



Department
for Education

Project Crewe

Research report

July 2017

**Jessica Heal, David Nolan and Michael
Sanders - The Behavioural Insights Team**

Contents

List of figures	4
List of tables	5
Executive summary	7
Summary of findings	8
Implications and recommendations	9
Introduction	11
Project Crewe Overview	11
Method	12
Evaluation aims	12
Quantitative design	13
Qualitative design	13
Risk analysis method	14
Improving outcomes for CIN	16
Summary of findings	16
CIN case outcomes	16
Likelihood of closing cases	17
Closing cases more quickly	19
Decreasing re-referrals	20
Attendance	20
Behaviour Scores	21
Risk	22
Qualitative analysis of CIN outcomes	28
Summary of findings	28
Map of qualitative findings	28
The effect of the Family Practitioner	30
Frequent contact	31
Flexible contact	34
Solutions-focused approach	36
Giving control to families	37
Feedback mechanisms	38

Relative success in addressing different types of problems	39
Parents are levers for, and inhibitors of, change	40
Project delivery	41
Cost-benefit analysis	41
Qualitative findings of project delivery	42
Alleviating pressure	43
Internal processes within Project Crewe	43
Communication	47
Limitations	49
Implications and recommendations	50
Implications for policy	50
Implications for evaluation and research	51
Conclusion	52
References	53
Appendix 1: Qualitative sample information	56
Appendix 2: Detailed sample outline	58
Appendix 3: Risk analysis framework	61
Appendix 4: Qualitative evaluation methodology	63
Appendix 5: Consent forms	64
Appendix 6: Quantitative evaluation methodology	67
Appendix 7: Solutions-focused brief therapy	75
Appendix 8: Project Crewe staffing model	76
Appendix 9: Cost benefit analysis	77
Appendix 10: Evaluation outcomes and measurements	81
Appendix 11 : Glossary of acronyms	82

List of figures

Figure 1: Likelihood of closing cases	18
Figure 2: Likelihood of a case closing across the pilot	19
Figure 3: CIN absences from school	21
Figure 4: Box and whisker for CEC cases at referral, and then using latest information	24
Figure 5: Box and whisker for Project Crewe cases at referral, and then using latest information	24
Figure 6: Change in average total risk score at the point of referral to latest update, between Project Crewe and CEC CIN cases	25
Figure 7: Change in average risk factors between Project Crewe and CEC CIN cases	26
Figure 8: Change in average protective factors scores between Project Crewe and CEC CIN cases	26
Figure 9: Map of the most common themes in the qualitative data	29
Figure 10: CIN picture of their family and Family Practitioner	30
Figure 11: Bar chart of average number of total visits to a CIN case over a month as described by families and frontline staff	31
Figure 12: Distribution of NHS stress scores across CEC and Project Crewe in November 2015	46

List of tables

Table 1: Summary of sample	14
Table 2: Comparison of risk occurrence in PC cases with national figures	15
Table 3: Sample overview by case outcome	57
Table 4: Detailed CIN case study sample information	58
Table 5: Detailed sample: non-CIN case study	60
Table 6: Illustrative average cost per case	77
Table 7: Illustrative individual benefits of Project Crewe and Cheshire East to the CIN	78
Table 8: Illustrative analysis of cost of re-referral per case	79
Table 9: Benefit of reducing escalations to child protection	79
Table 10: Evaluation outcomes and measurements	81

Acknowledgements

We are grateful to all the families and staff at both Cheshire East and Catch22 who took the time to contribute to the research; support the data collection, and critique drafts of this report: Julie Philbin, Kate Wareham, Frances Flaxington, Gary Cummings and Bev Harding. Thanks also to Diana Jones, Di McNeish, Francesca Tamma, Jessica Barnes and Susannah Hume for their assistance.

Executive summary

Raising children is challenging. Some parents and carers, through a combination of circumstance and motivation, find it easier than others. A gap can exist between a parent's intentions and actions: when this gap threatens the wellbeing of a child, children's services become involved. In 2016, 394,400 children were referred to social care and assessed as 'children in need' (CIN), the first rung of formal state intervention. Of those children, around 12 per cent needed increased intervention at 'child protection' or 'looked after' level (DfE, 2016).

Across several dimensions, children with child protection plans experience worse outcomes than other children. In 2014/5, only 49 per cent of primary-aged CIN achieved level 4 or above in writing compared to the 80 per cent average and only 15 per cent achieved 5 A*-C GCSEs including English and Maths, compared to 54 per cent national average (Morse and Arkell, 2016: 37).

In 2014, the Department for Education funded the Social Work Innovation Fund, which aimed to encourage new thinking in how children's services support young people. The Behavioural Insights Team (BIT) have conducted an evaluation of one pilot funded through the Innovation Fund, *Project Crewe*. It aimed to close CIN cases and divert them from being re-referred or escalated by offering more intensive support early on. This innovative model was tested using a randomised controlled trial (RCT), in which young people were assigned either to receive the Project Crewe working model (the 'treatment' group), or the business as usual local authority service (the 'control' group).

This RCT methodology allowed us to identify the specific impact of Project Crewe. Unfortunately, a smaller than anticipated sample size led to us being unable to draw any statistically significant conclusions. Instead, the results can only offer indications of potentially promising impact. We find that, compared to the more traditional model of support, cases assigned to the treatment group were closed more frequently (particularly for families with a history of social support) and experienced a greater increase in factors associated with lower risk of escalation. However, despite closing more cases, we found that the average case duration was shorter in the control than in Project Crewe. These results, based on data from the first 14 months of the pilot, do contain some early positive signs. The benefit of the RCT is that Cheshire East Council can continue to monitor these promising indications to measure the longer-term outcomes of these groups, as well as explore theories raised in the qualitative analysis.

Within this intervention, in-depth interviews with frontline staff and case families led us to isolate several elements we believe to be most effective in generating positive results for Project Crewe. Personalised and frequent support was offered to families using a solutions-focused approach: in the first instances Family Practitioners worked with families to identify their issues and strengths as opposed to being told what needed to be rectified. CIN cases were also visited on average 3 times more frequently than in the

traditional model of support, and used feedback tools to visualise their progress. It is striking that those who had previously experienced traditional care before were the most positive about this innovative approach: Project Crewe was able to build and re-establish relationships with families who may have had negative experiences in the past.

From an organisational perspective, Project Crewe demonstrated that a staffing model not wholly reliant on social work qualified staff could achieve positive outcomes for CIN. The novel approach to the staffing model, using family practitioners, volunteers and a pod support system, was highly valued by staff who felt supported to enact sustainable change with their families. CEC and Catch22 senior leaders have continued to reflect together upon the lessons of the pilot to improve their joint ways of working.

Despite a smaller than anticipated sample size, which restricted the confidence we can place in the results, this evaluation is important methodologically: it is the first known successful randomised controlled trial to be conducted in social care in the United Kingdom. This has important implications for the future What Works intervention in social care: when children's services have finite budgets and resources, it is essential to understand whether an intervention works, and which elements within it are effective. Combining this respected evaluation approach with in-depth qualitative research allowed us to ascertain that Project Crewe was effective, and to determine the mechanisms within it that appear to be most effective at improving CIN outcomes.

Summary of findings

We outline the evidence of impact, mechanisms of impact and project delivery findings below. Project Crewe appears to have had some positive impact on CIN outcomes. However, these results were not statistically significant and should be read as positive indications, as opposed to concrete evidence of impact.

Evidence of impact

- Project Crewe (PC) pilot closed more Child-In-Need (CIN) cases than the cases which remained with Cheshire East Council (CEC)
- Project Crewe appears most effective in closing cases with a previous history of social care
- Although they closed fewer cases, where CEC social workers did close cases, it was quicker than PC
- Early indications suggest Project Crewe decreases risk. It increases protective factors around the CIN more than the control. These factors, when present, correlate with a decreased likelihood of reoccurrence of harm. This may indicate future re-referral and escalation to child protection is less likely

- Project Crewe suggests that CIN cases can be supported positively by non-social work qualified staff

Mechanisms of Impact

- Project Crewe families were visited 3 times more frequently, and offered personalised flexible support. This was seen to develop stronger, more trusting relationships between the staff and their cases more quickly
- The solutions-focused approach (SFA) was valued by Project Crewe families. They felt empowered through being given ownership of their problems. Using feedback tools in conjunction with SFA enabled families to visualise their progress
- SFA suited some families more than others: it appeared to be less effective with families in acutely stressful or chaotic situations, and required the CIN case parents to acknowledge their situation as problematic
- The model may be particularly valuable for families with a history of social care as it offers them a fresh start and a chance to re-set their relationship with social support

Project Delivery

- Project Crewe has a strong culture of collaboration and support built through the innovative pod structure and supported by the buddy system. A responsive training programme allows frontline staff to access the information they need to support their families
- Project Crewe staff displayed lower levels of stress than their counterparts
- Project Crewe created space for social workers to focus on more complex child protection cases. It did not reduce overall social worker caseload as the CIN cases diverted to PC were typically replaced by additional referrals
- Embedding the model has taken time, and there have been issues with communication at the referral, handover and escalation stages. Although substantial efforts are being made to overcome these, this is an ongoing challenge

Implications and recommendations

Implications for policy

- Non-qualified social work practitioners can generate positive outcomes for CIN cases

- Working to resolve parent and carer issues, especially around their self-confidence and practical ability to parent, is fundamental to generating positive outcomes for CIN
- Altering the way of working with families with a history of social care, such as the solutions-focused approach, may improve case closure
- Diverting some low risk CIN caseload from SWs may allow them to focus on the more complex child protection cases
- Innovative models of social care are difficult to integrate within pre-existing social services. Good communication and collaboration between senior leaders and frontline staff on both sides is essential
- Better data need to be made available to improve monitoring in this sector, linking CIN status with other longer term outcomes such as employment and health

Implications for evaluation and research

- Randomised Controlled Trials can be implemented effectively in social care evaluations and should be prioritised in future commissioning decisions
- It is possible to successfully create and implement a counterfactual through randomisation in children's social care which can help us understand the impact of the intervention
- These results show promising indications of impact. The data for this analysis were collected at a nascent stage, and it is recommended that Cheshire East and Catch22 continue to monitor the longer-term outcomes, especially around re-referrals, of the 'control' and 'treatment' groups
- It is recommended that future evaluators are enabled to capture outcome data in the years following an intervention. These metrics will allow more accurate evidence of the longer-term impact on CIN outcomes

Introduction

Catch22 and Cheshire East Council worked closely with the Behavioural Insights Team to evaluate an innovative model of social care services for Children in Need: “Project Crewe”. The pilot, funded through the Department for Education’s Social Work Innovation Fund, is named after the town where the majority of children receiving social care in Cheshire East reside. This report outlines the findings from the evaluation conducted by the Behavioural Insights Team, that consists of a randomised control trial combined with an in-depth qualitative evaluation.

Project Crewe Overview

Project Crewe (PC) is a pilot model of support for children assessed as being a Child In Need (CIN)¹. It was developed and delivered by Catch22 (C22), in conjunction with Cheshire East council (CEC). Catch22 is a social business which provides a range of services from cradle to career and, for 12 years, has delivered services in Cheshire East, with whom they partnered to co-produce the pilot. The project aims to improve the outcomes for CIN by offering a more personalised and intensive model of support, as recently recommended by the Troubled Families evaluation (Blade et al, 2016). Logistically, Project Crewe is allocated cases assessed by Cheshire East social workers to be CIN. The CIN case is managed and delivered by non-social work qualified staff, a model which has shown promise in the United States (Peacock et al, 2013). Specifically, Project Crewe aims to reduce re-referrals to social care and escalations to child protection and looked after status. It was also hoped that diverting cases from social workers would reduce their caseload, allowing them to focus on the most urgent cases while maintaining confidence that lower risk CIN were still receiving high quality support.

The intervention we evaluated consists of several elements that are distinct from the traditional, business as usual support offered by CEC social workers. These are:

- qualified Social Work Consultants (SWC) hold the statutory responsibility for cases and manage a team of Family Practitioners
- primary front-line staff, Family Practitioners, are non-social work qualified
- these staff have a diverse range of backgrounds in education, youth work, substance misuse and the early years
- their role is to develop and deliver the CIN plan; working with families to help them identify signs of relapse, build resilience and maintain long term positive change

¹ See appendix 11 for a glossary of acronyms

- frontline staff use a solutions-focused approach with their cases, this is based on Solution-Focused Brief Therapy (SFBT) which has shown to be effective in early input interventions (Bond, 2013). See Appendix 7
- the tailored model of support was designed to be more intensive, with frequent and flexible contact time with CIN cases, including early mornings and weekends. Intensive support for families was shown to have a positive impact in a Catch22 pilot (Catch22, 2014)
- alongside Family Practitioners, volunteer Peer Mentors and Family Role Models work with children and parents to support families to sustain positive change after case closure²
- pod teams, where one SWC supports 4 FP, are structured to formalise and encourage collaboration, skill building and sharing best practice. See Appendix 8
- personalised family budgets are used to help a family achieve the goals outlined in the CIN plan, such as a trip or a reward

Considering all these elements of the intervention, this evaluation analyses the model as a whole in the quantitative analysis, and draws on qualitative measures to understand which components within this multifaceted approach are perceived to be most effective.

Method

Evaluation aims

The evaluation aimed to assess the effectiveness of the PC approach, compared to the business as usual CEC approach. This was achieved by employing a mixed method approach, using a quantitative RCT design in conjunction with an in-depth qualitative inquiry, which was combined with the quantitative research during the analysis phase. This is known as a convergent parallel mixed method approach (Creswell, 2013). Triangulating findings during the analysis helped us explore which aspects of this complex intervention were most likely to lead to success if replicated elsewhere.

It addressed this overall purpose through the following areas:

- whether Project Crewe improved outcomes for CIN when compared to the control group; in particular,
 - had better social care outcomes
 - reduced risk factors in the CIN cases

² To date (November 2016), 2 parents previously supported by Project Crewe have become volunteer Family Role models

- better academic and behavioural outcomes
- how participants experienced the intervention
- how the intervention is delivered and its effect upon staff
- the intervention's operational costs in comparison to the control

Please refer to Appendix 10 for a detailed outline of the evaluation outcomes and measurement strategy.

Quantitative design

The evaluation of Project Crewe is centred on a randomised controlled trial (RCT), which ran from August 2015 to March 2016. Cases were eligible for the evaluation if they were categorised as CIN, and Cheshire East staff felt they would benefit from intensive intervention. Of the 132 cases that were recommended by CEC staff, two-thirds (70%) were allocated to the Project Crewe (PC) pilot, termed the 'treatment' group, and one-third (30%) remained with Cheshire East, termed the 'control' group. The RCT was structured to ensure that all children within a family were allocated to the same service – this made implementation easier for the delivery organisations as it prevented families being supported by both interventions at the same time. The randomised 132 cases (individual CIN) consisted of 326 sibling children and young people. For the analysis, we had to exclude 6 cases, as their outcome information was incomplete. The final sample therefore consists of 126 cases.

For the RCT design please see Appendix 6

Qualitative design

Data for the qualitative work were collected through semi-structured interviews, which either took place over the phone, or in families' homes. 48 interviews were conducted with 33 families, frontline staff and leaders from both Cheshire East and Project Crewe across 2 time periods: November 2015 and April 2016. This enabled us to capture how the experience and delivery of the intervention evolved or altered for both staff and families. An overview of the type of participants we interviewed, the number of individuals and total number of interviews across the 2 time periods is outlined below at Table 1. A detailed demographic description of the sample can be found in Appendix 1 and 2.

