the assumption that most convictions would have happened before the start of the Troubled Families intervention.

abuse or violence. Around two-fifths reported having experienced family break-up since becoming an adult, and around a third reported experiencing domestic abuse or violence⁹.

	Troubled	Comparison group
	Families group	(unmatched)
	%	%
Family member ever been convicted of a crime (% yes):		
Main carer	14	12
Partner	5	3
Ex-partner	11	7
Son	17	12
Daughter	4	2
Problems in family of main carer when growing up:		
Family break-up	30	27
Domestic abuse/violence	19	15
Sexual abuse	8	5
Self/siblings living in care	8	4
Drugs	7	2
Alcohol	14	14
Problems experienced by main carer since becoming an adult:		
Family break-up	43	35
Domestic abuse/violence	38	30
Sexual abuse	8	4
Bases: all main respondents	495	314

Table 3.5 Criminal convictions and history of family problems

⁹ Again, these variables have been used as matching variables, on the assumption that most of these experiences would have been before the start of the Troubled Families intervention

3.5 Receipt of support

The survey interview included questions about the services families received in the last year. This was gathered, in part, to capture the families' perceptions of what the Troubled Families programme delivers. But asking the same questions of the comparison families, about their receipt of services before the start of the Programme, addresses the question of just how different the Troubled Families Programme is to the previous service model. Table 3.6 shows the percentage of respondents saying they received help or support across a range of categories. There are, as expected, very clear differences between the two groups, with the percentage of families in the Troubled Families group saying they received each type of support typically being more than double the percentage in the comparison group saying they received that type of support. It is, nevertheless, noteworthy that 23 per cent of the Troubled Families group said they received no support across the categories listed (the equivalent percentage for the comparison group being 56 per cent).

	Troubled Families group	Comparison group (unmatched)
	%	%
Whether received support in the last year regarding:		
Getting on better as a family	40	15
Getting children to school each day	29	11
Managing money/debts	21	8
Getting job/training	18	6
Finding things to do in community	17	8
Accept responsibilities better	15	3
Daily routines	14	4
Looking after children better	14	9
Stopping getting involved in crime	12	5
Feeling safer at home	11	4
Making home nicer (eg housework)	10	3
Keeping children living at home	8	4
Reduce drugs	6	4
Reduce alcohol	4	1
Health issues	1	1
School issues	-	-
None of these	23	56
Bases: all main respondents	495	314

Table 3.6 Self-reported receipt of services

For the Troubled Families group, the sample file for the survey included an indicator from the local authority as to whether the family received 'intensive' support through the programme or 'less intensive' support, with this information being provided for 93 per cent of the survey respondents in the group. Just over half (51 per cent) of the Troubled Families group received 'intensive' services. This is reflected in the level and types of support that families reported receiving, with Table 3.7 providing the details. Across all categories of support, families receiving the intensive services were much more likely to report having had support, and with just 11 per cent of families in this group saying that they received no support from the categories on the list. The families receiving 'less intensive' services reported receiving less support than those in the intensive group, but they still reported receiving more than those in the comparison group.

	Troubled Families	Troubled Families	
	group: intensive services	group: less intensive services	Comparison group (unmatched)
	%	%	%
Whether received support in the last year regarding:			
Getting on better as a family	50	27	15
Getting children to school each day	37	20	11
Managing money/debts	26	14	8
Getting job/training	17	18	6
Finding things to do in community	21	11	8
Accept responsibilities better	23	7	3
Daily routines	21	6	4
Looking after children better	21	6	9
Stopping getting involved in crime	15	7	5
Feeling safer at home	15	4	4
Making home nicer (eg housework)	14	6	3
Keeping children living at home	11	4	4
Reduce drugs	7	4	4
Reduce alcohol	6	1	1
Health issues	-	1	1
School issues	-	1	-
None of these	11	36	56
Bases: all main respondents	241	220	314

Table 3.7 Self-reported receipt of services, by level of support reported by LA

3.6 Profile of the families receiving higher intensity services

We report in <u>Section 4.2</u> and <u>Appendix B</u> on the impacts of the programme on families receiving higher intensity services. In terms of their profile, there is some evidence in the survey that, as expected, those families receiving the intensive services are those with higher levels of need. For example, 57 per cent of the families receiving higher intensity services had one or more children with an SEN or special needs, compared to 46 per cent of the families receiving less intensive services. Table 3.8 summarises the characteristics of the two sub-groups: those receiving more intensive services and those receiving less intensive services. The profiling variables included in the table are those where there is a significant difference between the two sub-groups.

	Troubled Families group: intensive services	Troubled Families group: less intensive services
	%	%
Three or more children	15	7
Oldest child 15-16	49	33
At least one child living with neither parent	13	5
Social renter	78	71
Moved at least twice in last three years	8	4
Family member with long-standing illness or disability	78	71
One or more child with SEN/special needs	57	46
Ex-partner has a criminal conviction	15	7
A son has a criminal conviction	19	13
Experienced domestic abuse/violence since becoming an adult	43	30
Bases: all main respondents	241	220

Table 3.8 Profile of families, by level of support reported by LA

4 Introduction to the impact findings

4.1 Overview of the findings

In Sections 5 to 9, we present the outcomes of the families we surveyed who had started the Troubled Families Programme around nine months earlier and matched comparison group families who were about to or had recently started the programme. To recap, we interviewed 495 families in the Troubled Families group and 314 families in the comparison group. In our analyses, the two groups have been matched using a wide range of baseline characteristics so that, across all these variables, the two groups are very close. As a result, we can be reasonably confident that any statistically significant differences between the outcomes of the Troubled Families group families and matched comparison group families can be attributed to the programme. The difference in outcomes between the two groups gives an estimate of the 'nine month' impact of the programme. However, the survey was conducted relatively early for many families. Crossmatching the survey data with the Family Monitoring Data (FMD) suggests that around 70 per cent of the families were still on the programme at the point of their survey interview. This implies that the outcomes for these families may have improved at some point after the survey interview. Thus, the survey data could underestimate the eventual impact of the programme.

We found very little evidence that the Troubled Families Programme significantly affected the outcomes of families around nine months after starting the programme. The statistically significant improvements we did identify relate to the perceptions of main carer respondents in the Troubled Families group about how they were coping financially (see <u>Section 5.4</u>), and more generally about how they felt they were faring, and their expectations for the future (see <u>Section 9</u>). There were no positive (or negative) impacts identified for housing, employment and jobseeking, anti-social behaviour and crime, school behaviour and attendance, health, drug or alcohol use, family dynamics or well-being.

4.2 Families receiving higher intensity services

Given the lack of evidence of an impact measured across *all* families, we have looked specifically at the sub-group of families in the Troubled Families group identified by local authorities as receiving higher intensity services. As we reported in <u>Section 3.5</u>, these families reported receiving more services than the families identified by local authorities as receiving less intensive services. We might therefore expect to see a greater impact among these families. In practice, it is difficult to estimate impact on this sub-group because the full range of reasons why these particular families were selected to receive the more intensive intervention is not known to us. We can match them to families in the comparison group who seem to have the same profile of pre-programme problems, but if the intensive intervention group started with additional problems that are not captured in the survey then the matched comparison group will not be exactly equivalent to the intensive intervention group and will not give a good estimate of the counterfactual for the higher intensity group. (That is, the comparison group will not reflect the outcomes we would have observed for the higher intensity group in the absence of the programme.)

Nevertheless, assuming the matched comparison group is adequate, we found that the pattern of results broadly follows those of the 'all family' analysis summarised in <u>Section</u> <u>4.1</u>, with families receiving higher intensity services showing no more evidence of impact than 'all families'. We found the same set of statistically significant impacts as in the 'all family' analysis on the outcomes related to financial confidence and expectations for the future. The sole exception is that we also found an impact for the high intensity group on their perception that they would know where to seek outside help if they needed it.

As with the all-family analysis, for this higher intensity sub-group we did not find statistically significant *positive* impacts on any of the other outcome measures included in the survey, so have to conclude that there is no survey evidence for greater impact on the higher intensity sub-group. In fact, on a small number of measures we identified statistically significant impacts which were *negative* (anti-social behaviour actions taken against a family member; a family member being in trouble with the police; young person taking non-prescription drugs), with other non-significant differences also pointing in a negative direction. On the face of it, this might suggest that the Troubled Families Programme was detrimental when delivered intensively. In practice, the most likely explanation is the one described above – that is, the intensive intervention group started the programme with more ASB or drugs problems than the matched comparison group.