Table 1: Summary of sample

Participant Type	Total Participants	Total Interviews
Family Practitioner	13	19
CEC Social worker	5	7
PC CIN Case (Family and CIN)	8	13
CEC CIN Case (Family and CIN)	4	6
C22 Senior Leader	1	1
CEC Senior Leader	2	2
Total	33	48

It is worth noting that a lapse of nearly 10 months occurred between data collection and reporting and the Project Crewe delivery model evolved in this time. Where possible, changes to the approach have been highlighted alongside the analysis. A detailed outline of the qualitative methodology is found in Appendix 4.

Consent

For the randomised controlled trial, families were offered opt-out consent and allowed time to decide whether to take part. For the qualitative study, opt-in consent was sought from both the parents and their children. Participation was voluntary, and no pressure was placed upon the families: those who chose to withdraw from the study were respected. Both consent forms can be found in Appendix 5.

Risk analysis method

A qualitative risk analysis was conducted to understand from the case notes whether, and to what extent, risk changed over time in both the control and treatment group. 30 randomly selected cases from CEC and Project Crewe were manually coded against a risk framework and subsequently analysed. The framework was developed by the research team, based on systematic reviews and meta-analyses of factors which correlate with increased or reduced likelihood of harm recurring in children. (Wilkins, 2015; Barlow et al, 2012; White et al, 2015; Hindley et al, 2006). The matrix can be found in the Appendix 3.

Each case was coded and scored against 3 categories: risk factors (low school attendance; history of social services); protective factors (supportive family, engaged in school); and engagement factors (denies issues; strongly engages with social care).

Each protective factor was marked positively, whilst risk factors were coded negatively. Engagement was rated on a sliding scale between -2 (dissents, lies or avoids) to +2 (strong engagement with social care). This generates 2 overall scores which show the difference and change in risk between the 2 points: time of referral and latest case information.

Despite being a small sample of 30 randomly selected cases (15 PC, 15 CEC), the types of risk factors that occur, in the risk analysis were similar to the national data on factors in CIN cases.

Table 2: Comparison of risk occurrence in PC cases with national figures

Risk Factor	Number in sample (out of 30)	% of occurrence in sample	% of occurrence nationally
Victim of domestic violence	14	46.7	49.6
Mental health problems	10	33.3	36.6
Substance abuse	7	23.3	19.3

(Source: DfE)

After generating a mean average of risk scores at both time points, the change in a case's risk could be measured to give an indication of how risk changed over the period of the pilot. We originally intended to assess all 132 cases. However, we were unable to secure a data sharing agreement and therefore the council had to manually download and anonymise each case, which was a very resource-heavy process for CEC; we therefore agreed on 30 cases, just over 20% of the sample.

Improving outcomes for CIN

This section outlines our quantitative results which compared the CIN outcomes from the control (CEC) and treatment (PC) groups. Despite finding some positive indications, we were unable to find any statistically significant results because our sample size was 50% smaller than expected. To compound this, the re-referral outcome needed more time to more accurately reflect how a programme might influence a case longer term. The findings should therefore be considered as positive indications of impact, as opposed to concrete evidence of effect.

Summary of findings

- Project Crewe appears more effective at closing cases than CEC. However, due to the small sample size and lack of significance, this finding should be treated with caution
- PC may be particularly effective for families that have a previous history of CIN involvement
- Despite closing fewer cases, CEC appears to close cases more quickly
- We find no difference in school attendance rates between children assigned to PC and CEC
- Project Crewe CIN appear to have better behaviours compared to their CEC counterparts at one point in time, however due to data collection issues we cannot say whether the intervention had any impact on behaviour
- Both interventions seem to be effective at reducing risk scores over the course of trial period. Project Crewe cases have a higher reduction as Project Crewe improved average levels of protective factors more than CEC

CIN case outcomes

When considering positive outcomes for CIN cases, it was important to capture whether the case was resolved (closed); the speed at which this took place and the sustainability of the positive changes made (re-referrals). These data, however, are complex in nature, especially in cases that have a history of prior social care involvement. It can be difficult to isolate exact information about when a case was referred and closed; how long the assessment period lasted; and the extent of their involvement with social care prior to being included in Project Crewe. To explore these outcomes, we have made four assumptions in the analysis:

1. Referral dates open before the PC pilot started are re-coded to correspond to the PC timeline. Therefore, if a case was open prior to this date, we re-coded the referral date to 1st August 2015
2. If the family received CIN support prior to 1st August 2015, we marked their case with a 'history of social care' indicator
3. We only classified cases as re-referrals if they were closed and re-referred during the PC pilot timeline (1st August 2015 - 1st November 2016)
4. We only classify those cases which were stepped down by the end of the pilot timeline (1st November 2016) as 'closed'. Cases that closed during the pilot but were re-referred were not categorised as closed

Likelihood of closing cases

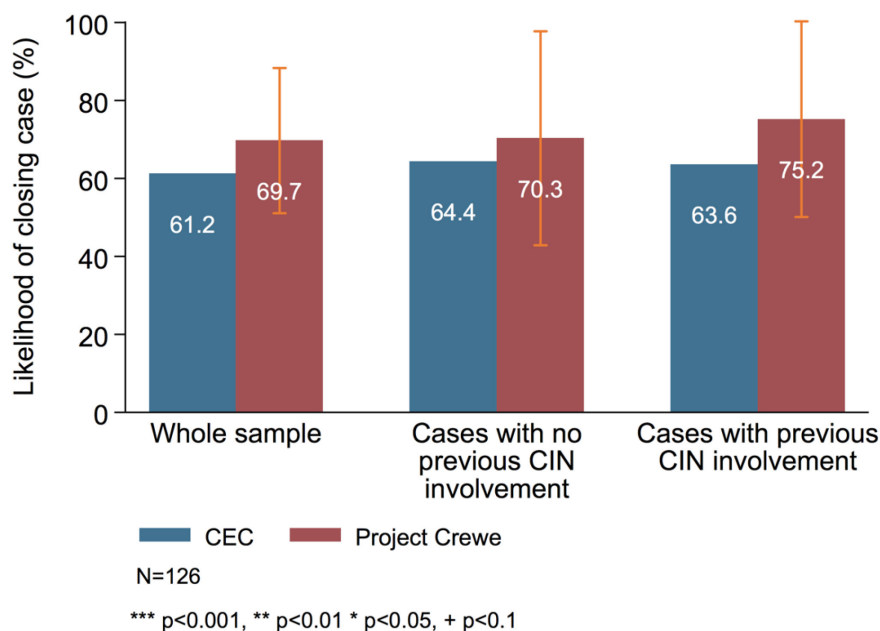
- The Project Crewe programme appears more likely to close a case compared to CEC by 8.5%. This result, however, is not statistically significant
- The Project Crewe programme appears 12% more likely to close cases for families with a history of social care involvement

Our primary analysis used an ordinary least squares (OLS) regression approach to understand how likely each programme was to close a CIN case. This method allows us to account for differences between cases, such as gender and age of the CIN and their history of social care, effectively removing those factors from influencing the findings. Appendix 6 provides a more detailed overview of the analysis strategy, specification and assumptions made.

Overall, we find a CIN case supported by Project Crewe is 8.5% more likely to close over the pilot year compared to CEC. However, this should be interpreted with caution as the result is not statistically significant.

Because findings from the qualitative data suggest that families with prior experience of CEC support were much more positive about their PC experience, we were also keen to see whether having a history of social care affected the likelihood of case closure. Interestingly, although again not statistically significant, Project Crewe has a greater effect on closing cases with a history of social care involvement. Our results indicate that these cases are 20 percentage points more likely to be closed with Project Crewe, suggesting it may be particularly effective for these families. These results are presented in Figure 1. The thin orange lines, confidence intervals, represent the range of uncertainty around our estimated effect of Project Crewe on the likelihood of closing cases. The asterisks displayed below the figure are used to report statistical significance of estimates. As these orange lines overlap and no asterisks are present on the graph, this signifies no statistically significant results.

Figure 1: Likelihood of closing cases



When interpreting the findings, one hypothesis could be that families with a history of social care are reacting positively to a change in the type of support received after being allocated to Project Crewe. These families could be responding well to a novel approach and a chance to re-set their relationship with frontline staff. This theory concurs with both the “fresh start effect” literature (Dai, Milkman and Riis, 2014); and qualitative analysis, which found families with previous experience of traditional social care were most positive about the new model of support. In particular, they valued the solution-focused approach to address their problems. To ensure the findings are not solely a product of our chosen analysis strategy, we cross-check our results against an alternative strategy outlined in Appendix 6 (robustness checks).

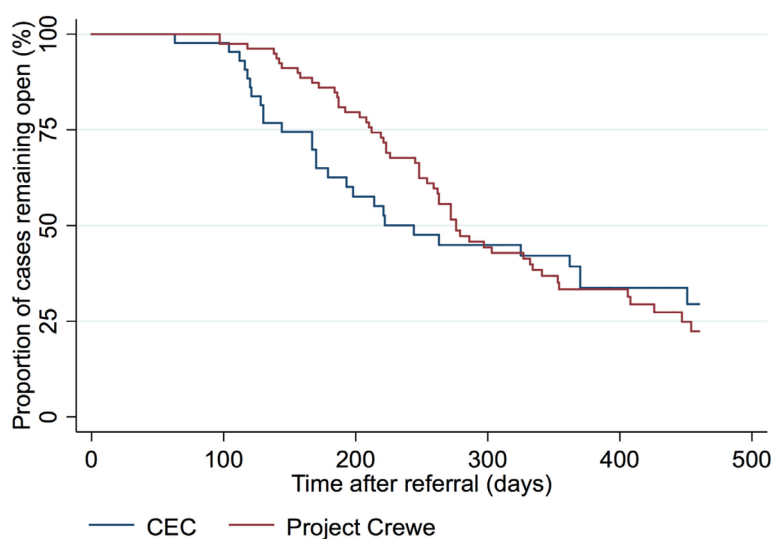
Closing cases more quickly

- Although Project Crewe appears to close more cases by the end of the trial period, CEC appears to close its allocated cases faster than Project Crewe
- Due to the smaller than anticipated sample size, the evidence is not conclusive

The time it takes to close and resolve the related issues of a CIN case is important for the stability of the family, and has financial and resource implications for children's services. We were therefore keen to understand the length of time each programme took to close a case. We used a statistical method known as survival analysis to estimate this, which accounts for the fact that not all cases were closed at the end of the study (see Appendix 6 for further details of the model, specification and assumptions).

The likelihood of a case being open after referral, in each intervention, is shown in Figure 2. The Y axis depicts the chance of a case being open, and the X axis is time (in days) elapsed since the pilot commenced. We can therefore see that, at time 0, all cases are open for both interventions. Over time, the likelihood of a case being open decreases at differing rates for Project Crewe cases and Cheshire East. The data suggest that CEC closes cases more quickly. This is represented by the sharper decline in probability of a case remaining open between 100 and 300 days after referral. Despite Project Crewe closing more cases by the end of the trial period (represented by the lower proportion of cases remaining open at the end of the study period), CEC tend to close cases faster. Contributing factors may be the slower disengagement procedures employed by Project Crewe, and the continued support from Family Role Models after case closure. Several Family Practitioners felt that gradually reducing the intensity of support helped families maintain their positive change (see page 29).

Figure 2: Likelihood of a case closing across the pilot



Decreasing re-referrals

Although closing CIN cases is an important measure, it was essential to capture whether the positive change made with families was sustained. Re-referrals are a problem for local authorities across the country, with many families bouncing in and out of the system over a number of years. Anecdotal evidence from Cheshire East suggest Project Crewe had helped resolve several of these complex ongoing cases for them. One family of 9, who have been known to CEC since 2010, with multiple referrals, had been stepped down in November 2015 and not been re-referred (as of December 2016). Another family of 3, with 5 separate episodes of involvement, including child protection, has remained closed since March 2016 and as of December 2016 had not re-opened.

We attempted to examine the effect of each intervention on reducing re-referrals to social care after being closed. However, due to a lack of occurrence of re-referrals in the data, and not enough time elapsing between the trial and analysis of data, the findings are inconclusive. There were only 8 observed occurrences of re-referrals (after the case had been opened and closed within the trial period) in our dataset, and we are therefore not able to analyse this outcome in any meaningful way. There were 5 re-referrals in PC and 3 in CEC, which, when accounting for the 2:1 ratio of control and treatment, is a 0.7% difference. However, the available data is far too small to analyse. It will be important to continue to track this sample, to monitor longer-term impact on re-referral rates.

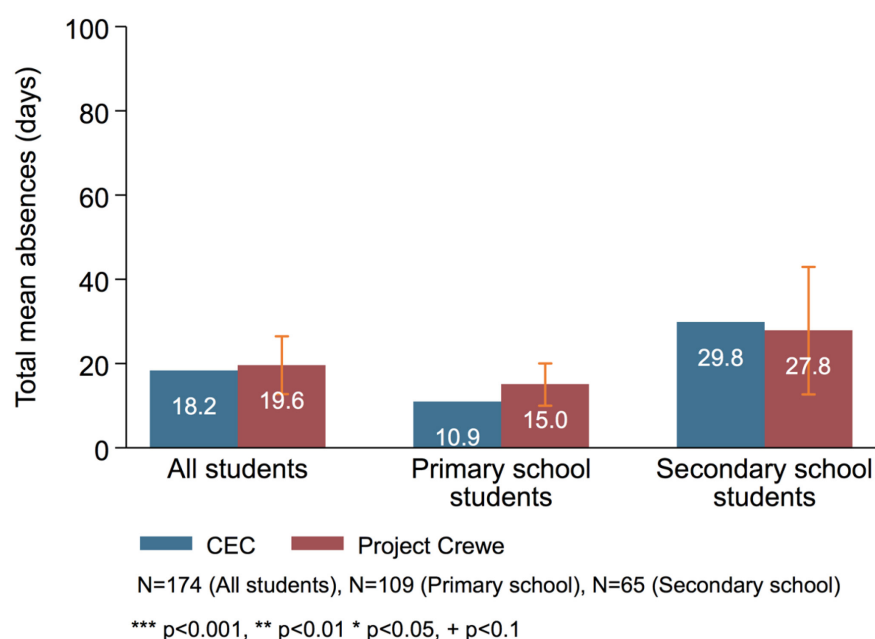
Attendance

Although it is important to consider direct case outcomes, examining CIN's education helps us understand the intervention in a more holistic way. The section below uses the National Pupil Database (NPD) to assess whether CIN receiving PC support have different school attendance rates to those receiving CEC support. Attendance is an important metric as it correlates with decreased likelihood of a child experiencing harm (Hindley, 2006), and stronger academic attainment (DfE, 2015). If an intervention improves stability and routines within the household, we might expect levels of absence to decrease.

Our analysis uses the total number of absences, measured in days, over the first 2 terms of the school year (summer term 2016 absence data was unavailable at the time of analysis). We used OLS regressions to examine whether there were significant differences between all school-age CINs in either intervention, controlling for prior social care involvement as this was found to effect closing cases. Subsequently we split our sample into Primary and Secondary pupils, and analysed each group separately. This assumes that the older students had greater autonomy over their decision to attend school. Our sample of school age CIN consisted of 174 pupils: 109 were primary school age, and 65 were of secondary school age. To ensure the findings are not solely a product of our chosen analysis strategy, we cross-check our results against an alternative strategy outlined in Appendix 6 (robustness checks).