For completeness, <u>Appendix B</u> includes a full set of findings for the group of families receiving higher intensity services, replicating the tables for all families included in Sections 5 to 9 below.

4.3 Interpreting the tables

The survey was used to assess the impact of the programme on outcomes that are not captured in national administrative datasets. For outcomes that record events, such as anti-social behaviour or GP visits, the outcome 'window' measured was the previous three months. For example, respondents were asked whether they had been to A&E in the last three months. The implication is that for these 'event' outcomes, the intervention would need to have a detectable effect within the first six months, with a reduction in poor outcomes being expected in the three months after that. The reference date for other non-event outcomes, such as well-being, was the interview date itself.

A number of the more sensitive outcome measures were asked by self-completion partway through the face-to-face interview. A small number of respondents (33) refused to answer the self-completion altogether. However, a further 168 completed it with the help of the interviewer or another household member (e.g. if the respondent had literacy issues). These respondents were not asked a number of the most sensitive questions (e.g. drug use and criminal behaviour). This is reflected in the base description of the relevant tables.

The tables in the sub-sections below each present three columns of data: the percentage or mean responses of the Troubled Families group (first column); the percentage or mean responses of the matched comparison group (second column); and the estimate of impact (that is, the difference, in percentage point terms, between the first two columns of data) (third column). All the outcomes presented are 'positive' outcomes: that is, a positive percentage point difference indicates that families' outcomes are improved as a result of the programme, whilst a negative percentage point difference would indicate a worsening.

Percentages are rounded to the nearest whole per cent. Due to this, table columns do not always total 100 per cent. Again, the percentage point differences are rounded to the nearest whole per cent. However, the differences between the percentages in the first and second columns are calculated using percentages to several decimal points¹⁰. The tables provide unweighted bases.

The p-value is the indicator of statistical significance – it represents the probability that the observed difference between the two groups could have appeared just by chance if the two populations from which the samples were drawn were in fact equal. In other words, the p-value tells us whether we can be confident that any differences we see in the outcomes of the Troubled Families Programme and comparison groups are down to the effect of the programme, rather than just differences that could have happened by chance. We have taken a p-value of 0.05 or less as a marker for 'statistical significance' – this being the default for most studies. For any impact with a p-value of 0.05 or less, we can be at least 95 per cent confident that the impact is genuinely different to zero¹¹. Put another way, if the p-value is 0.05 or less, we know that there is a very high probability that the differences observed between the samples is genuine and not 'random noise' in the data. Differences with p-values of 0.05 or less are marked in the tables with an asterisk.

¹⁰ This explains why the percentage differences do not always reflect a simple subtraction of the two percentages shown in the tables.

¹¹ All tests are two-sided. Standard errors take into account the weighting of the data. See Annex A.3 for more detail.

5 Impacts: housing, employment and finances

5.1 Introduction

Families were asked to report on any issues they had had with their housing or rent in the previous three months, their employment and jobseeking behaviour, and how they were managing financially. We found no significant impacts of the programme on families' housing or employment situations. However, families in the Troubled Families group were doing significantly better than those in the comparison group in relation to how they felt they were managing financially.

5.2 Housing

5.2.1 Housing issues

The survey was used to assess the impact of the Troubled Families Programme on the stability of families' housing situations. Using a precoded list (as shown in Table 5.1), main carer respondents were asked about any housing problems that they had experienced within the previous three months. They were also asked how satisfied they were with the state of repair of their home using a five-point scale (from very satisfied to very dissatisfied).

Overall, three quarters of families in both the Troubled Families (75 per cent) and comparison (73 per cent) groups reported having had no housing issues over the previous three months¹², with at least nine in ten families in each group reporting no issues across the range of potential problems asked about (Table 5.1). There were no statistically significant differences between the Troubled Families and matched comparison group families, with percentage point differences between them typically only 1 or 2.

Likewise, families in the Troubled Families group were not significantly more likely to be very or fairly satisfied with the state of repair of their home: the five percentage point difference (64 per cent versus 59 per cent) is not statistically significant.

¹² The mean number of housing issues mentioned was 0.38 among the Troubled Families group and 0.45 among the matched comparison group.

Table 5.1Housing issues over the previous three months

	Troubled	Matched		
	Families	comparison		
	group	group	Impact	
	<u> </u>	<u> </u>	Difference	p-value
	,,,	,,,	Billorolloo	
No housing issues	75	73	2	0.663
No notice served by landlord to leave	99	99	0	0.682
property	99	99	0	0.683
No evictions	98	97	1	0.298
No possession order	96	95	1	0.479
Warning meeting/interview with landlord, council, social				
worker	96	97	0	0.887
No bailiff warrant issued	95	97	-1	0.475
No nuisance/ASB complaints	94	93	1	0.581
No threat of eviction	93	88	4	0.065
No warning letters	90	89	1	0.697
Very or fairly satisfied with state of repair of home	64	59	5	0.241
Bases: all main respondents	495	314		

5.2.2 Rent arrears

Families who were renting were asked whether they had fallen behind with their rent payments during the previous three months. In both the Troubled Families and matched comparison groups, 71 per cent of main carer respondents said that they had not (Table 5.2).

Table 5.2 Rent arrears over the previous three months

	Troubled Families group	Matched comparison group	Impact	
	%	%	Difference	p-value
No rent arrears	71	71	-1	0.850
Bases: all renters	441	266		

5.3 Employment

5.3.1 Household employment

According to the families' reports, the Troubled Families Programme has had no statistically significant impact on adults being in work around nine months after the start of the programme. Table 5.3 shows the proportion of families with one or more adults in work (a parent or other adult household member) as well as the proportion of main carer respondents and partners in work. At the time of the interview, 38 per cent of families in the Troubled Families group were working households compared to 37 per cent of those in the matched comparison group. Likewise, the proportion of families in which either the respondent (20 per cent versus 23 per cent) or the partner (40 per cent versus 43 per cent) was working was not statistically significantly different between the Troubled Families and matched comparison groups.

Table 5.3 Current employment

	Troubled Families group	Matched comparison group	Impact	
	%	%	Difference	p-value
Working household: respondent, partner or other adult				
working	38	37	1	0.381
Respondent working	20	23	-3	0.827
Base: all main respondents	495	314		
Partner working	40	43	-3	0.646
Bases: all main respondents with				0.010
partners	160	132		

5.3.2 Jobseeking and readiness for work

Getting adult family members into paid work is a primary aim of the Troubled Families Programme. But given we were measuring outcomes only nine months after the programme start, we have measured the impact of the programme not only on *being* in paid employment at the time of the interview, but also on jobseeking activity and expectations about getting into paid work in the next year. Again, on these outcomes, we found no statistically significant differences between the two groups.

Table 5.4 shows the proportion of families, in the Troubled Families and matched comparison groups, in which the main carer respondent or the partner was either in work or actively looking for work. Around four in ten respondents (43 per cent versus 41 per cent) were in work or actively seeking it, whilst the vast majority (87 per cent versus 88 per cent) of partners were doing so. Likewise, the proportions of main carer respondents expecting themselves or their partner to be in paid work in the next year were 59 per cent in the Troubled Families group and 61 per cent in the matched comparison group.

Table 5.4 Jobseeking and expectations about paid work

	Troubled	Matched		
	Families	comparison		
	group	group	Impact	
	%	%	Difference	p-value
Respondent in work				
or jobseeking	43	41	2	0.576
Respondent expects				
themselves or				
partner to be				
working in next year	59	61	-2	0.708
Respondent expects				
to be working in next				
year	52	53	-1	0.763
Base: all main				
respondents	495	314		
Partner in work or				
jobseeking	87	88	-1	0.761
Bases: all main				
respondents with				
partners	160	132		

5.4 Managing financially

Families in the Troubled Families group were statistically significantly more likely to report that they were managing well financially, when compared to the matched comparison group (Table 5.5). Families were asked:

Taking everything together, which of the phrases on this card best describes how <u>you</u> <u>and your family</u> are managing financially these days?

- 1. A Manage very well
- 2. B Manage quite well
- 3. C Get by alright
- 4. D Don't manage very well
- 5. E Have some financial difficulties
- 6. F Are in deep financial trouble

Seven in ten (69 per cent) families in the Troubled Families group reported managing 'very' or 'quite well', compared to 59 per cent of the matched comparison group (a ten percentage point difference, p-value 0.012). Moreover, when main carer respondents were asked whether their financial situation was 'worse', 'better' or 'more or less the same' as a year ago, 26 per cent of those in the Troubled Families group reported doing better, compared to 19 per cent of those in the matched comparison group (a seven percentage point difference, statistically significant with p-value 0.037).