Figure 3 shows the difference in attendance of CIN between the Project Crewe and CEC, broken down by level of schooling. It presents predicted average attendance for CINs in each programme, of which none of the observed differences are substantive or statistically significant. We observe that CINs in Project Crewe had a marginally higher absence rate than their counterparts in CEC across the whole sample. This trend is also seen in the primary school sample, with CEC having a lower absence rate than PC. However, CIN of secondary school age supported by Project Crewe have a better attendance rates compared to those supported by CEC.

Figure 3: CIN absences from school



Behaviour Scores

- Project Crewe CIN appear to have better behaviours compared to their CEC counterparts at one point in time.
- This only provides a one-off snap shot due to issues with data collection - it is therefore impossible to say whether there was a change in behaviour due to the intervention

Understanding how CIN behaviour changes over time can be a useful metric to assess broader improvements at home and at school. We hoped to examine these changes by using a strengths and difficulties behaviour questionnaire (SDQ), which would be completed by Family Practitioners and Social Workers at the start of the pilot, and then 6 months afterwards to allow us to measure any reported progress. However, due to a lack of responses, we were only able to compare behaviours of the Project Crewe and CEC CIN at one point in time. Therefore, we are unable to determine whether there was a change in behaviour across the pilot year and consequently, we are unable to say whether the intervention had an impact on behaviour.

As the scoring of the SDQ does not follow a linear pattern, we use the Mann-Whitney U test in our analysis to account for the irregular distribution of scores. This compares whether there are any significant differences between SDQ scores for children in the PC intervention relative to the CEC intervention. The SDQ measures 5 sub-categories; emotional symptoms; conduct problems; hyperactivity (inattention); peer problems and pro-sociality. These are aggregated into a total behaviour score. We observe no significant differences between groups in any of these measures: however, Project Crewe CIN appeared to have slightly better behaviour at the time the survey was completed. For future studies, we recommend ensuring surveys are simple enough to be completed multiple times, which would allow the impact of the intervention on behaviour to be assessed.

Risk

- This is a novel methodology for measuring risk but due to the very small sample size, results must be taken as promising indicators which require further in-depth research
- Biases may be present in reporting style differences between CEC and Project Crewe which may also have influenced results
- Both CEC and Project Crewe led to decreases in risk over the course of the trial period, though there appears to be a larger reduction in risk for cases assigned to Project Crewe (when comparing the level of risk at the time of referral and at the most recent case information)
- Both interventions have a similar positive effect on risk factors. However, Project Crewe appears to be more effective at improving protective factors
- This may indicate that future re-referral is less likely as more factors which are strongly associated with reduced risk of future harm are present

Risk factors and protective factors associated with an increased or decreased likelihood future harm in children have been well documented (Wilkins, 2015; Barlow et al, 2012; White et al, 2015; Hindley, 2006). Understanding how these factors occur in cases is crucial to understanding the efficacy of Project Crewe compared to CEC.

The analysis below is based on 2 risk scores based on qualitative coding of case notes: the first is calculated with information at the point of referral, and the second using the latest information available. This enables us to assess the change between the 2 total risk scores. A Difference-in-Difference approach attempts to measure how the relative change in risk scores over time between the PC and CEC. We then breakdown these results to assess whether the difference between the 2 programmes is due to risk factors decreasing, or protective factors increasing. However, it is worth underlining that the

findings are only based on 30 cases – a very small sample. We had intended to code the case notes of the entire sample but, as mentioned in the methods section, were unable to secure a data sharing agreement. Alongside the biases which may be present in the qualitative coding, we cannot generalise these findings and must only interpret them as positive indications of impact which require future exploration with a larger sample.

Risk analysis findings

This analysis first outlines the differences in total risk score (risk score, protective score and engagement score summed) between Project Crewe and CEC case across the 2 time points. As risk is coded negatively and protective factors coded positively, a score becoming more positive demonstrates that there is less risk present in the case. Box and Whisker plots outline the spread of risk data, the median average risk score and how the risk scores are distributed. The 'whiskers' show the range: the highest and lowest risk scores across the sample. The line that strikes through the box denotes the median risk score. The edges of the box show the median in the lowest and highest halves of the data – this splits our data into four quartiles – the bottom quartile ranging from the whisker to the edge of the box. A dot on a graph represents an outlier, which is a risk score that is abnormal compared to the rest of the scores. The median and range of total risk scores can be found for CEC in Figure 4 and for Project Crewe in Figure 5. The box and whiskers compare the average risk scores in cases at the point of referral and with the latest case information. In both programmes, there is a positive shift and a reduction in risk over time as the scores at 'latest information' become more positive. This indicates that cases have fewer risk factors and more protective, or positive engagement, factors present at the end point compared to the initial referral.

Overall, at the point of referral, risk scores of most cases from both CEC and PC are clustered between -6 and 2. However, using the most recent data, we see a substantial positive shift and reduction of risk with most cases now clustered between 2 and 6. Although both show a positive reduction in risk, the shift is greater in the 15 Project Crewe cases analysed.

Figure 4: Box and whisker for CEC cases at referral, and then using latest information

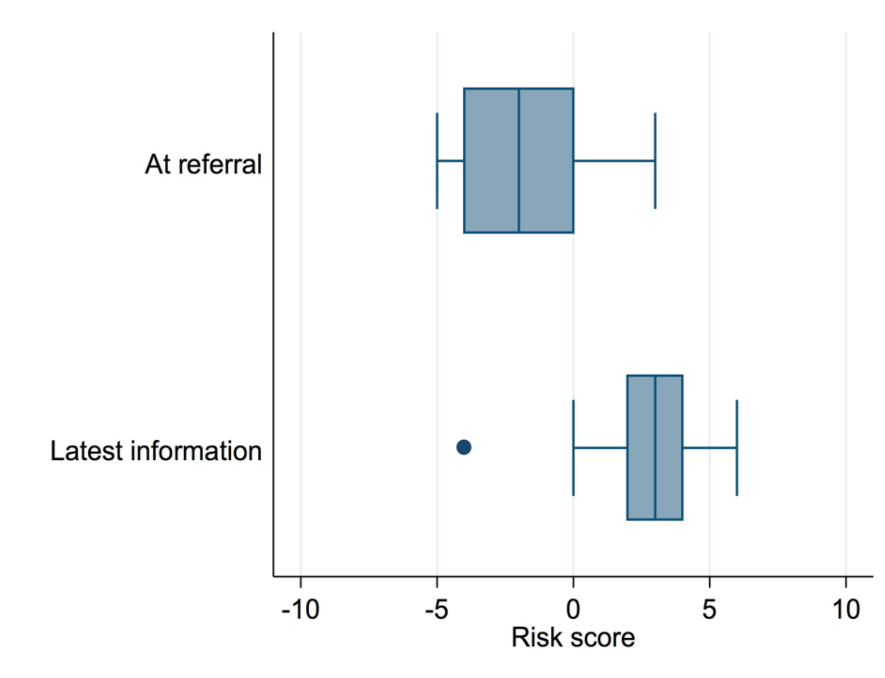
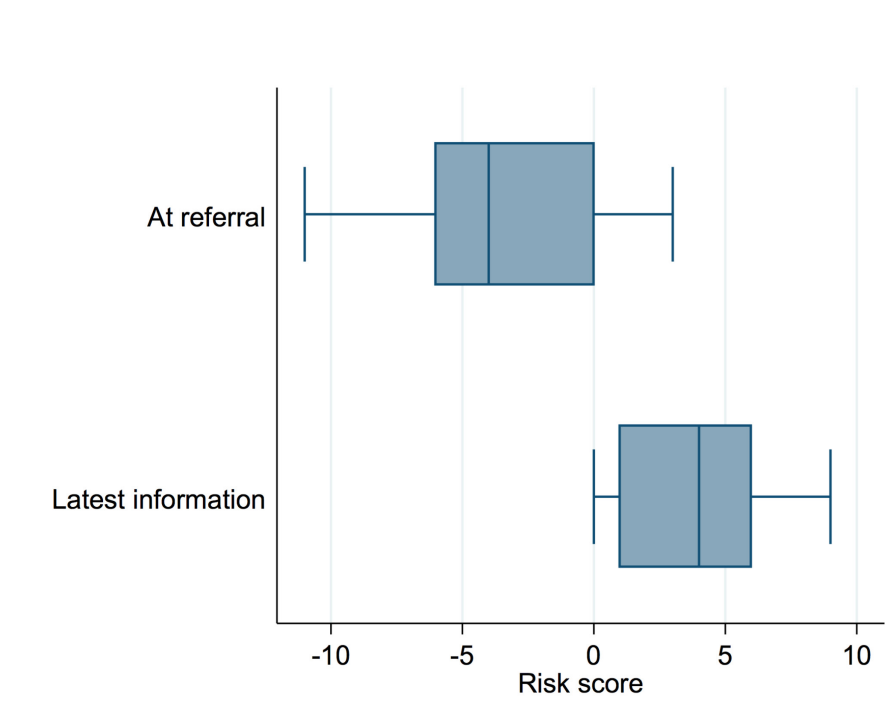
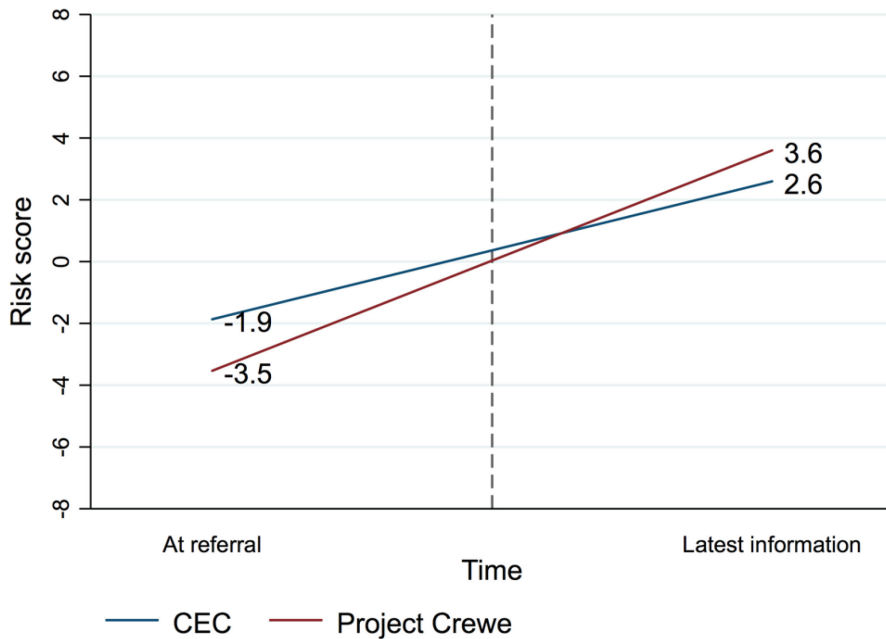


Figure 5: Box and whisker for Project Crewe cases at referral, and then using latest information



PC cases tended to have more risk factors present at the point of referral: however, as shown in Figure 6, when using latest information, the 15 Project Crewe cases coded were of lower risk and made a greater improvement compared to the 15 CEC cases.

Figure 6: Change in average total risk score at the point of referral to latest update, between Project Crewe and CEC CIN cases



To try to unpick what accounted for the difference in improvement, we broke down the total risk score into 2 categories: protective factors and risk factors. Protective factors are associated with the prevention of future harm, such as CIN engagement in school, supportive familial networks and parental employment. Risk factors correlate with an increased likelihood of future harm, such as parental substance abuse, poor mental health or domestic violence. As outlined in Figure 7, the improvement in risk factors is similar between Project Crewe and CEC suggesting that both interventions have a similar impact on these factors. Conversely, we observe a small decrease in average protective factors for 15 CEC cases, which increases in 15 Project Crewe cases. Figure 8 indicates that the Project Crewe model of support may be more effective at increasing protective factors. This seems to be what accounts for the greater improvement in average total risk scores for cases receiving Project Crewe support.

Figure 7: Change in average risk factors between Project Crewe and CEC CIN cases

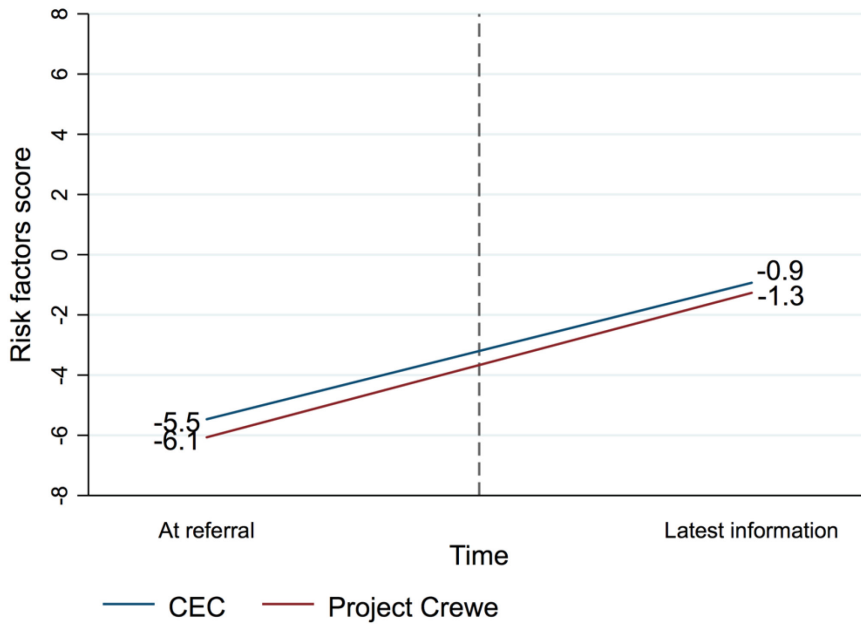
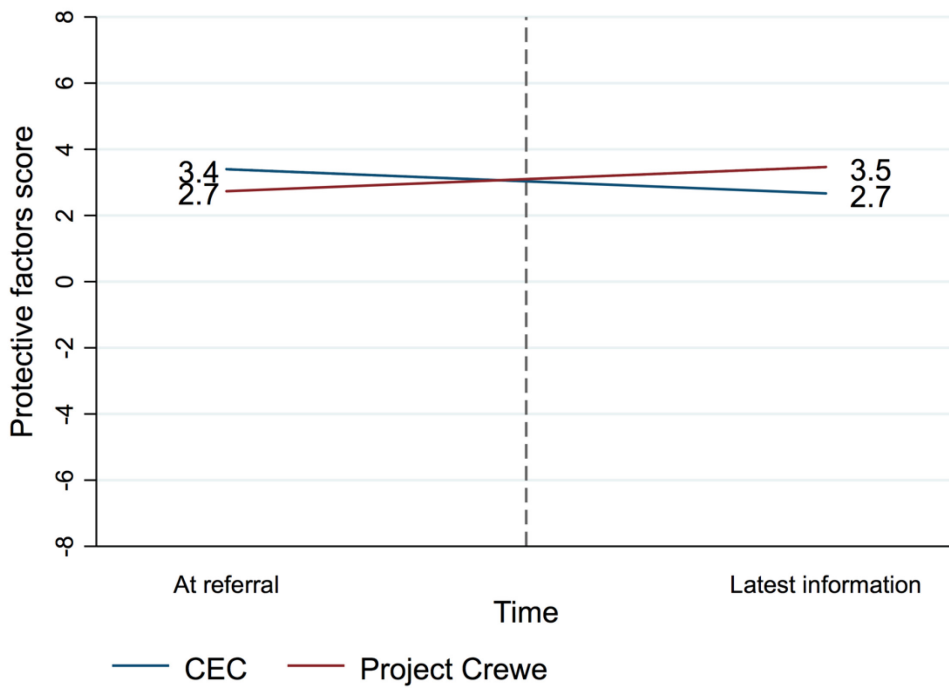


Figure 8: Change in average protective factors scores between Project Crewe and CEC CIN cases



Overall, the risk analysis indicates that Project Crewe may have had a greater effect on reducing overall risk scores in the cases analysed. This appears to be caused by an increase in protective factors which could potentially result in longer term cost savings by decreasing the likelihood of re-entering social care. It could also indicate that Project Crewe's actions are leading to more positive changes with the families they work with, as opposed to purely resolving problems. As these results are more positive indications of impact, it is important to test this risk analysis on a larger sample to determine whether it is replicable.