However, there were no significant differences in the proportion of families keeping up with bills or regular debt payments in the previous three months: a substantial majority (79 per cent) of families in both groups reported having kept up with their bills over that period.

Table 5.5Managing financially

	Troubled Families group	Matched comparison group	Impact	
	%	%	Difference	p-value
Kept up with bills in previous three	70	70	•	0.000
months	79	79	0	0.930
Managing well financially	69	59	10	0.012*
Managing better than a year ago	26	19	7	0.037*
Base: all main respondents	495	314		

6 Impacts: education

6.1 Introduction

A primary aim of the Troubled Families Programme is to improve the school attendance of children and young people, with the aim of improving educational attainment in the longer term. Analysis of the National Pupil Database as part of the impact study using national administrative data will provide more definitive data on attendance. Nonetheless, we report here on parents' reports on the attendance level of their children, and of any behavioural issues at school (measured by parents having been called into school about issues and by young people's reports of their own behaviour).

6.2 Behavioural issues and attendance at school

According to parents' reports and the reports of the young people interviewed, the programme has not had a statistically significant impact on either attendance rates or behaviour at school.

Table 6.1 shows the proportion of main carer respondents with a child in education who reports that their child attended school at least 85 per cent of the time in the previous three months (the bar under which attendance is deemed problematic). They were asked if they had been told the attendance rate of their child by the school – and if so what it was. If they did not know the attendance rate, they were asked about the number of days that their child had been absent from school within the previous term, which we recalculated into percentage attendance. Overall, around two thirds of main carer respondents in both the Troubled Families group (70 per cent) and the matched comparison group (65 per cent) reported their child attending school for at least 85 per cent of the time (not a statistically significant difference). Likewise, there were no significant differences between the two groups in the proportion saying they had not been called in to school in the previous three months about their child's behaviour (55 per cent versus 53 per cent). Neither was there a difference between the Troubled Families and matched comparison groups in the reports of the young people themselves about not often getting into trouble at school (63 per cent versus 62 per cent).

Table 6.1Behavioural issues at school in past three months

	Troubled Families group	Matched comparison group	Impact	
	%	%	Difference	p-value
Child attended at least 85% time	70	65	5	0.378
Not been called in to school about child's behaviour	55	53	2	0.733
Base: all families with young person in education	277	187		
Young person not often or never in trouble at school	63	62	2	0.768
Base: all young people in education answering self-				
completion	269	181		

6.3 Not in Employment, Education or Training (NEET)

The vast majority of main carer respondents reported that their child was currently in education, employment or training, with no significant differences between the Troubled Families group (87 per cent) and the matched comparison group (89 per cent) (Table 6.2).

	Troubled Families group	Matched comparison group	Impact	
	%	%	Difference	p-value
In education, employment or				
training	87	89	-1	0.671
Base: all families with young person aged 4 to 25	370	225		

Table 6.2 Children and young people in education, employment or training

7 Impacts: anti-social behaviour and crime

7.1 Introduction

The analysis of the national administrative data will provide an objective assessment of the Troubled Families Programme on identified criminal activity among families going through the programme. However, we used the survey to identify any impact on anti-social behaviour and lower level trouble with the police that may not be included in administrative records. The main carer respondents were asked about themselves, their partner (if relevant) and any other household members. The young people interviewed were asked about their own behaviour.

7.2 Anti-social behaviour and contact with police

There were no statistically significant differences in main carer or young people's reports of themselves or family members being in troubled with or charged by police, or having anti-social behaviour actions taken against them (with percentage point differences typically between zero and four; Table 7.1). In general, the substantial majority of families in both the Troubled Families and matched comparison groups had not been in trouble over anti-social or criminal behaviour. For instance, eight in ten main carer respondents reported there being no anti-social behaviour actions taken against the family in the previous three months (84 per cent in the Troubled Families group and 86 per cent in the matched comparison group).

	Troubled Families	Matched comparison		
	group	group	Impa	
	%	%	Difference	p-value
Family-level outcomes No ASB actions used against family	84	86	-2	0.443
No trouble with police by family members	78	82	-4	0.261
Respondent's outcomes Respondent not charged by police	98	98	0	0.935
Partner's outcomes				
Partner not charged by police	93	92	1	0.738
Young person's outcomes No ASB actions against young person Young person not been in	77	80	-3	0.442
trouble with police Young person not charged by	85	85	0	0.987
police	92	90	2	0.295
Bases Family level and respondent outcomes: respondents answering self-completion without help ¹³ Partner outcome: respondents answering self-completion questions without help, with	381	227		
partner Young people outcomes: all young people answering self-	120	91		
completion without help	331	201		

Table 7.1 Anti-social behaviour and contact with police in previous three months

¹³ The ASB outcome was based on a higher number of interviews (481 Troubled Families group and 295 matched comparison group), because it was asked of all doing the self-completion regardless of whether or not they received help in completion.

8 Impacts: health, alcohol and drug abuse, well-being and family relationships

8.1 Introduction

The survey included a wide range of outcome measures aimed at testing whether the Troubled Families Programme had an impact on families' use of health services and on their own health and well-being. It also included measures on how well the parents got on within the family and of physical, verbal, emotional and sexual domestic violence. We found no statistically significant impacts across all of these measures.

8.2 Health

8.2.2 GP and Accident and Emergency visits

Main carer respondents were asked how many times they had visited (a) a GP and (b) the Accident and Emergency (A&E) Department during the previous month concerning either themselves of their children. There were no statistically significant differences in the use of either of these services between those in the Troubled Families and matched comparison groups. Two thirds (65 per cent versus 62 per cent) had not visited A&E during that period, and just under half (46 per cent versus 47 per cent) had visited a GP three times or fewer (Table 8.1).

	Troubled Families group	Matched comparison group	Impact	
	%	%	Difference	p-value
Not been to A&E	65	62	2	0.529
Been to GP fewer than three times	46	47	-1	0.897
Base: all main respondents	495	314		

Table 8.1 GP and A&E visits in previous three months

8.2.2 Self-perceived health and life satisfaction

Similarly, the programme appears not to have had a statistically significant impact on the main carer respondents' perceptions of either their own health or that of a partner, or young people's perceptions of their own health. They were asked:

How is **your** health in general? Would you say it was ...READ OUT....

And how is **your partner's** health in general? Would you say it was ...READ OUT....

- 1. Very good
- 2. Good
- 3. Fair
- 4. Bad
- 5. Very bad

Levels of perceived health were low among both groups for main carer respondents and partners (Table 8.2). For instance, four in ten (40 per cent and 41 per cent) main carer respondents viewed their health as being 'very good' or 'good'. Whilst higher for the young people interviewed (76 per cent versus 81 per cent), the difference between the Troubled Families and comparison groups was not significant.

Table 8.2Self-perceived health

	Troubled Families group	Matched comparison group	Impact	
	%	%	Difference	p-value
Respondent health very good or good	40	41	-1	0.804
Base: all main respondents	495	314		
Partner health very good or good Bases: all main respondents with	46	51	-5	0.439
partners	160	132		
Young person health very good or				
good Base: all young people interviewed	76 371	81 226	-5	0.242

Likewise, when respondents were asked to rate how satisfied they are with their life 'nowadays' on a scale of 0 to 10, the scores of the two groups were not statistically different for either the main carer respondent¹⁴ or the young person interviewed. Table 8.3 shows both the banded distribution of respondents' scores and the mean score, with neither showing statistically significant differences between the Troubled Families and comparison groups. Likewise, when asked about how happy they were yesterday (again on a scale of 0 to 10), young people in both groups scored very similarly (and not significantly different).