Qualitative analysis of CIN outcomes

Understanding how both Project Crewe and the CEC model of support were experienced and perceived, both by those who both received the intervention and those who delivered it, can help us identify what elements were most effective. This next section outlines the findings from in-depth interviews with families and frontline staff, who were spoken to at 2 points across the pilot year.

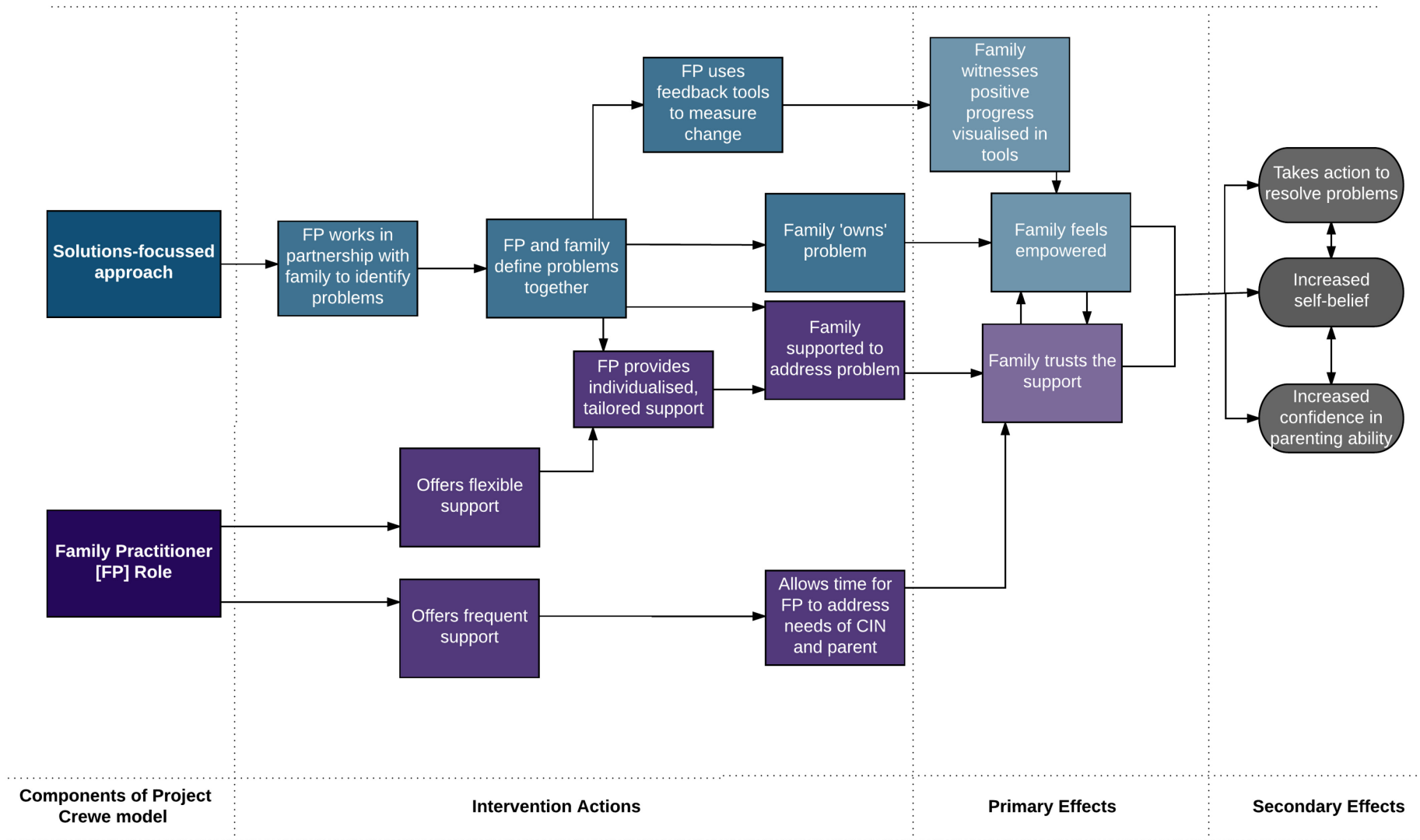
Summary of findings

- A Family Practitioner visited a case overall on average 3 times more frequently than a social worker. This was seen by FPs to develop stronger and more trusting relationships between the staff and their families more quickly
- The flexibility of the Family Practitioner role, visiting at specific times or to do tailored activities, allowed the frontline staff to differentiate their support, which again developed relationships and supported the sustainable stepping down process
- The solutions-focused approach (SFA) was valued by parents as it engendered a sense of control.
- Feedback tools allowed families to visualise their progress and supported their engagement with the change process and with their Family Practitioner
- For SFA to be effective, parents had to recognise the need for change
- SFA appears to be less effective for families with the most chaotic or stressful issues
- These positive findings lead us to suggest that, despite not having formal social-work qualifications, improving CIN outcomes is equally possible through this pilot's approach and structure

Map of qualitative findings

Figure 9, overleaf, shows how the themes that emerged from the qualitative research appear to interact. This is not a theory of change which defines a problem and outlines the pathways to achieve it, but a process map that draws out the most common themes in the qualitative data. It outlines how these themes interact and connect in this complex intervention and aims to give a sense of the chronological or causal flow. It highlights 2 central themes that emerged from the interviews: the role of the Family Practitioner, and the solutions-focused approach they used, were perceived as highly valuable by the families and frontline staff interviewed. Some elements of the pilot are not referenced due as the flow chart is focussed on the most common themes across the qualitative research.

Figure 9: Map of the most common themes in the qualitative data



The effect of the Family Practitioner

This section outlines how the frequent and flexible nature of the Family Practitioner role helps relationships develop with families and provide differentiated support.

The Family Practitioner (FP) role is at the heart of the Project Crewe model. They are multi-disciplinary workers, without social work qualifications; and work with up to 12 CIN at any one time. They work with the family to identify strengths and what already works well, and then agree what needs to change. They then help to make plans to achieve this, as well as identifying any risks and concerns. The Family Practitioner offers both administrative and frontline support; completes Child in Need plans and updates Liquid Logic (case information). They are organised into a pod system and managed by a Social Work Consultant (SWC) who holds statutory responsibility for the cases.¹ At times the FP will work alongside the SWC and may also be supported by Peer Mentor and Family Role Model volunteers.

Figure 10: CIN picture of their family and Family Practitioner



Figure 10 shows a picture drawn by a CIN in the Project Crewe group. The narrative which accompanies the drawing shows the positivity the young person felt and that they considered the FP alongside their family:

CIN: 'This is me (far left), my brother and sisters, my mum and my FP'.

Interviewer: What do you do with your FP?

CIN: Go to the park, go boxing.

Interviewer: Do you enjoy it?

CIN: Yeah.

Interviewer: What do you think of your FP?

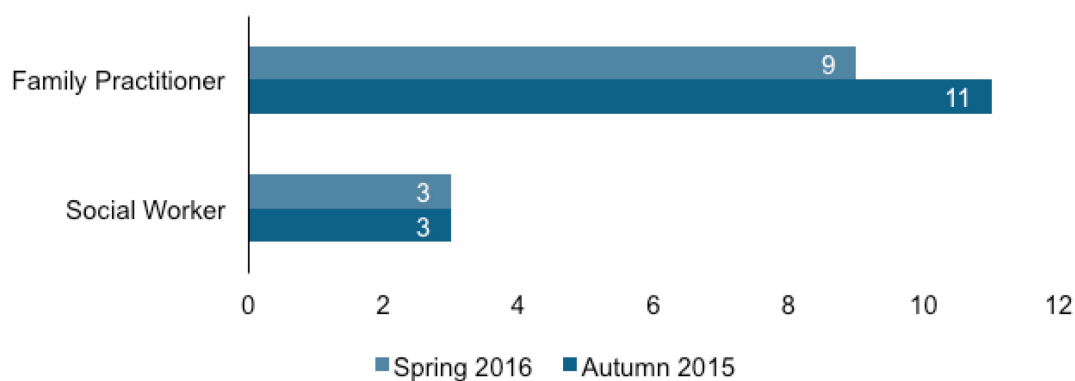
CIN does a 'double thumbs up'.

Frequent contact

Family Practitioners visited a CIN case family 11 times a month on average in autumn and 9 in spring - almost 3 times more often than their CEC counterparts. Types of visit varied between one-to-one sessions with the CIN; family visits; and one-to-one sessions with the parents. Visits also took place at different times of day, depending on the need. The families and staff felt that this frequency of contact underpinned Project Crewe, and that it was a pre-requisite to quickly building trusting relationships and to providing personalised care.

FP11: 'I think we get quicker results than they (CEC) can because of their time restriction - we can see them [their cases] as and when they need.'

Figure 11: Bar chart of average number of total visits to a CIN case over a month as described by families and frontline staff



The benefits of frequent contact

If the PC model is increasing the frequency of contact between practitioners and families, compared to CEC, it is worth considering why we might expect this to be positive. We understand that frequent contact positively influences the intervention in 2 ways:

- frequent contact was believed to resolve cases more quickly as families trust their family practitioner and are open about their issues. This is counter to the data analysis, where a survival analysis found that CEC resolved cases faster than PC
- frequent contact can help build stronger relationships between families and practitioners more quickly, which appears to be especially important for families who have previously had negative experiences of social care

Both CEC social workers and Family Practitioners felt that more frequent visits in Project Crewe benefited the CIN case resolution. One social worker lamented that her diary didn't enable her to provide the same level of support to one case that was assigned to the CEC group:

SW6: 'I think the outcome would have been the same longer term, but that the decision would have been made quicker if we could have offered that intensive support and maybe we would have closed the case by now...It's definitely not impacted upon the child, but we would have probably drawn the case to conclusion quicker. On the whole I think Project Crewe have gone really well... and sped things up for lower level cases.'

This frequency also allows the Family Practitioners to build relationships quickly, and provide extensive out of hours support. Several case families cited that FPs increased or decreased support as was required, and were always available on the phone. Conversely, CEC families described support that was more structured with appointments set in advance, and procedures for contacting their social worker.

Being readily available for the families built their trust in their Family Practitioner. This trust is important, as several families interviewed had negative experiences with social care beforehand and resented the way the social worker had approached their case, or errors that had been made relating to them. Interestingly, these families were the most positive about the PC model of support. Rebuilding this trust was a pre-requisite to engaging with the family practitioner, as one mother relates:

Mother, CIN case 8: 'Because when I saw her first I thought 'ah here we go again, another one, going back to square one again.' And it wasn't. And they'd read up on the file before they came in. Before I'd had social workers come in who hadn't even read the Liquid Logic [system which stores case information] And started ringing up their dad in front of the kids (father has a restraining order against and is not allowed any contact with family due to violence and domestic abuse). That's just ridiculous. I phoned them up and said don't you dare come around my house again, you make things worse. But no Project Crewe's been really good. I get along with them and the manager [SWC] is also really nice. I met her before when I was in pre-proceedings so already knew her which helped. They [FP and Social Work Consultant] are really funny and the children like them and that's really important for me. Because if the kids don't like you we ain't going to work with you.'

The initial trust that developed between the family practitioner and their family was a pre-requisite to meaningful support. This trust could provide the bedrock from which to address highly personal or sensitive issues related to the parent or CIN. One parent explained how the relationship was so strong that she felt comfortable to open up about her financial difficulties and illiteracy.

Mother, CIN case 2: 'Well for starters, there were things...I'm not a very good reader and writer and I was having...rent problems with the house and they were sending letters for instance. The rent, it was like from my husband and the debt like all landed on me...and she went through everything and...not just explained it, went through it with me and every phone call she would explain before and after...'

it's more...I can read but it's more the understanding, some big words I don't understand...'

The intensive style of support appears to allow Family Practitioners the space to be able to develop strong, trusting relationships with the families who are open to sharing some of their most personal problems. On its own, frequency of support has been shown to have multiple benefits, but primarily it provides a base from which other positive interventions, such as the flexibility of the support, and the SFA, can be realised. It is interesting to note that, although several staff perceived the frequency of visits would close cases quicker, this was not supported in the data analysis. It may also have side effects on Family Practitioners, outlined below.

Side effects of frequent support

Despite the frequency of support being considered a positive and integral attribute of the PC model, it did create 2 negative side effects, which appear to be well managed by the delivery team. These are important to recognise as challenges which could occur if the project was scaled:

- the increased administrative work generated by frequent visits was hard to juggle on top of other responsibilities
- the intensive model can be emotionally draining for the frontline staff, who drew upon the strong pod support model for respite

Capacity is a significant concern in the social care field: the Munro Review (2011) advised that heavy caseloads were an obstacle to good practice. Several Family Practitioners worried that taking on more cases would impact on the sustainability of the Project Crewe model. Despite the caseload being capped at 12 (whereas a social worker typically has 18-21 (ADCS, 2016)), they worried whether documenting visits, completing CIN plans and conducting frequent visits would still be possible.

FP2: 'If caseload were to increase we wouldn't have that availability. The fact we have that time available, we're able to do all sorts of things. I do worry that the constraints of the system will override our flexibility at some point.'

However, we found no evidence of expanding caseloads, and the intervention has been running for over a year with a cap of 12 as an optimum number of cases.

The frequency of visits does appear to create a large amount of paperwork. Several articulated that they struggled to balance the administrative duties on top of regular visits:

FP1: 'As we work so intensively, our work generates more case notes and actions: keeping on top of that as well as Child in Need Plans and supporting families is quite tough and time consuming...we're supposed to be innovative and different but we're bogged down with the same paperwork.'

At the time of interviewing, Family Practitioners were not at capacity – in November 2015 there was an average of 7 cases per practitioner, in April 2016 there were 9 cases and in November 2016 there were 11. No additional concerns about caseload were raised, and FPs had lower stress levels than SWs (see page 44), but it is important to monitor considering the current social care context.

Flexible contact

It is not just the frequency of visits that appears to benefit the families, but the flexibility to develop a relationship that responds to the needs of the family and the CIN. Compared to the business as usual condition, it is worth considering why we might expect this to be positive. There are 3 main reasons:

- Family Practitioners can tailor and personalise the support for each CIN case
- this flexibility creates space for creativity which FPs find personally fulfilling
- flexibility helps mitigate issues around families becoming dependent upon support by allowing supportive detachment from cases which were closing or being escalated

The Family Practitioner model of care allowed for visits to be differentiated according to the needs of the family. This enabled the service they provided to be both tailored and responsive.

FP9: 'There's no average visit... each visit is totally different.'

Alongside flexible visits, Family Practitioners could also draw upon a family fund to support the delivery of the CIN plan.

Mother, CIN case 7: 'And recently, she took them to the ice cream farm.'

Interviewer: The ice cream farm! What's that?