	Troubled Families group	Matched comparison group	Impact	
	%	%	Difference	p-value
Respondent's life satisfaction				
Very low (0 to 4)	13	14	-2	0.275
Low (5 or 6)	28	32	-4	
Medium (7 or 8)	30	26	4	
High (9 or 10)	30	28	2	
Mean score Base: all main respondents	7.1 495	6.8 314	0.3	0.117
Young person's life satisfaction				
Very low (0 to 4)	11	7	4	0.366
Low (5 or 6)	21	23	-1	
Medium (7 or 8)	28	28	0	
High (9 or 10)	39	42	-3	
Mean score (0 to 10)	7.6	7.8	-0.3	0.241
Very low (0 to 4)	12	9	3	0.266
Low (5 or 6)	15	12	3	

Table 8.3 Life satisfaction and happiness

¹⁴ It is interesting to compare the life satisfaction scores of the families to those of the English population as a whole: <u>http://www.ons.gov.uk/ons/dcp171778_417216.pdf</u>. As a whole, the mean life satisfaction score for the English population is 7.6, compared to a mean score of 7.1 among the Troubled Families group and 6.8 among the comparison group. Troubled Families' main carers were more likely than the English population as a whole to score their life satisfaction as 'very low' (13 per cent compared to seven per cent) or 'low' (28 per cent compared to 18 per cent). They were less likely to rate their life satisfaction as in the medium range (30 per cent compared to 50 per cent of the English population), while 30 per cent rate their satisfaction as high compared to 26 per cent of the population as a whole.

	Troubled Families group	Matched comparison group	Impact	
Medium (7 or 8)	28	31	-3	
High (9 or 10)	44	47	-3	
Mean score (0 to 10)	7.8	8.0	-0.3	0.259
Base: all young people answering self-completion	331	201		

8.3 Drugs and alcohol

A series of questions were asked of main carer respondents about their drinking habits which were used to provide a risk score of problem drinking: the AUDIT-PC score¹⁵. Summary form questions were asked about their partner (if relevant) and directly of the young people interviewed. Both main carer respondents and young people were also asked about their use of non-prescription drugs in the previous three months. We found no statistically significant differences between the drug-taking or alcohol consumption of families in the Troubled Families or matched comparison groups (Table 8.4). In general, the proportion of families reporting 'problem' behaviours in this respect was low.

¹⁵ See Piccinelli, M., Tessari, E., Bortolomasi, M., Piasere, O., Semenzin, M., Garzotto, N., & Tansella, M. (1997). Efficacy of the alcohol use disorders identification test as a screening tool for hazardous alcohol intake and related disorders in primary care: a validity study. *BMJ*, *314*(7078), 420-27.

Table 8.4Drug and alcohol issues

	Troubled Families	Matched comparison		
	group	group	Impa	act
	%	%	Difference	p-value
Respondent not a high risk Audit-PC alcohol score for respondent	84	83	1	0.798
Base: all main respondents completing Audit PC questions self-completion	432	263		
Respondent not taken non- prescription drugs in past three months	91	88	3	0.230
Base: all main respondents completing self-completion without help	381	227		
In past three months, partner consumes six (female) / eight (male) units of alcohol in single occasion less than weekly	80	76	4	0.487
Base: all main respondents completing self-completion without help, with partners	160	132		
Young person never gets drunk	80	81	0	0.905
Young person not taken non- prescription drugs in past three months	82	84	-1	0.701
Base: all young people answering self-completion without help	331	201		

8.4 Well-being and depression

Main carer respondents were asked to complete two self-completion scales to measure their mental health and well-being: the short form of the Warwick Edinburgh Mental Well-Being Scale (SWEMWBS) and the Malaise Scale. We found no statistically significant impacts of the Troubled Families Programme on the well-being of main carer respondents, using either scale.

The SWEMWBS is seven-item scale which measures positive well-being (that is, all items are worded positively)¹⁶:

The next questions ask about your feelings and thoughts. Please say how often, if at all, you have felt each of the following <u>in the past 2 weeks</u>.

I've been feeling optimistic about the future I've been feeling useful I've been feeling relaxed I've been dealing with problems well I've been thinking clearly I've been feeling close to other people I've been able to make up my own mind about things

- 1. None of the time
- 2. Rarely
- 3. Some of the time
- 4. Often
- 5. All of the time
- 6. Don't know
- 7. Don't want to say

People score between seven and 35, with a higher score indicating greater levels of wellbeing¹⁷. The mean scores of the main carer respondents were very similar between the Troubled Families and matched comparison groups (20.7 versus 21.1). Table 8.5 shows the proportion of main carer respondents scoring in the upper half of the distribution (49 per cent versus 55 per cent, difference not statistically significant).

The Malaise Scale is a 23-item scale designed to measure levels of psychological distress or depression¹⁸. A score of eight or more (out of a possible 23) indicates that an individual is at risk of depression. The questions are as follows:

¹⁶ See Stewart-Brown, S., Tennant, A., Tennant, R., Platt, S., Parkinson, J. & Weich, S. (2009). Internal construct validity of the Warwick-Edinburgh mental well-being scale (WEMWBS): a Rasch analysis using data from the Scottish health education population survey. *Health and Quality of Life Outcomes*, *7*(1), 15-22; Tennant, R., Hiller, L., Fishwick, R., Platt, S., Joseph, S., Weich, S., Parkinson, J. Secker, J. & Stewart-Brown, S. (2007). The Warwick-Edinburgh mental well-being scale (WEMWBS): development and UK validation. *Health and Quality of life Outcomes*, *5*(1).

 ¹⁷ The scoring applies a metric score conversion so is not a straightforward sum of the question scores.
 ¹⁸ See Rutter, M., Tizard, J. & Whitmore, K. (1970). Malaise Inventory. In: *Education, Health and Behaviour*. London: Longmans; McGee, R., Williams, S. & Silva, P.A. (1986). An evaluation of the Malaise Inventory.

The next few questions ask about how you feel generally. Please answer each question with either 'Yes' or 'No'.

Do you often have backache? Do you feel tired most of the time? Do you often feel miserable or depressed? Do you often have bad headaches? Do you often get worried about things? Do you usually have great difficulty in falling asleep or staying asleep? Do you usually wake unnecessarily early in the morning? Do you wear yourself out worrying about your health? Do you often get into a violent rage? Do people often annov and irritate vou? Have you at times had a twitching of the face, head or shoulders? Do you often suddenly become scared for no good reason? Are you scared to be alone when there are no good friends near you? Are you easily upset or irritated? Are you frightened of going out alone or of meeting people? Are you constantly keyed up and jittery? Do you suffer from indigestion? Do you suffer from an upset stomach? Is your appetite poor? Does every little thing get on your nerves and wear you out? Does your heart often race like mad? Do you often have pains in your eyes? Are you troubled with rheumatism or fibrositis? (Muscle and joint pain)

Table 8.5 shows the proportions of main carer respondents who scored less than 8.0 on the Malaise Scale (that is, no signs of depression): 45 per cent versus 43 per cent. The mean score across both groups was very similar (9.0 versus 8.7). Although there were no significant differences between the Troubled Families and matched comparison groups, these figures highlight the high proportions of main carers with concerns over their mental health.

Journal of Psychosomatic Research, 30, 147- 52; Rodgers, B., Pickles, A., Power, C., Collishaw, S. & Maughan, B. (1999). Validity of the Malaise Inventory in general population samples. *Social Psychiatry and Psychiatric Epidemiology*, *34*(6), 333-41.

Table 8.5 Well-being and depression

	Troubled Families group	Matched comparison	Impa	ot
	%	group %	Difference	p-value
	70	70	Difference	p-value
Scored less than 8 on				
Malaise scale (no sign				
of depression)	45	43	2	0.676
Base: all main				
respondents completing				
Malaise scale	437	267		
Scored 23 or more on				
SWEMWBS (higher				
well-being)	48	54	-5	0.217
Base: all main				
respondents completing				
SWEMWBS	431	279		

8.5 Couple relationships and domestic abuse

The single-item Dynamic Adjustment Scale¹⁹ was used to measure the couple relationship of main carers and their partners (where relevant):

On a scale of 0 to 6 where 0 is extremely unhappy, 3 is happy and 6 is perfect, point number 3 "happy," represents the degree of happiness of most relationships. Which number would you say best describes the degree of happiness, all things considered, of your relationship?

- 0 Extremely unhappy
- 1 Fairly unhappy
- 2 A little unhappy
- 3 Нарру
- 4 Very happy
- 5 Extremely happy
- 6 Perfect

¹⁹ See Sharpley, C. F. & Cross, D. G. (1982). A psychometric evaluation of the Spanier Dyadic Adjustment Scale. *Journal of Marriage and the Family*, 44, 739-41; Spanier, G. B. (1976). Measuring dyadic adjustment: New scales for assessing the quality of marriage and similar dyads. *Journal of Marriage and the Family*, 38, 15-28.

Seven in ten (70 per cent) of the Troubled Families respondents reported being happy in their relationship compared with 73 per cent of the matched comparison group (difference not statistically significant) (Table 8.6).

Main carer respondents were also asked about conflict between family members, which were recoded into different forms of domestic abuse (physical, sexual and verbal/emotional):

In the last three months which of the following, if any, have members of your household used against one another? This could be between yourself and an ex or current partner or children and other family members.

- 1. Being grabbed/ pushed/ shoved
- 2. Being slapped/ punched
- 3. Being threatened with a weapon
- 4. Being physically forced into having sex/ taking part in sexual activities
- 5. Shouting and/ or swearing abuse
- 6. A family member spreading rumours
- 7. Being called hurtful names
- 8. Being threatened with violence
- Being pressured to have sex/ take part in sexual activities when they don't want to
- 10. Being told what to wear/ do
- 11. Having calls/ texts/ emails monitored
- 12. Having pressure put on the time spent with friends and/ or family
- 13. Being sent unwanted sexual texts (e.g. messages and pictures)
- 14. Being touched sexually/ groped in a way they are not comfortable with
- 15. None of these

Six in ten (58 per cent versus 61 per cent) main carer respondents reported that none of these had happened within the previous three months, with no significant differences between Troubled Families and matched comparison groups. Likewise, there were no significant differences between the two groups across each of the types of abuse.

Lastly, young people interviewed were asked about how safe they felt in their home (using a four-point scale). Seven in ten (69 per cent) of young people in the Troubled Families group reported feeling very or fairly safe compared to 75 per cent of those in the matched comparison group (difference not statistically significant).

		Matched		
	Troubled	comparison		
	Families group	group	Impa	
	%	%	Difference	p-value
Happy in relationship				
(score 3+)	70	73	-4	0.561
Base: all main				
respondents with				
partner completing self-				
completion	152	125		
No domestic abuse in				
family in previous three				
months	58	61	-3	0.478
No physical abuse	83	82	1	0.819
No sexual abuse	99	98	1	0.685
No mental, emotional or				
verbal abuse	62	65	-3	0.448
Base: all main				
respondents completing				
self-completion without				
help	381	227		
Young person feels				
very safe at home	69	75	-6	0.165
Base: all young people				
answering self-				
completion	367	218		

Table 8.6 Couple relationship and domestic abuse in previous three months

9 Impacts: attitudes and confidence

9.1 Introduction

Although significant impacts were not detected in the survey for most of the main programme outcomes, there are nevertheless marked impacts on main carer respondents' levels of confidence and expectations about the future.

9.2 Attitudes and confidence

Table 9.1 shows the percentage of main carer respondents saying they agreed ('strongly' or 'tended to agree') with the following statements, each of which used a five-point scale.

I'm going to read out some statements about the future for you and your family. For each, I would like you to say whether you "strongly agree", "tend to agree", "neither agree nor disagree", "tend to disagree" or "strongly disagree" with what I've said.

- 1. I know how my family should keep on the right track
- 2. I am confident that our worst problems are behind us
- 3. I feel in control of things
- 4. I can count on others from my family for support
- 5. I would know where to turn for outside help if we needed it
- 6. I feel positive about what the future holds for me and my family

Virtually all show the Troubled Families group to be more positive than the matched comparison group, with the differences between them statistically significant on four of the six statements. Those in the Troubled Families group were significantly more likely to report that they knew how to keep their family on the right track (96 per cent compared to 91 per cent, p-value 0.009) and that they were confident that their worst problems were behind them (68 per cent compared to 52 per cent, p-value 0.000). They were also more likely to say that they felt in control of things (69 per cent compared to 60 per cent, p-value 0.018) and that they felt positive about the future (69 per cent compared to 61 per cent, p-value 0.037).

It is not obvious why the survey would show the Troubled Families Programme to have changed attitudes and confidence, yet not show impacts on actual outcomes²⁰. This *may* imply that changes in outcomes are occurring in these families, but that the interview was too early to detect those changes. As we have noted earlier, cross-matching with the Family Monitoring Data (FMD) for a proportion of the families surveyed suggests that 70 per cent of the families were still on the programme at the point of the interview (see <u>Appendix section A.4</u>). This leaves open the possibility that the outcomes for these

²⁰ We should note that these questions followed a module of questions about the key worker asked of the Troubled Families group, which may have affected their responses to these questions.

families may have improved at some point *after* the survey interview. If so, the survey data *may* underestimate the final impact of the programme.

5.1 Perceptions of		aomg		
	Troubled	Matched		
	Families	comparison		
	group	group	Impact	
Whether agree	%	%	Difference	p-value
strongly or tend to				
agree				
Know how family				
should keep on the				
right track	96	91	5	0.009*
Know where to seek				
outside help	80	76	4	0.195
Can count on others				
in family for support	73	72	0	0.899
Feel in control	69	60	9	0.018*
Feel positive about				
the future	69	61	8	0.037*
Confident worst				
problems behind				
them	68	52	17	0.000*
Base: all main				
respondents	495	314		

9.1 Perceptions of how family is doing

10 Families' experiences of the Troubled Families Programme

In addition to the outcome measures reported in Section 9 – which were asked of both families in the Troubled Families and comparison groups – families who had been going through the programme were asked a suite of questions about their experiences, focusing particularly on the role of their key worker. Overall, a large majority of families reported very highly on their relationship with their key worker, and the perceived positive effect the key worker had had on their families' lives. So, these findings resonate with the impacts we detected on families' confidence levels and expectations about the future.

In the following sections we report on:

- The contact that key workers had with the families (Section 10.1)
- The key workers' plans for the families (Section 10.2)
- Families' views of their key worker (Section 10.3)
- Families' perceptions of how far the help received had improved their lives (Section 10.4)
- Actions made against the families since they entered the programme (Section 10.5)

10.1 Contact between key workers and families

Nine in ten (91 per cent) main carer respondents recognised the name of the key worker as someone who had been working with their family during the past the year²¹. Of these, one in five (22 per cent) reported being in contact with their key worker every day or several times a week (Table 10.1). Six in ten (58 per cent) were in contact at least once a week²².

10.1 Frequency of seeing key worker

	Troubled Families group
	%
Once a day or more	3
Several times a week	19
Every week	37
Every two weeks	18

²¹ We did not ask this question of 28 families for whom we did not have the key worker's name.

²² As the question covered the full period over which families were in contact with their key worker, there is a risk that respondents reported on the frequency of their most recent contact - which may not reflect the level of contact in the early months of the programme.

	Troubled Families group
Every month	12
Every three months	5
Once every six months	1
Less than once a year	1
No fixed pattern	3
Never	0
Base: all main respondents who remembered key worker name	424

Main carer respondents reported that their key worker was largely in contact with themselves (88 per cent) and children who were living with them (59 per cent). One in ten (nine per cent) said the key worker was in contact with their resident partner and two per cent with their non-resident partner.

10.2 Key worker plan

Eight in ten (80 per cent) main carer respondents (who remembered their key worker) said that they agreed a plan with their key worker. Of these, nine in ten (93 per cent) said that they and their family had been involved in making the plan (70 per cent 'very involved' and 23 per cent 'fairly involved'). The vast majority (95 per cent) of main carer respondents reported that they were clear about the changes that they and their family had to make, as set out in the plan (Table 10.2).

10.2 How clear families were about the changes set out in the plan

	Troubled Families group
	%
Very clear	80
Fairly clear	16
Not very clear	3
Not at all clear	1
Don't know	1
Base: all main respondents who	0.11
agreed plan with key worker	341

10.3 Families' views of their key worker

The vast majority of main carer respondents were very positive about the role that their key worker had played in their lives. During the interview, they were asked to say how far they agreed or disagreed (on a five-point scale) with a series of statements about their key worker. Table 10.3 shows the percentage of main carers who 'strongly agreed' or 'agreed' to each (ranked from high to low). Across the statements, the majority of main carers reported developing a good relationship with their key worker and feeling that the key worker was committed and helpful.

10.3 Families' views of their key worker

	Troubled Families group
	% agreeing
Our key worker	
Took time to get to know me and my family	87
Was honest with us and clear with us what needed to change	83
Asked us what we wanted to change	82
Stuck with us and didn't give up	81
I had confidence in her/him	81
I felt like I could open up and trust him/her with things about me and my family	80
Followed up on his/her promises and did what s/he said s/he would do	80
Was there when we needed her/him at the times of the day we needed them	79
Helped the whole family not just one of us	78
Helped me believe in a better life for me and my children	73
Was willing to roll her/his sleeves up and give me practical help	70
Got other services to work better to help my family	71
Got us to open up as a family and talk about things	69
Could get tough with us if we were going off track	59
Base: all main respondents who remembered key worker name	423

When asked overall how helpful they had found it having their key worker working with them, again, the majority of main carers were positive. As shown in Table 10.4, 86 per cent reported that the key worker's involvement had been very (66 per cent) or fairly (20 per cent) helpful.