CIN: It's got animals and ice cream.... I had marshmallow, chocolate pistachio mixed all together.'

However, this financial assistance is unique to the intervention and is not available to families in with CEC, which may affect engagement:

CEC Senior Leader 1 'We use charities, recycling and Church organisations, as we don't have a pot of money to delve into. You've always got to be mindful that families aren't just saying "I'll go there because I'll get a new cooker."

Despite this concern, no families interviewed mentioned financial aid, aside from trips or excursions their children had been taken on, or support to access food banks. This is in

line with the purpose of the PC budgets, to be used as an enabler to build family bonds and achieve the CIN plan. This suggests the primary incentive to engage in the intervention was not financial and was used by Family Practitioners as an added benefit to the support, as opposed to a motivation to engage in it.

Creativity

The current flexibility (perhaps a consequence of relatively low caseload) allows the family practitioner freedom to be creative, something which many valued:

FP3: 'Policy and procedure helps us to be creative and you don't have to do everything the same way. They (PC Senior staff) are open to new ideas.'

Several cited that they felt motivated and empowered by the flexibility they were allowed within the role, as well as it contributing to their wellbeing. One Family Practitioner implied they had more autonomy than their colleagues in CEC and felt supported.

FP11: 'She (manager) doesn't get involved like regular social workers and allows me to manage my time and case and I ask for support when I need it.'

However, one social worker felt that this flexibility did not sit neatly next to the CEC's more procedural way of working and the services should be more similar in approach.

SW6: '(I)t's not about you have this and we have this but having a proper procedure and process that benefits children and families.'

This may indicate more collaborative and shared ways of working are needed between Cheshire East social workers and Project Crewe SWC and FPs.

Family dependency and closing cases

There is a risk that, when a family receives intensive social care, they become dependent upon the supportive environment, believing it to be necessary for sustaining the positive changes (Barber, 1986).

FP1: 'That's an issue with an intensive service like ours...you have to be careful about how you manage back for that family to be independent.'

However, the flexibility model of support appears to mitigate that risk by allowing FPs to gradually disengage from cases.

FP15: 'She was quite dependent after a few months of working with her, but we slowly reduced the amount of times we'd see the family. She knew I'd be at the end of the phone if she needed, but she began to manage the CIN behaviour without my support. I guess that's how you look at maintaining changes after social services step out, which was important to identify early on.'

Sometimes a volunteer continues to support a family prior to and following case closure. Both the families involved in this process, CIN cases 1 and 2, and their Family Practitioners, cited they were happy with the support.

This gradual approach to disengagement was equally beneficial for cases being escalated up to Child Protection, meeting the parents and attending meetings up until the official handover. The mother in CIN case 10 was known to be particularly vulnerable so the Family Practitioner arranged her other commitments around this ongoing support, whilst slowly disengaging from the one-to-one interaction with the CIN in school.

The frequency of the visits to Project Crewe families appears to lead to strong, trusting relationships developing between the FP their families. To avoid this trust being broken, it is strongly recommended the intervention continue to allow for slow and sustainable disengagement once a case is closed, to help families manage change and retain trust in social care support.

Solutions-focused approach

FP2: 'It's an approach you can take in any walk of life, really.'

Across the interviews, the solutions-focused approach was appreciated by both staff and families as a way of engaging and tackling problems. This section outlines how the solutions-focused approach (SFA)³ appeared to be effective through the following features:

- it gave parents a sense of control and ownership over their problems, which helped them take responsibility for them
- feedback tools were motivational and helped parents understand and document the progress they made
- the approach appeared more effective with certain types of problems and less effective in families in acutely stressful or chaotic situations
- the parent or CIN needs to recognise their issue and acknowledge they have a problem before this approach can be effective

The solutions-focused element of the intervention was the most positively cited aspect of the Project Crewe intervention. Many Family Practitioners stated it felt natural and something I'd always done without knowing it. Meanwhile, families praised the approach for being different and supportive.

³ For a detailed overview of the approach, please see appendix 7

The approach draws on Solution Focused Brief Therapy. It involves identifying, and working towards, a goal; and focuses on the problems that families raise themselves, working in partnership with the Family Practitioner to resolve them. One parent compared SFA to the more traditional model of support she had previously encountered. The excerpt below exemplifies the difference families felt in the way PC approached them, and how it initially focused on the positives, as opposed to highlighting the problems which need resolving.

Mother, CIN case 1: 'Their ways [CEC social workers] were very hard, coming into my house going "You need to change that, you need to change this". I had a million things I needed to do and I was coming in and out of hospital...in their mind I was failing as a mum but in my mind, I was doing everything I could, the children didn't want for anything. But obviously difference of opinion and things spiralled and they were saying I wasn't doing what I was supposed to. Having sepsis, it doesn't take weeks, it takes months to get over. I'm still trying to get over it now. And then it was within 3 weeks when they [PC] came in... even in that time my confidence changed, they said, "Right we know you're a good mum, what do you feel you can do?" and I said, "I can do this and this," and it was the way that they spoke that was totally different. The first 2 [CEC SW] I couldn't get to know. Whilst the others [PC] came at it from a...we can do this in a good way, "What can you do?" They could see we were good people.'

Giving control to families

The SFA supports families to identify and address their issues. By holding families responsible for identifying their issues, it ensures accountability for those issues remains with the family. The majority of Family Practitioners interviewed stated that this approach had a positive effect on families who had previously received CEC support where many felt they had power and control taken away from them. FP2

FP15: 'One family was really disengaged and hostile to support, we broke down these barriers and she thanked us after as she wasn't being told what she should or shouldn't be doing.'

Project Crewe families articulated that they felt they were listened to compared to those who were supported through the CEC support, which takes a more directive approach. The difference between these 2 approaches is exemplified by the quotes below. In the first example the social worker takes a positive, but direct instruction approach:

SW5: 'I went through things with mum that needed to be cleaned, so the kitchen floor and the sides had food on them and the children didn't have any bed sheets so I asked her to get sheets and the carpet in the room wasn't clean either. So, I asked her to do that and by the next day she'd already done it. Mum is great really. You tell her to do something and she does try...'

How the social worker approaches resolving a situation is different from the Family Practitioner in this example of an SFA approach, as one parent articulates:

CIN case 7, Mother: 'They ask me what I wanted. It sounds silly and small but they were thinking about what I needed not what they thought I needed. It makes a massive difference. The first thing she said when she came in was, "This isn't about what we want, it's about what you want and you need and how we help you going forward." The minute she said that it changed my opinion.'

One aspect of this was asking families what they wanted to improve in their home and then supporting them to achieve their own goal. This ownership motivated and engaged parents and carers to improve.

FP7: 'Listening to what she wanted, not telling her what I think she needs because that's not my role. I don't live her life; she lives it. But listening to what she wanted, what she wanted to change and her telling me how I could support her and how I could support the kids.'

This concept of ownership underpins the Family Practitioner approach and is supported by tools which help to visualise this progress.

Feedback mechanisms

FP11: 'Families can be experts in their own lives and they like that.'

The tools used by the Project Crewe pilot enabled families to understand the change they made through visualising the impact. The Time Wheel, Outcomes Star and Scaling, where families ranked themselves against certain criteria, were cited as particularly effective for families. This was also highly motivational for Family Practitioners as it gave them concrete evidence of the impact they'd had.

CIN case 1, Mother: 'We've had a goal, every day and we've stuck to it - it's been like that for the last 6 months. Even today, going into town with 4 kids is my goal, it's good to have a plan of action and stick to it.'

Visualising measurable change was cited positively by almost all the Family Practitioners. Studies on the effect of feedback on performance support this view: feedback that is specific and task-related leads to greater improvements in performance than general feedback such as praise for the person (Hysong, 2009). Setting measurable goals helps motivate families to continue along this path, as well as providing documentation for follow-up support once the case has been closed.

FP2: 'We did the Time Wheel, it highlighted when I'd become involved and the path she'd taken, with a few blips along the way, it was really positive... she asked if she could keep it to remind her of what she'd been through.'

As well as a motivational force, the measurement tools had practical implications for parents. Theories on motivation for behaviour change acknowledge the importance of monitoring and diagnosis of problems (Carver & Schreier, 1998). The interviews suggest that measurement tools provided this function to parents.

FP11: 'I do scaling quite a lot, especially with parents with mental health difficulties, it's useful to get them to scale where they are each day, on 1-10, to see if there are any patterns or sometimes whether they need to see a GP.'

One family practitioner cited an underlying reason for this efficacy: they enabled parents to understand their situation.

FP10: 'They can be experts in their own lives and they like that.'

Relative success in addressing different types of problems

Despite SFA receiving very positive feedback from families and Project Crewe, in some cases it wasn't uniformly successful, particularly in chaotic cases.

FP10: 'I've had a few cases that have had quite significant safeguarding concerns and it's difficult to work in a solutions-focused way as you're kind of passing it back to them asking how they would manage it. Sometimes if it's safeguarding you need to say: right, we need to do this to ensure your child is safe. So that can be difficult.'

Frontline staff needed to distinguish when to use the SFA approach when high-risk incidents arose. This family practitioner explained how they deviated from SFA to manage a high-risk incident when the CIN attacked the mother, whilst continuing to use it for lower risk situations.

FP10: 'We did work with mum around removing the knife and keeping them safe. Any safeguarding things that come up or anything that's risky we'll work with that straight away because we need to. The other stuff we'll work in a solution focused way and try and get them to look at their resources and get them to manage it themselves.'

It is worth noting that the case referred to above was appropriately escalated. Similarly, several Family Practitioners felt that SFA was ineffective for families who FP10: 'couldn't engage with it' or who FP15: 'destructive...trying to sabotage everything we put in place'.

FP7: 'Some families just don't get SFA at all, they're in too much chaos that that SFA just doesn't work out for them.'

The ability to engage in SFA is essential to the efficacy of the approach: understanding the hallmarks or features of these types of CIN cases may improve the referral process to Project Crewe. Steps could be taken to further explore this theory and identify whether

certain types of issues or family situations are more receptive to the intervention and enable the CEC and PC to provide more targeted referrals.

Parents are levers for, and inhibitors of, change

For good and for ill, parents have been shown to be instrumental in the efficacy of the Project Crewe model as the mechanisms for change.

CIN case 3, Mother: 'She (Family Practitioner) has opened a lot of doors, say 6 months ago, I was a different person, even as much as chatting to people, I couldn't do it, even a lot of my own family, and a lot of my friends didn't know she was involved, have ...noticed a change in me.'

With many of the cases, improving how parents acted and felt about themselves and their parenting abilities often appeared to have a noticeable effect upon case outcomes, especially as so many of the CIN were under 11.

CIN case 2, Mother: 'The kids have come on so strong and that's one thing I will say, if they see me being positive that sets an example for them.'

A plausible reason for the change is that the Project Crewe pilot addresses the needs of the parent as well as the CIN. Across the interviews, a salient difference between CEC and Project Crewe cases was the impact they appeared to have on the parents. Although both schemes alter how the parents and CIN act and behave, Project Crewe cases also improved parental socio-emotional wellbeing. Families interviewed cited that their confidence to parent and address issues had improved, as had their sense of belief in their improving circumstances.

CIN case 8, Mother. 'Yeah it makes a massive difference because I want to work with them.... now I feel better. I can see us getting somewhere, getting actually to an end and actually getting to a place where the house is calmer.'

This may be an effect of giving ownership of the issues to the parents, by altering the power relationship between the frontline practitioner and family: SFA shifts the position of the parents from one of submission to one of control, and they become agents in resolving their situation.

CIN case 8, Mother: 'If a situation has occurred, I've not got to sit here on my own and think, "How the hell am I going to fix this?" I phoned her (FP) last week and said, "We need to find a way to get kids into school. I don't know why it's kicked off since half term and we need to find a way." And she (the FP) then came over, we jotted down loads of ideas to sort it – arranging meetings and working together.'

However, for the Family Practitioner to create a successful partnership with the parents or carer, the parents or carer must recognise there is an issue to be resolved. Across the

families involved in the qualitative research, a small minority failed to recognise they had an issue in the first place. All these cases failed to make any progress, or worsened, in the time between the 2 interviews. In all 3 PC CIN cases which escalated or where there was no change between November and April, either the parent or CIN failed to acknowledge the problems they faced. This was sometimes through their own vulnerabilities where they were too passive⁴ to engage in the support: one parent did not recognise their actions were harmful to their children; another parent was too passive to engage in the process through her vulnerability; and in the final case a teenage CIN had vulnerabilities that led her to not want to stop her risk-taking behaviour.

It is worth exploring this theme further and putting measures in place to identify those CIN cases where they initially fail to recognise the issues for which they were referred. This needs to be considered in the CIN plan.

Project delivery

This report now moves onto focus on the wider processes that supported the intervention. It first analyses the cost effectiveness and then moves on to outline the qualitative findings on the delivery of Project Crewe.

Cost-benefit analysis

To assess feasibility of scaling such an initiative, it is important to understand the cost effectiveness compared to the traditional model of support. However, due to insufficient data, the analysis in this section cannot support any firm conclusions about the relative benefit of Project Crewe compared to Cheshire East. It is important to consider this cost-benefit analysis (CBA) as an illustrative exercise and an example of an approach that could be improved by better data. This is a challenge faced across the social care section, as there is a lack of data linking CIN outcomes to any other metrics, aside from education (Morse and Arkell, 2016). We base our figures on comparative re-referral rates between Project Crewe and Cheshire East and compare escalation rates in PC with national trends. It needs to be highlighted that the data used has significant limitations and are not statistically significant. Moreover, we have limited observations on re-referrals (8 observations) for both Project Crewe and Cheshire East and escalation information for Project Crewe only (2 observations). Therefore, all figures estimated below must be considered illustrative. Please refer to Appendix 9 for an outline the costs of the programme per case and then itemised the benefits to the individual CIN and the Local Authority. All these estimates only relate to our sample and cannot be generalised.

It may be better to consider this CBA as illustrative and an example of a method that could be improved by better data.

⁴Unable to take control of their situation through being in an abusive situation (present or historical)

Qualitative findings of project delivery

This section of the report outlines how the project was delivered for an operational perspective. It first focuses on how Project Crewe implemented the intervention - training and supporting their staff. It secondly looks at the interaction between Project Crewe and Cheshire East Council, to explore how the intervention was nested within children's services.

From our qualitative research, several common themes emerge from interviews conducted with 18 frontline staff and 3 senior leaders from both CEC and Project Crewe. This section aims to summarise these themes which have supported the pilot intervention. Finally, we consider the challenges of integrating an innovative project into a more established system.

Implementing an innovative pilot within a pre-existing structure has challenges. This section outlines several features of the intervention that differed from how they were intended.

- caseload from CEC was not alleviated as expected by Project Crewe as the cases which were removed were replaced by others
- CEC reported that they had more time to focus on more complex cases
- cases referred to Project Crewe were of greater risk than expected
- issues with communication between CEC and PC meant frontline staff encountered challenges at the referral, handover and escalation stages

It is demanding to assimilate an agile and flexible way of working within a more traditional and structured model: and many of the issues highlighted below stem from this structural difference. However, senior leaders within both CEC and Project Crewe are continually working to address these issues and to improve the way they work together.

PC Leader: 'I suppose it's about better cross-working really. If it was more seen as working in partnership with one another really rather than...a step-down service or a lesser service in some way because we're not.'

Sustainable and conscious organisational culture change takes time and requires a readiness to accept the change (Todnem By, 2005). Successful implementation arises from continuing to develop measures to overcome unexpected challenges or unintended consequences of implementation, which the delivery team continues to work towards. The lessons that are learned through this process will be of importance to local authorities across the country.