10.4 How helpful families had found their key worker involvement

	Troubled Families group
	%
Very helpful	66
Fairly helpful	20
Not very helpful	9
Not at all helpful	5
Don't know	0
Base: all main respondents who knew key worker name	423

Of particular note is the perceived difference of these families between the support provided by the key worker and the support they had previously received. Three quarters (76 per cent) of main carer respondents felt that the difference the key worker had made to their families' lives was 'much more' (58 per cent) or 'slightly more' (18 per cent) than that made by previous support (Table 10.5).

10.5 Families' perceptions of the difference made by the key worker in comparison to previous support

	Troubled Families group %
Much more	58
Slightly more	18
About the same	11
Slightly less	2
Much less	2
Neither made a difference	8
Don't know	1
Base: all main respondents who knew key worker name	423

10.4 Families' perceptions of how far the help received has improved their lives

In Section 3.5 (Table 3.6), we present the support provided to families as part of the Troubled Families Programme, as reported by the main carers during the survey interview. For each type of support received, the main carers were asked whether this aspect of their lives had got better, worse or stayed the same (on a five-point scale) since they got the help. They were asked if they attributed any improvements (that is, if things had got 'a lot' or 'a little better') to the help they received from their key worker.

In Table 10.6, we present the percentage of families receiving each form of support (that is, repeating the data from Table 3.6), alongside the percentage of these families who report that their lives had got 'a lot' or 'a little' better since this help. In the final column, we show the proportion of families perceiving things to have got 'better' who attributed these improvements to the help of the key worker ('definitely' or 'to some extent').

The overall picture given by the majority of main carer respondents is one of perceived improvements to their lives, which they nearly always attribute to the help of the key worker.

	Receipt of support in last year	Whether got better since support	Whether attribute improvements to key worker
	% of Troubled Families group	% of those receiving support	% of those reporting things got better
Getting on better as a family	40	81	95
Getting children to school each day	29	72	91
Managing money/debts	21	72	98
Getting job/training	18	66	[90]
Finding things to do in community	17	66	[96]
Accept responsibilities better	15	84	[91]
Daily routines	14	71	[95]
Looking after children better	14	78	[93]
Stopping getting involved in crime	12	65	[89]
Feeling safer at home	11	76	[93]

Table 10.6Self-reported receipt of services, together with the perceived help ofthe key worker²³

²³ Percentages based on sample sizes of fewer than 50 are shown in square brackets.

	Receipt of support in last year	Whether got better since support	Whether attribute improvements to key worker
Making home nicer (eg housework)	10	[79]	[90]
Keeping children living at home	8	[69]	[95]
Reduce drugs	6	[54]	[80]
Reduce alcohol	4	[75]	[83]
None of these	23		
	All main carer respondents:	All receiving support about issue: from 20	All attributing improvements to key worker:
Bases:	495	to 226	from 10 to 148

Overall, seven in ten (72 per cent) main carer respondents reported feeling better about their future than they had before the involvement of the key worker (Table 10.7).

10.7 Whether families feel better or worse about their future than before involvement of key worker

	Troubled Families group
	%
Much better	52
Slightly better	21
About the same	16
Slightly worse	2
Much worse	2
No different	8
Don't know	0
Base: all main respondents who knew key worker name	424

10.5 Actions made against the families since they entered the programme

Main carer respondents were asked whether any actions had been taken against their family within the past year (Table 10.8). Four in ten (40 per cent) families had had at least one action taken against them, most commonly fines for children's non-attendance at school (15 per cent), eviction or threat of eviction (13 per cent) and cuts or threatened cuts to welfare benefits (12 per cent).

10.8 Reported actions taken against families in the past year

	Troubled Families group %
Care proceedings	15
Eviction or threat of eviction	13
Cuts or threat of cuts to benefits	12
Housing injunction or anti-social behaviour order	5
Parenting order/contract	4
No actions taken	60
Base: all main respondents who knew key worker name	424

Half (48 per cent) of main carer respondents against whose families actions had been taken were positive about the effect that these actions had on their families' behaviour (Table 10.9).

10.9 Perceived effect of actions taken against families in the past year

	Troubled Families group %
Made it a lot better	25
Made it a bit better	23
Had no effect	25
Made it a bit worse	10
Made it a lot worse	17
Don't know	1
Base: all main respondents whose family had received actions	168

11 Final comments

Overall the survey analysis suggests that, after matching, the Troubled Families group did *not* have statistically significantly better outcomes in the three months prior to the interview than the matched comparison group. This applied across the range of outcomes measured - with the exception that more of the Troubled Families group report they were managing well financially, and better than previously, than do the matched comparison group. In terms of families' levels of confidence and expectations about the future there *has* been a detectable impact however. Adding to this evidence is the fact that the majority of families who had been going through the programme in the past year reported very positively on the role of their key worker. The impacts among families receiving higher intensity services are broadly similar to the overall pattern of results, with little evidence that these families are doing any more or less well under the programme than other families.

A possible explanation for the lack of observed impact is that the survey interview took place too soon. Matching the survey data to the Family Monitoring Data showed that around 70 per cent of families in the survey's Troubled Families group were still on the programme at the point of the interview. Had the families been interviewed later, more positive impacts may have been found.

More generally, the design of the impact survey would have been strengthened if it had proved feasible to interview families twice: both before starting the programme, and after a suitable period. This would have given data on the degree to which outcomes changed during the programme, but would also have given stronger data on which to match the programme and comparison groups. Without this before-after data it remains a possibility that the two groups, programme and comparison, were not similar enough to generate an entirely unbiased estimate of impacts.

Appendix A: Technical details of the matching and analysis

The full survey procedures are documented in a separate background report (Panayiotou, et al. 2016). That report covers the details of the sampling process within the ten participating local authorities (LAs), the questionnaire development and testing, and the fieldwork details. In this appendix, we cover the technical details of how the survey data was used to generate the estimates of impact reported on here.

A.1 Matching of the Troubled Families and comparison samples

The two groups of survey respondents, Troubled Families group and comparison group, were matched so as to minimise any observable differences between the two groups. The matching method used was 'propensity score matching', the main steps of which are:

- The probability (or propensity) of an individual being in the Troubled Families group (rather than the comparison group) is estimated from a logistic regression model of the data. The binary outcome variable in the model is the group (1=Troubled Families; 0=comparison), and the predictors are all the variables for which matching is required.
- Each Troubled Families respondent is then matched to the set of comparison group respondents with a similar propensity score. The 'matched comparison group members' per Troubled Families respondent are given weights that sum to one, those with propensity scores closest to the propensity score for the Troubled Families respondent being given the largest weight.
- Repeating this process for each Troubled Families respondent generates a weighted comparison sample, which should match the Troubled Families sample across all the matching variables.

The technical details of the matching undertaken are as follows:

- The logistic regression model was fitted within SPSS with forward stepwise selection of variables; the p-value for inclusion was 0.2 the p-value for exclusion was 0.3.
- The matching used a kernel weighting algorithm, with a bandwidth of 0.6 (the default within the Stata psmatch macro).

The matching was repeated for all sub-sets of respondents reported on in Sections 4 to 9. That is, a new logistic regression was run, and the two groups matched on the propensity scores for the sub-set.

The matching variables included in the propensity score models were:

• Personal characteristics of the main carer: gender; age; ethnic group; qualifications; whether a lone parent; age when had first child;

- Household characteristics: number of adults and children in household; ages of the children; tenure at baseline; number of times moved in the last three years; whether any children living outside of the household;
- Economic characteristics: summary of work history for main carer and partner; whether household was workless one year previously; benefits received one year previously (one year previous acting as a retrospective baseline for the families);
- Health characteristics: Whether main carer or other household members have a disability or health condition; and child with SEN;
- Criminal convictions of family members;
- Past experiences of the main carer: problems in family of main carer when growing up (family break-up; domestic abuse/violence; sexual abuse; drugs; alcohol); problems experienced by main carer since becoming an adult (family break-up; domestic abuse/violence; sexual abuse);
- An overall summary score, calculated as a count of the number of problems or risk factors per family. The score ranged from 0 to 20²⁴.

The logistic regression identified a large number of the matching variables to be significant predictors of being in the Troubled Families group, with the final model including 11 of the possible predictors listed above. The strongest predictors were ethnic group plus the overall 'summary risk score', but having controlled for these, other variables including the gender and the number of children in the household were found to be significant predictors.

The propensity scores generated for those in the Troubled Families group varied from 0.15 to 0.96 (mean = 0.66); and for those in the comparison groups the score varied from 0.08 to 0.90 (mean = 0.54). The fact that the largest propensity score in the Troubled Families group is greater than the largest propensity score in the comparison group does generate a 'common support²⁵' problem (with 11 Troubled Families respondents being outside of the common support area). The matching was carried out two ways: firstly, excluding these 11; and secondly, including the 11 but matching them to comparison members with similar if not very close propensity scores. The two approaches did not affect the impact results so the latter approach was adopted and all cases retained in the analysis.

The matching weights generated by the process for the comparison group were trimmed at the 5th and 95th percentile to reduce the impact of variable weights on what is a fairly small sample (n=314). Given the importance of ensuring the two groups were matched on employment within the household at baseline, a final post-stratification of the comparison group to force it to be identical to the Troubled Families group on this variable was carried out. This last step led to only a very small change in the weights.

After matching and trimming, the distribution of propensity scores in the two groups is extremely similar (mean of 0.66, standard deviation of 0.14 in the Troubled Families group,

²⁴ The score was a count across 20 of the matching variables, excluding the strictly demographic variables (age and gender). Although crude it is a very good predictor of the level of intensity of services received by a family so does appear to operate as a reasonable 'risk score'.

²⁵ The 'common support' is the range of propensity scores that appear in both groups. Those Troubled Families respondents outside of the common support area technically have no appropriate matches in the comparison group.

and mean of 0.65, standard deviation of 0.14 in the matched comparison group). The mean of the matching weights for the comparison group is 1.58 (sd=1.05).

For bias reduction, it is most important that the matching leads to the two samples, Troubled Families and comparison, looking very similar to each other. The tables below show the profiles of the samples before and after matching. The first column gives the Troubled Families respondent profile; the second column gives the comparison group profile before the matching; and the final column gives the comparison group profile after matching. The matching is judged to have been successful if the first and final columns are very close (which is the case here): after matching there are no statistically significant differences between the two groups on any of the matching variables.

Table A.1Samples before and after matching: Personal characteristics of main
carer respondents

	Troubled	Comparison	Comparison
	Families	group before	group after
	group	matching	matching
	%	%	%
Gender:			
Female	92	87	92
Male	8	13	8
Age:			
Under 26	1	4	2
26-34	19	19	18
35 and older	80	77	80
Ethnic group:			
White British	92	75	93
Other	8	25	7
Highest qualification:			
No formal qualifications	42	38	40
GCSE/O-level/CSE	25	27	29
Vocational qualification	18	18	18
A level or above	15	15	13
Lone parent:			
Yes	67	58	68
No	33	42	32
Age when had first child:			

Under 18	25	19	23
18-19	27	30	28
20 or older	49	51	49
Bases: all main respondents	495	314	314

Table A.2 Samples before and after matching: Household characteristics

	_		
	Troubled	Comparison	Comparison
	Families	group before	group after
	group %	matching %	matching %
	70	70	70
Number of children:			
Up to two	71	65	70
Three or more	29	35	30
Age of oldest child:			
17 or over	11	9	10
15-16	42	42	41
13-14	22	19	23
11-12	9	9	9
10 or under	16	21	17
Any children living outside of household?:			
No	83	91	86
Yes, with other parent	6	4	6
Yes, with other adult	9	3	5
Tenure:			
Owner occupier	10	14	9
Social renter	75	67	73
Other	16	19	18
Number of times moved in last three years:			
None or one	95	96	94
At least twice	6	5	7
Bases: all main respondents	495	314	314
•			

	Troubled Families group	Comparison group before matching	Comparison group after matching
	%	%	%
Whether any adult in paid work one year ago:			
Yes	33	44	33
No	67	55	67
Working history of main carer:			
Never been in paid work	12	15	10
Spent most of time out of paid work	43	36	42
Spent about as much time in paid work as out	19	22	25
Spent most of time working	26	28	23
Working history of partner (where applicable):			
Never been in paid work	6	7	4
Spent most of time out of paid work	23	20	28
Spent about as much time in paid work as out	16	11	13
Spent most of time working	55	61	52
Household in receipt of IS or JSA one year ago:			
Yes	48	38	45
No	52	62	55
Household in receipt of a disability- related benefit one year ago:			
Yes	57	42	54
No	43	58	46
Bases: all main respondents	495	314	314

Table A.3Samples before and after matching: Economic circumstances at
'baseline' (one year before the interview)

Table A.4Samples before and after matching: Health of household members and
SEN

	Troubled Families group	Comparison group before matching	Comparison group after matching
Anyone in household with a limiting long-term illness or disability:	%	%	%
Yes	75	67	74
No	26	33	26
Any child with SEN or other special needs:			
Yes	52	47	53
No	49	54	47
Bases: all main respondents	495	314	314

Table A.5Samples before and after matching: Criminal convictions and history offamily problems

	Troubled Families group	Comparison group before matching	Comparison group after matching
	%	%	%
Family member ever been convicted of a crime (% yes):			
Main carer	14	12	15
Partner	5	3	3
Ex-partner	11	7	10
Son	17	12	15
Daughter	4	2	3
Problems in family of main carer when growing up:			
Family break-up	30	27	30
Domestic abuse/violence	19	15	20
Sexual abuse	8	5	9
Self/siblings living in care	8	4	6
Drugs	7	2	2
Alcohol	14	14	19
Problems experienced by main carer			

	Troubled Families group	Comparison group before matching	Comparison group after matching
since becoming an adult:			
Family break-up	43	35	43
Domestic abuse/violence	38	30	41
Sexual abuse	8	4	8
Bases: all main respondents	495	314	314

A.2 Sensitivity analysis

The matching process described above was repeated several times using a number of different approaches to test whether the findings of the analysis were sensitive to the matching method. These included alternative matching methods (inverse propensity weights rather than kernel matching), and different sub-sets of matching variables. Interaction terms between matching variables in the logistic regression model were also tried. Although the estimates of impact changed by one or two percentage points with different methods, the change was always small and non-systematic.

A.3 Significance testing

The p-values presented with the tables in the report have been calculated using the SPSS complex samples module. For categorical variables the tests are based on chi-squared tests, and means are based on F-statistics. The tests take into account the propensity score weights for the comparison group.

A.4 Linking to the Family Monitoring Data

To help with the interpretation of the survey findings the ten LAs participating in the survey were asked to provide a link between the Family Monitoring Data (FMD) for the families in the survey (conditional on the family having given consent for the link). Where the family was not included in the FMD sample the LA was asked to complete the FMD as a special exercise for the evaluation. Overall eight of the ten LAs were able to provide linked FMD data, for, between them, 267 families (180 from the Troubled Families group and 87 from the comparison group). These 267 appear to be a broadly representative sub-sample of the 809 survey respondents.

Of very particular significance, this analysis highlighted that at the time of the survey interview around 70 per cent of the families in the Troubled Families group were still on the programme. In fact, at the time of the latest FMD return (end Jan 2015), 48 per cent families still had their case open. That is, cases were still open for almost half of the Troubled Families group at least three months after their survey interview. This suggests that the survey was almost certainly too early to detect the full impact of the programme.

For families who did complete the programme before the survey interview it is possible, in principle at least, to compare programme exit outcomes as recorded on the FMD with survey outcomes as reported by the main carer. In practice interpretation is difficult because the outcomes recorded on the FMD are 'at this point in time' whereas the survey outcomes typically record issues over 'the last three months'. For employment status however the two data systems are 'point in time' so direct comparison is possible.

The date on employment status suggests that there is a degree of churn in outcomes for families after they enter the programme. The sample numbers are very small, but of the 54 families in the matched data who left the programme before their survey interview, 69 per cent were found to be in the same employment state at the two dates (exit and interview). But 17 per cent moved from employment to unemployment (i.e. at least one adult became employed) over the period, and an almost equal percentage moved from unemployment to employment.

Similarly, for the 37 families in the matched data who left the programme after their survey interview but before the end of January 2015, 68 per cent were found to be in the same employment state at the two dates, but 16 per cent moved from employment to unemployment, and an equal percentage moved from unemployment to employment.