Alleviating pressure

Due to the demands on the system, the CIN case families reallocated to Project Crewe were almost instantaneously replaced by other families. The relief that Project Crewe was expected to provide to SWs did not therefore transpire. This finding supports evidence that suggests there is a great deal of latent demand for the system that will arise whenever the space is created (NSPCC, 2014; BASW, 2013).

Cheshire East Senior Leader: 'The impact might not be quite what we had imagined at the beginning if I'm honest, but, the impact is 'how would you manage with another 145 cases more than we're currently holding?'

Despite limited visible evidence of reducing caseload, another senior leader within Cheshire East felt that Project Crewe had created a space for her team to focus on some of their enduring, complex cases.

Cheshire East Senior Leader: 'With PC picking up cases which would have probably ended up in child protection case conferences, we've been able to turn around the team and use this space to concentrate on our hard child protection cases and conclude what we will do with them, so we've been able to drill down on some of the more worrying cases we've previously not be able to get a grip of.'

Despite being harder to demonstrate, this suggests Project Crewe has allowed for the use of resources with those children who are most in need of support. Ongoing monitoring of the re-referral rates of the families in the control and treatment will help provide more accurate long-term estimates as to the reduction in pressure on the council services.

Internal processes within Project Crewe

Project Crewe does not only pilot innovative ways of working with CIN case families, but new systems to support frontline staff. From the interviews, several practices emerged which were found to be particularly effective in supporting and motivating staff.

- embedding the solutions-focused approach into the internal operational system supported staff in their work with families
- the pod and buddy system supported a strong culture of collaboration across CIN cases
- a responsive training programme allowed Family Practitioners to access information they needed to support their families
- staff at Project Crewe displayed lower levels of stress than their counterparts

- the organisation is a well-established charity within Crewe, having worked with families in the area for the past 12 years. This may have supported these strong operational functions

Solutions-focused approach is embedded

Despite not being universally successful across all CIN cases, the approach was well delivered; all FPs interviewed stated they felt confident to use the method. This aptitude stems from the approach being fully embedded within the day-to-day practices of Project Crewe. As one FP stated, 'it just comes up every day.' This integration was said to support the Family Practitioners to use and refine the approach with their case families.

FP7: 'Our line manager uses SFA to set out the agenda in our monthly supervisions - it keeps us constantly thinking in this approach.'

They have also incorporated this approach into wider CIN meetings. This was especially beneficial for families who feared or struggled at meetings in the past:

FP 15: 'One mother used to shake visibility before meetings.'

Using the same approach with families within their home, and in more formal meetings, helped families engage with the statutory meetings.

FP3: 'The SFA approach to CIN meetings has had some really positive feedback in engaging parents who've refused to attend previously: they found the sessions really empowering.'

Support and collaboration

Project Crewe used a pod support system⁵ – where one Social Worker Consultant (SWC) led and supported 4 Family Practitioners (which was reduced from 5 after feedback from the frontline staff, to enable sufficient oversight of all cases). The system was praised by all FPs interviewed. The SWCs, who are responsible for risk management and case escalation, were always available for when a Family Practitioner needed advice or support on a particular issue, case or meeting.

FP1: 'My manager's really available. If I've just done a visit I can say, "can I just run this by you?" ... I really feel supported.'

Several Family Practitioners described incidents they had encountered which needed SWC attention and that they responded quickly and efficiently. This was seen as invaluable, especially as some cases were more complex, or of a higher level of risk, than anticipated. Several Family Practitioners felt that their SWC was equally available to the families they supported.

⁵ For an outline of the Project Crewe Staff model, please see Appendix 8

FP12: 'My manager makes my parents aware that they can contact her if they ever need anything or are unhappy and don't feel they can talk to me about it. If I'm ever away, she's there for extra support and has a good relationship with them so can check in and make sure everything is all right.'

This culture of support has helped the team form strong relationships:

FP2: 'The level of support we get in the team, we're really close, you never feel on your own at all.'

This association between support and culture appears to be a positive feedback loop: a culture of support improves working relationships which in turn reinforces the culture of support.

This way of working is not just limited to the vertical relationships but has led to a collaborative, horizontal support network, formalised through a buddy system where a second FP is introduced to the family so that in the absence of the allocated FP, there is someone who can cover their work and has met the family.

FP1: 'As a pod we are very aware of each other's cases and we co-work: if there's a family with a large number of children or if I go off ill, it's fairly easy for a team member to pick up the case.'

Testament to this positive experience is that several Family Practitioners are seeking to pursue a career in social work. Project Crewe should look at ways of working with CEC on an embedded training programme, or feeding those who are interested into Project Crewe in advance of commencing a social work degree.

Training

Family Practitioners highlighted that the Project Crewe training was very strong, explaining that it was comprehensive, ongoing and personalised, responding to frontline issues encountered by family practitioners.

FP7: 'Domestic violence within the cases we're getting, we've identified that as an additional training need for some of us so we've been attending domestic violence training. Anything which comes up we're not sure about we look to train it. So that's really good.'

Taking advantage of the skillset and past experiences of the FPs allowed Project Crewe to offer a range of free training and empower those to share their expertise:

FP10: 'We share a lot of skills and knowledge between us, I've worked in SEN so was able to do a presentation on it.'

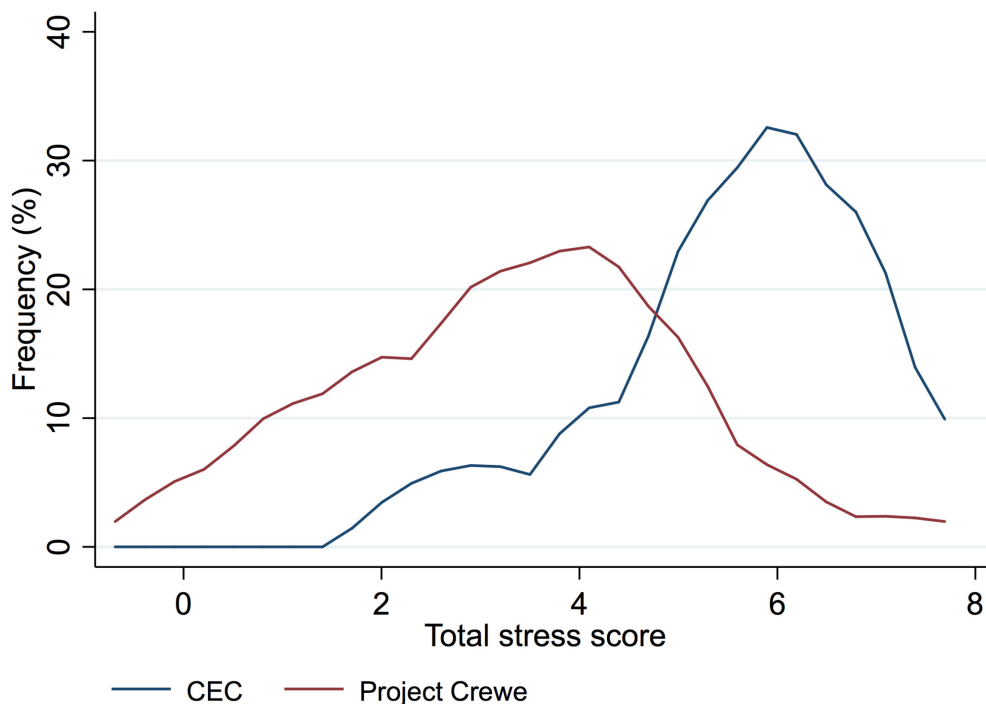
However, several Family Practitioners felt they still needed training in certain areas. They raised Child in Need Plans, where they felt there was little space to develop and learn, as they felt they were expected to be fully proficient from day one.

Project Crewe’s response to training needs ensured that FPs felt supported during this pilot year. The intervention now offers training on case recording and planning within the pod system. It is recommended that they continue to provide this dynamic training to ensure that staff feel prepared and know to sign up as soon as they are exposed to something they do not feel able to handle.

Stress

High levels of stress among social care professionals are common (Farmer 2011, Pedrazza et al 2013). This can be detrimental as stress in the workplace is a predictor of attrition (Leiter & Maslach, 2009), sickness absenteeism (Godin & Kittel, 2004) and low productivity (Burton et al. 2005). It is difficult to compare CEC social workers directly to Family Practitioners, as, on average, only 20 per cent of their caseload is CIN cases compared to Family Practitioners’ 100 per cent.

Figure 12: Distribution of NHS stress scores across CEC and Project Crewe in November 2015



When surveyed, CEC social workers had higher stress scores on average than the PC FPs, as shown in Figure 13. Eight out of the 9 CEC staff who completed the survey reported that this was predominantly due to workload, whilst comparatively fewer FPs cited workload as the main factors (6 out of 19). FPs instead reported that complex cases, and difficulty in working with CEC, were more common issues. Due to a lack of responses in the second round of data collection, we were also unable to determine how

stress changed over time, so Figure 12 represents a snapshot in time and must be treated with caution. However, this survey was conducted only a few months into the pilot and it would be valuable to re-run to explore new themes that may emerge.

Communication

All members of Senior Management within CEC and PC stated that they had good working relationships and frequent contact with their counterparts. However, this positivity is not reflected in those lower down the organisations, with both FPs and SWs highlighting some difficulties which spiral from a lack of communication and inconsistent adherence to procedure.

PC Senior Leader: 'We are 8 months in but it still feels like early days. I have a good working relationship with my counterpart but the SWCs and FPs are still in their infancy of making their relationships tangible with their peers. Some are better than others but the priorities and pressures amongst both sets of workers in their day jobs make it difficult.'

Senior leaders on both sides were aware of this, but initiatives to improve communication channels have been challenging to sustain. However, recent strategic meetings observed by the evaluation team highlight that improvements have been made that may not be reflected in the section below. At the time of interview, difficulties with communication manifested across the referral, handover and escalation points of overlap between the organisations.

Referral process

Interviews suggest that, during the pilot, there were issues with the level of risk associated with cases. This occurred at 2 stages: firstly, the cases that were referred to Project Crewe, and secondly the process to escalate cases if the risk escalated from CIN to CP.

Every Family Practitioner interviewed mentioned that cases were higher risk than they had anticipated.

FP3: 'We were led to believe it would be mid-to-low end need which I feel it hasn't been.'

Working with cases where the risk was higher than anticipated had unintended consequences on the Family Practitioners' confidence and wellbeing. Several felt they had not been prepared for the level of risk they encountered:

FP14: 'The training was extremely good but I don't think it was fully adequate as it didn't focus on the difficult families that we've had referred to us...we were

supposed to get low level CIN but this wasn't the case, especially for my caseload.'

However, due to the level of support offered by the pod system, Family Practitioners generally felt supported, despite the stressful decisions and situation. Social Work Consultants' caseloads were also reduced to ensure the safe management of all children, from 60 to 48 cases (or, from 5 to 4 FPs).

FP15: 'The support was good for safeguarding issues, where I've been worried about cases - it's made me feel better about the ones not progressing to child protection ...even in the cases where I haven't got enough support it's been easy to go to the intervention lead.'

Handover process

Despite many elements of the internal Project Crewe processes being flexible, this did not appear to translate into practice between Cheshire East Council and Project Crewe. Issues with case handover from CEC to PC were raised by both parties: one Social worker lamented that the flexibility required to develop a CIN plan was not provided.

SW5: 'Child in Need plans don't just come out of one assessment, they are an ongoing process...there needs to be more flexibility around us identifying an issue, Project Crewe accepting it on our skeleton plan and then putting a proper one in place.'

Since the research was conducted, PC do now accept cases without plans and give more ownership to FPs to update the plans after handover. This has benefited the project, as this issue had previously caused delays. A senior CEC leader elaborates:

'It takes a long time to identify cases that are going to be managed by Project Crewe, actually getting them off the Social worker, sometimes it's quite a long delay and we're both at fault.'

As this issue had knock-on effects, delaying allocation and redistribution of new and existing cases, providing a more flexible handover process has benefitted families and frontline staff.

Escalation

Despite only 8 cases escalating over the pilot year, 2 of these between November 2015 and April 2016, some tension has emerged in the process to escalate a case to child protection: several Family Practitioners described how difficult they found the process.

FP3: 'Where they've been at Child Protection level, Cheshire East have been reluctant to accept them back and escalate...it's had a big impact upon myself and my colleagues and the clients we're working with.'

This effect, and the sense of the unknown, was also felt by CEC SWs:

SW6: 'It's not the best integration to be honest... I just don't know what's going on, whether we're about to have a lot of cases dumped on us.'

Some cases appear easier to escalate than others: if there is an acute issue, such as a one-off incident like domestic violence, the evidence is there, as opposed to harder-to-prove issues, such as neglect:

FP8: 'It's an absolute nightmare because we can't seem to get many cases up to child protection, because if it is neglect then the threshold doesn't make much sense so we're stuck with these cases going around in circles.'

The perceived friction to re-accept cases appears to have a detrimental effect upon the morale and motivation of Family Practitioners, particularly when considering that the cases referred appear to be of a higher risk than was intended.

FP7: 'I just feel like we're stuck and all I'm doing is repeating myself. In 4 weeks, we'll review it and if no changes have been made we will try to step in up to child protection but I know they won't take it from cases previously... I can't understand it. I certainly wouldn't have taken the job if I had known this.'

Several Family Practitioners felt that, as their role required fewer qualifications, their professional opinions were less respected by the more qualified CEC staff. Although this did not impact upon the day-to-day running of the intervention, it manifested during attempts to escalate cases. One Family Practitioner felt it negatively impacted her sense of self:

FP3: 'When a case is not escalated, and we go back into work with these families, it's really quite frustrating, backs us into a corner and undermines us as professionals.'

Despite this relating to relatively few cases, escalation of cases appeared to cause tension on both sides. Senior Leaders were continually working on this issue through the Strategic and Operational Board meetings. The working agreement between these 2 organisations (the Joint Working Protocol) is frequently updated and aims to improve the speed of case consultation, re-assessment and escalation. One notable change is the future co-location of Project Crewe and Cheshire East staff in Crewe and Macclesfield. More integrated ways of working could improve this collaboration so it can continue to evolve from a 'service' to a 'partnership'.

Limitations

As outlined throughout the report, the quantitative evaluation of Project Crewe data has found a number of promising indications of impact on outcomes for CIN, supported by

qualitative findings from 48 interviews. However, our confidence in these results is limited, as the findings are not statistically significant. This is predominantly due to a smaller than expected sample size (50% less than anticipated), which meant our analysis was based on much less data than intended. To compound this, several outcome measures, such as re-referral or case closure rates, need more time to fully ascertain effect. The project team can continue to monitor the 'control' and 'treatment' groups over the next few years to understand the differences that may emerge between the 2 groups.

The sample size challenge also manifested in the qualitative data collection methods. It was intended that 3 interviews in both November 2015 and in March 2016 should be conducted for each of the 12 case studies. However, due to circumstances beyond our control - such as significant family illness, health problems, staff turnover or case escalation - only 5 case studies contain the full 6 interviews. To redress the balance of interviewees from control and treatment, 2 additional families were interviewed in March. Gathering data directly from frontline staff also proved taxing, with very low response rates in second round data collections. This is understandable given the importance of prioritising their caseload. In future, it is essential to plan data collection to be as simple and as quick as possible, to improve response rates. It is also worth highlighting that the findings reflect the data collected between November 2015 and April 2016. Aspects of the pilot, such as the volunteer element, are not discussed in depth because participants did not mention them.