The sample numbers are too small for this to be conclusive, but evidence of churn does provide a possible explanation as to why the Payment by Results (PbR) outcomes are very positive whilst the survey results are less so. That is, if PbR claims are made when families are at the top of a cycle, then a survey timing that is essentially uncorrelated with the claim point will almost certainly give more a more negative reading of outcomes.

Appendix B: Families receiving high intensity services

Table 1Housing issues over the previous three months

		Imnact	
			p-value
70	70	Difference	pvalue
69	74	-5	0.257
99	100	-1	0.404
98	97	1	0.623
94	95	-1	0.713
96	97	0	0.847
96	97	-1	0.462
92	94	-2	0.469
91	89	2	0.405
87	88	-1	0.575
64	58	5	0.179
241	314		
	99 98 94 96 96 96 92 91 87 87 64	Families group comparison group % % 69 74 99 100 98 97 94 95 96 97 96 97 92 94 91 89 87 88 64 58	Families group comparison group Impact % % Difference 69 74 -5 99 100 -1 98 97 1 94 95 -1 96 97 0 96 97 -1 92 94 -2 91 89 2 87 88 -1 64 58 5

Table 2Rent arrears over the previous three months

	Troubled Families group	Matched comparison group	Impact	
	%	%	Difference	p-value
No rent arrears	67	72	-4	0.369
Bases: all renters (high intensity services)	227	266		

Table 3Current employment

	Troubled Families group	Matched comparison group	Impact	
	%	%	Difference	p-value
Working household: respondent, partner or other adult				
working	33	33	0	0.902
Respondent working	16	20	-4	0.220
Base: all main respondents (high				
intensity services)	241	314		
Partner working	33	39	-6	0.482
Bases: all main respondents with partners (high				
intensity services)	72	132		

Table 4Jobseeking and expectations about paid work

	Troubled	Matched		
	Families	comparison		
	group	group	Impact	
	%	%	Difference	p-value
Respondent in work				
or jobseeking	43	38	5	0.275
Respondent expects				
themselves or				
partner to be				
working in next year	55	58	-3	0.555
Respondent expects				
to be working in next				
year	49	50	-1	0.810
Base: all main				
respondents (high				
intensity services)	241	314		
Partner in work or				
jobseeking	87	85	1	0.903
Bases: all main				
respondents with				
partners (high				
intensity services)	72	132		

Table 5Managing financially

	Troubled Families group	Matched comparison group	Impact	
	%	%	Difference	p-value
Kept up with bills in previous three	74	70	F	0.000
months	74	79	-5	0.266
Managing well financially	69	59	10	0.041*
Managing better				
than a year ago	29	20	9	0.018*
Base: all main respondents (high				
intensity services)	241	314		

Table 6Behavioural issues at school in past three months

	Troubled Families	Matched comparison		
	group	group	Impact	
	%	%	Difference	p-value
Child attended at				
least 85% time	64	69	-5	0.425
Not been called in to school about child's				
behaviour	58	50	8	0.243
Base: all families				
with young person in				
education (high				
intensity services)	144	187		
Young person not				
often or never in				
trouble at school	65	61	4	0.560
Base: all young				
people in education				
answering self-				
completion (high				
intensity services)	140	181		

Table 7Children and young people in education, employment or training

	Troubled Families group	Matched comparison group	Impact	
	%	%	Difference	p-value
In education, employment or training	87	90	-3	0.325
Base: all families with young person aged 4 to 25 (high intensity services)	191	225		

	Troubled	Matched		
	Families group	comparison group	Impa	act
	%	%	Difference	p-value
No ASB actions used against family <i>Base: respondents answering</i>	76	86	-10	0.010*
self-completion	234	295		
No trouble with police by family members	73	83	-10	0.046*
Respondent not charged by police	97	99	-2	0.316
Base: respondents answering self-completion without help	97 190	99 227	-2	0.510
Partner not charged by police Base: respondents answering self-completion questions without help, with partner	93 55	95 91	-2	0.670
No ASB actions against young person Young person not been in	73	78	-5	0.324
trouble with police	81	84	-3	0.546
Young person not charged by police <i>Base: all young people</i>	90	88	3	0.488
answering self-completion without help (high intensity services)	168	201		

Table 8 Anti-social behaviour and contact with police in previous three months

Table 9 GP and A&E visits in previous three months

	Troubled Families group	Matched comparison group	Impact	
	%	%	Difference	p-value
Not been to A&E	64	61	3	0.475
Been to GP fewer than three times	42	45	-3	0.516
Base: all main respondents (high intensity services)	241	314		

Table 10Self-perceived health and life satisfaction

	The latest			
	Troubled	Matched		
	Families	comparison	Impost	
	group %	group %	Impact Difference	p-value
	/0	/0	Dillerence	p-value
Respondent health			_	
very good or good	37	39	-2	0.714
	Mean	Mean		
Respondent life	MEan	IVICALI		
satisfaction (0 to 10)	7.1	6.8	0.3	0.253
Base: all main	7.1	0.0	0.0	0.200
respondents (high				
intensity services)	241	314		
	211	011		
		<u> </u>		
	%	%		
Partner health very				
good or good	56	47	9	0.340
Bases: all main				
respondents with				
partners (high				
intensity services)	72	132		
Young person				
health very good or				
good	80	82	-2	0.177
Base: all young				
people interviewed				
(high intensity				
services)	191	226		
	Mean	Mean		
Young person life	INICALI			
satisfaction (0 to 10)	7.4	7.8	-0.4	0.187
Young person	1.7	1.0	- 0. 1	0.107
happiness yesterday				
(0 to 10)	7.7	8.0	-0.3	0.272
Base: all young		0.0	0.0	0.212
people answering				
self-completion				
intensity services)	191	226		

Table 11Drug and alcohol issues

	Troubled	Matched		
	Families group	comparison group	Impact	
	%	%	Difference	p-value
Respondent not a high risk AUDIT-PC alcohol score for	84	84	1	0.926
respondent Base: all main respondents completing AUDIT-PC questions self-completion (high intensity				0.920
services)	208	263		
Respondent not taken non- prescription drugs in past three months	91	89	2	0.586
Base: all main respondents completing self-completion without help (high intensity services)	190	227		0.000
In past 3 months, partner consumes 6 (female)/8 (male) units of alcohol in single occasion less than weekly	81	76	5	0.471
Base: all main respondents completing self-completion without help, with partners (high intensity services)	72	132		
Young person never gets drunk	83	83	0	0.983
Young person not taken non- prescription drugs in past three months	79	87	-8	0.048*
Base: all young people answering self-completion without help (high intensity services)	168	201		

Table 12Well-being and depression

	Troubled Families group	Matched comparison group	Impact	
	%	%	Difference	p-value
Scored less than 8 on Malaise scale (no sign				
of depression)	41	40	1	0.867
Base: all main respondents completing Malaise scale (high				
intensity services)	209	267		
Scored 23 or more on SWEMWBS (higher well-being)	50	51	-1	0.840
Base: all main	50	51	- 1	0.040
respondents completing SWEMWBS (high				
intensity services)	205	279		

		Matched		
	Troubled	comparison		
	Families group	group	Impa	
	%	%	Difference	p-value
Happy in relationship				
(score 3+)	68	74	-6	0.455
Base: all main				
respondents with				
partner completing self-				
completion (high				
intensity services)	58	125		
No domestic abuse in				
family in previous three				
months	52	58	-6	0.244
No physical abuse	77	82	-5	0.252
No sexual abuse	98	99	-2	0.126
No mental, emotional or				
verbal abuse	57	64	-7	0.174
Base: all main				
respondents completing				
self-completion without				
help (high intensity	100	007		
services)	190	227		
Young person feels			_	
very safe at home	69	75	-6	0.179
Base: all young people				
answering self-				
completion (high intensity services)	191	226		
intensity services	191	220		

Table 13Couple relationship and domestic abuse in previous three months

Table 14Perceptions of how family is doing

	Troubled Families group	Matched comparison group	Impact	
Whether agree strongly or tend to agree	%	%	Difference	p-value
Know how family should keep on the right track	96	91	5	0.043*
Know where to seek outside help	83	74	9	0.022*
Can count on others in family for support	70	71	-1	0.796
Feel in control	71	60	11	0.016*
Feel positive about the future Confident worst	70	60	10	0.040*
problems behind them	67	51	16	0.001*
Base: all main respondents (high intensity services)	241	314		

Appendix C: References

Bewley, B., George, A., and Rienzo, C. (2016) *The Impact of the Troubled Families Programme: Findings from the Analysis of National Administrative Data*. London: Department for Communities and Local Government.

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