Despite these challenges limiting the confidence we have in our findings, they are not insurmountable. A randomised control trial can be a highly accurate method for measuring the efficacy of an innovation and, when combined with qualitative methods, can lead evaluators to be able to isolate both if and why an innovative model may or may not have a positive impact. It is hoped that future projects, which deal with a high number of cases, will build on the lessons learned in this study and adopt this method to measure their impact.

Implications and recommendations

The results from this evaluation indicate promising signs of impact. Lessons have been learnt from this evaluation that can have wider effects on the social care sector. These implications and recommendations broadly divided between those for social care structures and those commissioning evaluations.

Implications for policy

- Non-qualified social work practitioners can generate positive outcomes for CIN cases

- Working to resolve parent and carer issues, especially around their self-confidence and practical ability to parent, is fundamental to generating positive outcomes for CIN
- Finding new ways of working with families with a history of social care, such as the solutions-focussed approach, may improve case outcomes
- Diverting some low risk CIN caseload from SWs allows them to focus on their more complex child protection cases
- Innovative models of social care are difficult to integrate within pre-existing social services. Good communication and collaboration between senior leaders and frontline staff on both sides is essential
- Better data need to be made available to improve monitoring in this sector, linking CIN status with other longer term outcomes such as employment and health

Implications for evaluation and research

- Randomised Controlled Trials can be implemented effectively in social care evaluations and should be prioritised in future commissioning decisions
- Creating a counterfactual through randomisation is possible to successfully implement in children's social care and can help us understand the impact of the intervention
- These results show promising indications of impact. The data for this analysis was collected at the nascent stage of the research, and it is recommended that Cheshire East and Catch22 continue to monitor the longer-term outcomes, especially and longer around re-referrals, of the 'control' and 'treatment' groups
- It is recommended that future evaluators are enabled to capture outcome data in the years following an intervention. These metrics which will allow more accurate evidence around the longer-term impact on CIN outcomes

Conclusion

Children who face adversity, and need support from social services, are far less likely to achieve good outcomes in education and later life. Reducing the number of families who need this support has longer term benefits for the social, economic and health outcomes of their children. This evaluation finds that the Project Crewe approach has promising indications of efficacy in closing cases, particularly for families with a history of social care support. We suggest that this may be due to their frontline staff increasing the protective factors around the families, with those protective factors previously being found to correlate with a reduction in likelihood of future harm. However, these findings are neither conclusive nor statistically significant and must be treated with cautious positivity.

This evaluation also posits that elements of the pilot appear particularly effective in supporting positive CIN outcomes: more frequent support built trusting relationships and the use of the solutions-focussed approach helped to engage families to take ownership of their issues by asking them to outline what they need to change, as opposed to instructing them to make those changes. Providing families with a fresh start to succeed, as well as feedback tools to monitor their progress, were motivational for both families and frontline staff.

The operational structure of the intervention developed a culture of collaboration and support across the frontline staff, which ensured that families felt supported, even if their case lead was unavailable. Project Crewe represents a cultural shift for Cheshire East, and embedding the model is understandably taking time. Collaboration isn't achieved in a one-off event, but by continually striving to work together. Continued efforts must be made to ensure staff on both programmes feel they are working in partnership; so that Project Crewe works as well with Cheshire East staff as it does internally.

Beyond the direct impact upon young people and social care services, this report shows that randomised control trials can be successful within this sphere. Despite successfully implementing the trial, a lower than expected sample size prevented us from finding any statistically significant results. This gold standard of evaluation, especially when combined with qualitative methods, can tell us whether an intervention has worked and the likely components of the intervention most essential to its impact. Lessons have been learnt through this first RCT that can be drawn on for future studies. Randomisation can feel challenging and unethical to those new to the process and it is important to communicate the purpose and value of creating a counterfactual. It will be society's most vulnerable young people who will benefit, in the longer term, from an increasingly secure evidence base in the children's social care sector.

References

Association of Directors of Children's Services, [Caseload Management Survey Report](#), March 2016. (accessed 05/12/16)

Antle, B. F., Barbee, A. P., Christensen, D. N., & Sullivan, D. J. (2009). The prevention of child maltreatment recidivism through the solution-based casework model of child welfare practice. *Children and Youth Services Review*, 31(12), 1346-1351.

Avey, J.B., Luthans. F., & Jensen, S.M., (2009). Psychological Capital: A Positive Resource for Combating Employee Stress and Turnover. *Human Resource Management*, 48(5): 677–693.

Barber, J. G. (1986). The promise and the pitfalls of learned helplessness theory for social work practice. *British Journal of Social Work*, 16(5), 557-570.

Barlow, Jane, Joanne D. Fisher, & Jones. D., (2012) Systematic review of models of analysing significant harm. *Department for Education*.

Blades, R., Day, L., & Erskine, C. (2016). National Evaluation of the Troubled Families Programme: Families' experiences and outcomes. *Department for Communities and Local Government*.

Bond, C., Woods, K., Humphrey, N., Symes, W., & Green, L. (2013). Practitioner review: The effectiveness of solution focused brief therapy with children and families: A systematic and critical evaluation of the literature from 1990–2010. *Journal of Child Psychology and Psychiatry*, 54(7), 707-723.

Brown, R., & Ward, H. (2012). Decision-Making Within a Child's Timeframe: An overview of current research evidence for family justice professionals concerning child development and the impact of maltreatment. *Department for Education, Working Paper 16*.

British Association of Social Workers, (2013). [All Party Parliamentary Group on Social Work](#), (accessed 20/09/16)

Bunn, A. (2013). [Signs of Safety in England: An NSPCC commissioned report on the Signs of Safety model in child protection](#). (accessed 21/10/2016)

Calder, M. C., McKinnon, M., & Sneddon, R. (2012). [National risk framework to support the assessment of children and young people](#). *The Scottish Government*.

Catch22, (2014). [Impact Report 2013/14](#) (accessed 28/01/17)

- Craig, P., Dieppe, P., Macintyre, S., Michie, S., Nazareth, I., & Petticrew, M. (2008). Developing and evaluating complex interventions: the new Medical Research Council guidance. *British Medical Journal*, 337.
- Creswell, J. W. (2013). *Research design: Qualitative, quantitative, and mixed methods approaches*. Sage publications.
- Corcoran, J., & Pillai, V. (2009). A review of the research on solution-focused therapy. *British Journal of Social Work*, 39(2), 234-242.
- Dai, H., Milkman, K. L., & Riis, J. (2014). The fresh start effect: Temporal landmarks motivate aspirational behavior. *Management Science*, 60(10), 2563-2582.
- Davidson, M. R. (2004). A phenomenological evaluation: using storytelling as a primary teaching method. *Nurse Education in practice*, 4(3), 184-189.
- Department for Education, (February, 2015), [The link between absence and attainment at KS2 and KS4](#) .(accessed 08/11/16)
- Department of Education, (November 2016). [Characteristics of children in need: 2015 to 2016](#) .(accessed 08/11/16)
- Godin, I., France K. (2004). Differential Economic Stability and Psychosocial Stress at Work: Associations with Psychosomatic Complaints and Absenteeism. *Social Science and Medicine*, 58(8): 1543–1553.
- Farmer, D. (2011) Increasing Job Satisfaction among Social workers. *International Journal of Humanities and Social Science*, 1 (18).
- Hayes, C., & Davies, M. S. (2014). A phenomenological evaluation of a hybrid model of problem based learning for multidisciplinary healthcare practitioners. *Journal of Learning Development in Higher Education*, 667(7), 2014.
- Hayward, H., Hunt, E., Lord, A., Vernoit, J., North, C., & Donnelly, E. (2014). [The economic value of key intermediate qualifications: estimating the returns and lifetime productivity gains to GCSEs, A levels and apprenticeships](#). Department for Education. (accessed 09/11/16)
- Hindley, N., Ramchandani, P. G., & Jones, D. P. (2006). Risk factors for recurrence of maltreatment: a systematic review. *Archives of disease in childhood*, 91(9), 744-752.
- Hysong, S. J. (2009). Meta-analysis: audit & feedback features impact effectiveness on care quality. *Medical care*, 47(3), 356.
- Kim, J. S. (2008). Examining the effectiveness of solution-focused brief therapy: A meta-analysis. *Research on Social Work Practice*, 18(2), 107-116.

Leiter, M. P., and Maslach, C., (2009). Nurse Turnover: The Mediating Role of Burnout. *Journal of Nursing Management*. 17 (3): 331–339.

Morse, A., & Arkell, T. (2016). [Children in need of help or protection](#). *National Audit Office*. (accessed 24/11/16)

Munro, E. (2011). [The Munro review of child protection: Final report-a child-centred approach](#) (Vol. 8062). *Department for Education*, (accessed 24/11/16)

NSPCC. (2014). [Annual Report](#). (accessed 25.09.16)

Pedrazza, M., Trifiletti, E., Berlanda, S., & Bernardo, G. A. D. (2013). Self-efficacy in social work: development and initial validation of the self-efficacy scale for social workers. *Social Sciences*, 2(3), 191-207.

Peacock, S., Konrad, S., Watson, E., Nickel, D., & Muhajarine, N. (2013). Effectiveness of home visiting programs on child outcomes: a systematic review. *BMC public health*, 13(1), 17.

Scheier, M. F., & Carver, C. S. (1988). A model of behavioural self-regulation: Translating intention into action. *Advances in experimental social psychology*, 21, 303-346.

Todnem By, R. (2005). Organisational change management: A critical review. *Journal of change management*, 5(4), 369-380.

Wilkins, D. (2013). Balancing risk and protective factors: How do social workers and social work managers analyse referrals that may indicate children are at risk of significant harm. *British Journal of Social Work*, 45 (1): 395-411.

White, O. G., Hindley, N., & Jones, D. P. (2015). Risk factors for child maltreatment recurrence: an updated systematic review. *Medicine, Science and the Law*, 55(4), 259-277.

Woods, K., & Green, L. (2011). [Systematic review of Solution Focused Brief Therapy \(SFBT\) with children and families](#). *Department for Education Research Report 179*.

Appendix 1: Qualitative sample information

Sample

There were 2 purposes to the interviews: understanding how the project was delivered (Q4) and understanding how it was experienced to unpick elements of efficacy (Q2). Forty-eight interviews were conducted in total and the sample therefore divides into the following 2 sub-groups. The majority were interviewed about the experience of Project Crewe (39), and a minority were interviewed specifically about the delivery of Project Crewe (9).

Project Crewe delivery

Nine interviews related to the intervention delivery. A detailed breakdown of the sample and the glossary of terms can be found in Appendix 2.

Experiencing Project Crewe

Thirty-nine interviews related to the 12 Children in Need (CIN) cases. For each case, we aimed to conduct 6 interviews per case, but often this was not possible. We only collected 5 completed interviews which included the child, the parent or carer and their frontline staff member in both autumn 2015 and spring 2016. A more detailed breakdown of which case studies are complete and which interviews took place can be found in Appendix 2.

The 12 CIN cases comprised:

- 7 Project Crewe cases, who received the intervention
- 5 Cheshire East cases, who were in the control and received the traditional mode of support

The table below shows the status of the cases in terms of the progression towards closure, at the time at which interviews took place.

Table 3: Sample overview by case outcome

Case Outcome	Project Crewe	Cheshire East	Total
Closed	2	3	5
Ongoing but improved	2	1	3
No change	1	0	1
Escalated to child protection or in the process of escalating	2	1	3

Sampling challenges

Unfortunately, due to the challenging nature of data collection with such vulnerable groups, only 5 of the case studies are complete: with 3 interviews in both November 2015 and in March 2016. Several cases are incomplete due to family illness, health problems, or staff moving on, or their situation escalating.

Across the evaluation, CEC staff were harder to engage, which is understandable as they had a larger caseload and more serious child protection cases. Due to a lower number of CEC cases, we conducted new interviews with 2 additional families in April to address the imbalance.

Appendix 2: Detailed sample outline

Table 4: Detailed CIN case study sample information

Scheme	Role	CIN Age	CIN case	November '15 Interview	April '16 Interview	Case Outcome	Interviews Total
CIN case Sample							
Project Crewe	Mother	>11	1	Y	Y	Closed	2
Project Crewe	Family Practitioner	>11	1	Y	Y	Closed	2
Project Crewe	Mother	>11	2	Y	Y	Closed	2
Project Crewe	Family Practitioner	>11	2	Y	Y	Closed	2
Project Crewe	Mother	<11	3	Y	Y	Ongoing but improved	2
Project Crewe	Family Practitioner	<11	3	Y	Y	Ongoing but improved	2
Project Crewe	CIN	<11	3	Y	N	Ongoing but improved	1
Project Crewe	<i>Withdrew from study before first data collection</i>		4				
Cheshire East	Mother	>11	5	Y	Y	Closed	2
Cheshire East	Social worker	>11	5	Y	Y	Closed	2
Cheshire East	CIN	<11	5	Y	N	Closed	1
Cheshire East	Mother	>4	6	Y	Y	Ongoing but improved	2

Scheme	Role	CIN Age	CIN case	November '15 Interview	April '16 Interview	Case Outcome	Interviews Total
Cheshire East	Social worker	>4	6	Y	Y	Ongoing but improved	2
Project Crewe	Mother	>11	7	Y	Y	Escalated to CP	2
Project Crewe	Family Practitioner		7	Y	N	Escalated to CP	1
Project Crewe	Mother	>11	8	Y	N	Ongoing but improved	1
Project Crewe	Family Practitioner	>11	8	Y	Y	Ongoing but improved	2
Project Crewe	Grandmother	<11	9	Y	Y	No change	2
Project Crewe	Family Practitioner	<11	9	Y	Y	No change	2
Project Crewe	CIN	<11	9	Y	N	No change	1
Project Crewe	Mother	>11	10	Y	Y	Escalated to CP	1
Project Crewe	Family Practitioner	>11	10	Y	Y	Escalated to CP	2
Cheshire East	Social worker	<11	11	Y	N	Escalated to CP	1
Cheshire East	Mother	<11	11	N	N	Escalated to CP	0
Cheshire East	Social worker	>11	12	N	Y	Closed	1
Cheshire East	Social worker	>11	13	N	Y	Closed	1

Table 5: Detailed sample: non-CIN case study

Non-CIN case sample				
Programme	Role	Pseudonym	April 2016 Interview	Interviews Total
Project Crewe	Senior Leader	SLT PC 1	Y	1
Cheshire East	Senior Leader A	SLT CEC 1	Y	1
Cheshire East	Senior Leader B	SLT CEC 2	Y	1
Project Crewe	Family Practitioner	FP 11	Y	1
Project Crewe	Family Practitioner	FP 12	Y	1
Project Crewe	Family Practitioner	FP 13	Y	1
Project Crewe	Family Practitioner	FP 14	Y	1
Project Crewe	Family Practitioner	FP 15	Y	1
Project Crewe	Family Practitioner	FP 16	Y	1
Total Participants: 33			Total Interviews: 48	

Appendix 3: Risk analysis framework

Risk Factors	Parent (main care giver)	CIN (>11)	Family	Social Setting
-1 point for each factor	Previous dealings with social care	Risk taking behaviours	Parental conflict	Violent or dangerous neighbourhood
-2 points for factors in bold	Mental health problems	Expelled/Excluded	Family stress	Lack of social support
	Substance abuse	Low attendance	Isolated parent / Lack of familial support	
	Attachment issues with children	Aggressive behaviour	Power issues (controlling, manipulative, subservient)	
	Own needs before child's		Substance abuse	
	Victim of Domestic abuse		Young children (<3)	
	Personality disorder			
Protective Factors				
1 point each factor	In employment	Positive family relationships	Supportive partner	
2 points factor in bold	Empathy for child	Currently low levels of risk taking behaviour	Supportive Family Network	
	Overcome own adversity	Engagement at school		
	Lack of denial			
	Responsible for issues			
Engagement with social care				

	2 Strong desire for change - collaborative	Strong desire for change - collaborative		
	1 Compliant (attends all meetings, takes on advice)	Compliant		
	-1 Tokenistic (Minimal level of engagement when pushed)	Tokenistic		
	-2 Dissent/Avoidance/Denial - Actively lies about involvement or denies need for change	Dissent/Avoidance/Denial		

Appendix 4: Qualitative evaluation methodology

This evaluation was conducted adhering to guidelines published by the British Medical Council (Craig, et al, 2008). Methodologically, a phenomenological approach - exploring individual experience through phenomena - was adopted to explore Project Crewe through the participants' subjective in-situ experience. This approach complemented the data generated through the RCT, as its aim was to provide rich description to inform how the intervention did, or did not, work.

The complex, multi-faceted process of experiencing a new type of social care is best understood through studying individual cases and then comparing these thematically. Through exploring individuals' experiences and then triangulating the data during analysis, nuanced and rich themes emerged which led us to identify which factors within the intervention appeared to be more successful. It is an approach that researchers have used in the social work, healthcare and youth work fields (Davidson, 2004; Davies, 2014)

The interviews were transcribed and coded, and then further categorised using the thematic approach as outlined by Strasse and Corbin (1990). Coding was conducted by the principal researcher and verified by a research assistant, to ensure validity of interpretation and meaning.

Appendix 5: Consent forms

Qualitative Consent form (for children aged 15 or below)

Dear parent/carer,

We are a research team from Behavioural Insights Team (BIT) based in London and we are working with Project Crewe and Cheshire East Council to evaluate the social care services they are providing. **We would like your child to sit in on a face to face 1-hour long interview with a qualified researcher who has full DBS clearance. This is for children aged 11-15. If your child is younger than 11, we would ask you to sit in the same interview with your child.**

Before you make a decision it is important for you to know why the research is being done and what it will involve. **If you are happy for your child to take part, please sign the consent form below if your child is aged 15 or below and return to your social worker or family support worker.** If you **do not** want you or your child to take part, you will not need to do anything. **Please speak to the family case worker and agree on a few dates when the interview could take place.**

What happens if my child takes part?

They will receive social care support as they normally would.

If your child is aged 11-15, he or she will participate in a 1-hour long interview with a qualified researcher who will collect feedback on the service received, their personal behaviours and their relationship with their social worker or family practitioner and.

If your child is younger than 11, we would ask you to sit on the interview above to answer most of the questions for him or her.

You authorise us to share your child's interview information with researchers from the Behavioural Insights Team. If you like, you can be provided with a record of any data that is shared.

You may be asked to participate in a follow up interview in early 2016.

The questions in the interviews have been reviewed by your social care providers and deemed suitable.

If at any point of the interview your child may wish to withdraw, you may do so.

You will not be paid for participating.

If your child participates, how will your child’s privacy be protected? What happens to this data?

All information that is collected about your child during the course of the research will be kept strictly confidential. All data will be kept securely in a locked office at all times and access will be restricted to study investigators and statisticians. Any information that is stored electronically will be kept securely on Behavioural Insights Team computers.

Your child’s contact details will ONLY be used for the purposes of this project.

Your child and their social worker or family practitioner will not be identifiable in any resulting research.

Your child’s responses will not be shared with their social workers or family practitioners, nor with the organisations providing their social care services.

If I have any questions or concerns about this project, whom can I talk to?

If you have questions or concerns, you can speak to either XXX at Project Crewe (XXX@cheshireeast.gov.uk) or e-mail XXX XXX@behaviouralinsights.co.uk at the Behavioural Insights Team.

What if I change my mind?

You can change your mind about any part of your child’s participation at any time you like. You do not have to give a reason why. Your decision to take part will in no way impact on your relationship with your child’s social worker , now or in the future. If you wish to withdraw at any time, please email XXX (XXX@cheshireeast.gov.uk).

Child’s name: _____

Date: _____

Signature: _____

Parent Name: _____

Consent form for Quantitative Evaluation

Project Crewe:

Consent form to access school grades and absenteeism.

What is the purpose of this project?

Project Crewe and Cheshire East Council are working with the Behavioural Insights Team to evaluate the impacts of their models of social care on the children in need (CIN).

What happens if I take part in this project?

You will receive the same support that you would if you decided not to participate.

You authorise the Department for Education to share absenteeism and attainment data with researchers from the Behavioural Insights Team. This data shows how many days your child was absent from school and what was the final grade if she/he sat any state exams during the school year 2015/16.

If I participate, how will my privacy be protected? What happens to our data?

You or your child will not be identifiable in any research. The data will be confidential and only used for this project. It will not be shared with social services or any other organisation except for the research team.

We will destroy the data 12 months after the research is complete

If I have any questions or concerns about this project, whom can I talk to?

If you have questions or concerns, you can speak to either XXX at Project Crewe (XXX@cheshireeast.gov.uk) or e-mail XXX (XXX@behaviouralinsights.co.uk) at the Behavioural Insights Team.

This sounds good. How do I participate?

You don't have to do anything. If you are not happy to let the researchers access this information, then please sign this form and return it to your family practitioner or social worker.

Not participating or withdrawing from the study will not affect the social care support you are receiving, or have any other penalty

Parent's Name: _____

Date: _____

Appendix 6: Quantitative evaluation methodology

Sample selection

Participant Pool

The evaluation focused on social care practitioners from Project Crewe and CE, and CIN within Crewe. Children within the CIN population proceeding into care, identified by CE, were eligible for the intervention at any given time. The criteria cases within CIN population have been set in collaboration with CE. These criteria were set to ensure a large enough population to maximise use of Project Crewe’s resources. The categories of need (see appendix 2) in the sample, compared to the national data, can be seen in figure 10 below.

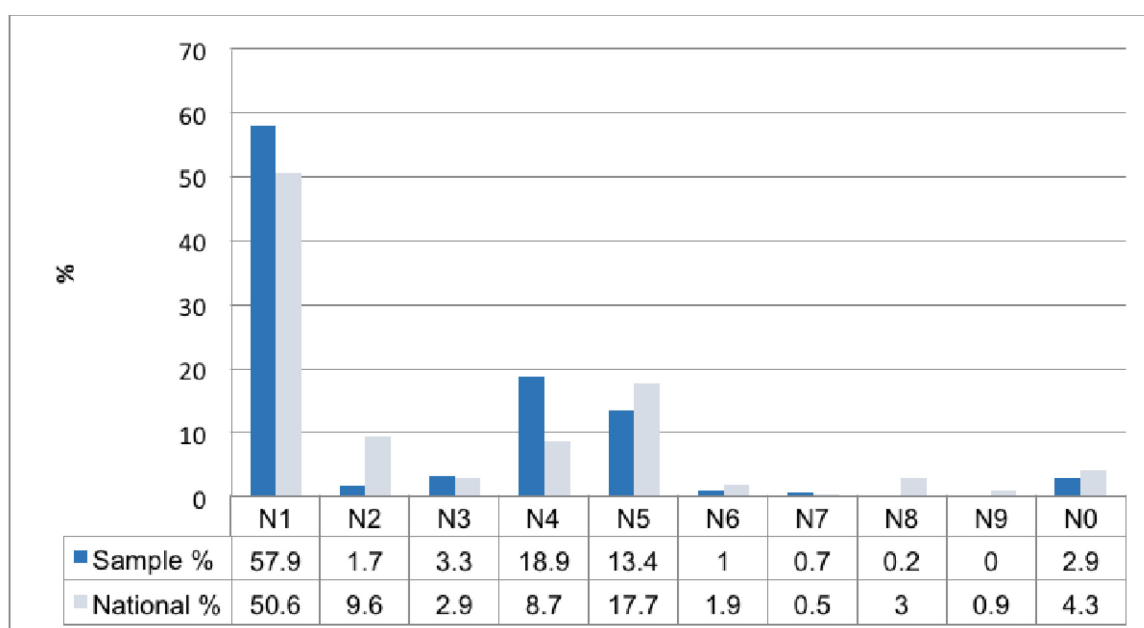
Sample size

The sample size was determined by the duration of the evaluation and Project Crewe’s capacity.

Over the duration of the trial we estimated that a total sample size was 132 cases.

During the period of the trial Cheshire East Council continued its business as usual practices, meaning that any eligible cases beyond Project Crewe’s capacity were referred to the Council’s services. These overflow cases were not counted as part of the RCT control group.

Figure 13: comparison of the sample CIN categories of need to the national data



Randomisation

The clustered RCT at the centre of the evaluation made use of family-level randomisation. This means that eligible families in Crewe were randomly assigned to either receive the Project Crewe intervention, or to receive social care from the existing statutory team as usual, subject to approval from CEC staff. All children within a family were assigned to the same trial arm.

Power calculations

Historical data on the baseline duration of CIN cases was not readily available. Instead, re-referral rates were used to and carry out power calculations for this outcome measure. Based on the estimates for the expected sample size, and Cheshire East's historical data on re-referral rates, we carried out some power calculations to inform what would be the minimum effect size we would be able to detect with respect to this outcome measure.

Historically, the re-referral rates were about 22.6 per cent, lower than the average of 27.3 per cent for the North East of England and of 23.4 per cent for England. In the absence of better data on the distribution of re-referral rates across the CIN population in Crewe, we rely on some assumptions. We assume the average number of children per family is 3, based the sample of the first 25 cases.

We consider a range of intra-cluster (within family) correlation coefficients (ICC), which is the extent to which, if one child is re-referred, the other children will be also. Based on existing literature (following Cheng and Kelly 2012), as a lower bound we assume an intra-sibling correlation coefficient of 0.36. The upper bound is 1, meaning that re-referral occurs effectively at the family level.

The test run was a 2-sided test for a binary outcome variable, with a significance level of 5 per cent and power of 80 per cent.

The most conservative minimum detectable effect size (MDES) is of 15.1 percentage points, equivalent to a 67 per cent difference from the baseline rate. With the lower ICC, the MDES is 11.2 percentage points, or 50 per cent.

As a sensitivity check, we repeated the power calculations with a lower baseline than the historical 22.6 per cent. Due to the introduction of the Project Crewe model, we expected that CE would experience lower re-referral rates, because of reduced pressure on their CEC services. For a 50 per cent reduction in the baseline, with the same sample size and duration of the trial we are able to detect a minimum effect of 9.1 percentage points (for the low ICC), or 12.4 percentage points (for the high ICC).

These are high MDES; however, we are collecting demographic data on the participants which we expect will explain part of the variance in the outcome variable, increasing our ability to detect effect sizes smaller than those calculated above.

Analysis strategy

The following section details the analysis strategy and specifications used for each part of the quantitative analysis. We used a variety of statistical approaches to assess differences between our treatment and control groups. These were tailored to the specific outcome we measured and number of observations we had in each dataset.

We analyse outcomes from 4 separate data sources. These are listed below:

- individual case data supplied by Cheshire East Council
- anonymised case notes which were subsequently coded by the Research Team at BIT (also supplied by Cheshire East Council)
- strengths & difficulties questionnaire conducted by either family practitioners or parents and sent to BIT
- National Pupil Database records of student attendance over the first 2 terms of 2015/16 school year

Case Data – percentage of cases closed

Variables

The individual case data supplied by Cheshire East Council provided information on the status of each case, including whether the case was closed or open, alongside the dates associated with the referral, closure and re-referrals. We have an indicator representing whether the case was allocated to PC or CEC. The dataset also provides information on the characteristics of the CIN i.e. gender, age, ethnicity, whether the family had a previous history of CIN involvement, and accommodation status.

Outcome

The primary outcome is whether a case is closed at the end of the study period. This is represented by a binary indicator, equalling one if closed and zero if open.

Linear regression & assumptions

The primary analysis is performed using an Ordinary Least Squares (OLS) model. We have assumed all cases are independent of each other. OLS estimates the Average Treatment Effect (ATE) across the whole sample. OLS also assumes a linear treatment effect which is uniform across all levels of our covariates (ie. treatment effect is the same whether CIN is young or old). Additionally, OLS assumes that the errors are homoscedastic and not serially correlated. In practice, this assumption may not hold, hence we use Huber-White Standard-Errors which are robust to any serial correlation or heteroscedasticity.

Specification

Our specification is presented below:

$$Y_i = \alpha + \beta_1 T_i + \beta_2 X_i + u_i$$

Y_i - binary indicator representing whether a case is closed at the end of the study period.

α - constant β_1

T_i – binary treatment indicator representing which programme a case was allocated to, equalling 1 if Project Crewe and 0 if CEC.

X_i - represents our Vector of control variables. These are a binary indicator representing the gender of CIN, categorical indicator representing the age of CIN in years, binary indicator of whether the CIN had a disability or not, and a binary indicator for whether the family had a previous history of CIN involvement.

u_i - error term assumed to be independent and identically distributed across cases.

One specification includes an interaction effect between the treatment indicator and our demographic variable representing whether the family had a previous history of CIN involvement. This specification is presented below:

$$Y_i = \alpha + \beta_1 T_i + \beta T_i D_i + \beta_2 X_i + u_i$$

All variables in the model are defined as above aside from $T_i D_i$. This variable represents a dummy indicator for individuals at each level of the dummy variable D_i who are allocated to the treatment condition. β represents a vector of coefficients corresponding to the associated interaction terms.

Re-weighted means

All specifications control for background characteristics of the participants to adjust for differences between the control and treatment groups. This raised the question of how to present the average levels of the outcome variables in the 2 groups. We opted for presenting the average predicted levels at the means of the control variables. This accounts for the fact that the composition of the control and treatment groups might be different in terms of these characteristics. In the graphical output, the error bars represent the 95% confidence interval around this re-weighted mean.

Robustness checks

As we are using an OLS approach, this assumes the treatment effect is additive. To check this assumption, we also run a logistic regression specification for each of our

models. We find no significant difference between the results and hence no deviation from our assumption.

Case Data – closing cases more quickly

When attempting to measure which programme closes cases more quickly, we must consider the fact that we only observe our outcome (number of days taken to close) if the case has been closed. This means that our outcome is conditional on another event.

To account for this, we opt for using a statistical method known as survival analysis. This is used for analysing the expected duration of an event: in this context the event being the case closing. We use a model known as the Cox Proportional Hazards model, which is in the classes of Maximum Likelihood Estimators (MLE). This estimates a hazard function, which essentially reports a probability of an event happening at a time, T , given a set of covariates X .

It relies on a few assumptions. Firstly, that there is no non-informative censoring present. This means that a case will receive either the treatment or control program, regardless of the status of the CIN. The second crucial assumption is that of proportional hazards. This means the survival curves for 2 cases at levels of each covariate will be proportional over time.

Formally, the specification is presented below:

$$H_i(t) = \lambda_0(t) \exp(\beta_1 T(t)_i + \beta_2 X_i)$$

$\lambda_0(t)$ - represents the baseline hazard for a case allocated to the CEC programme

$T_i(t)$ - indicates the treatment status, set to 1 if the case i has been allocated to PC, and 0 if CEC. This is 0 for all cases at time t .

X_i – is a binary indicator representing whether a family has a previous history of CIN involvement.

B_1 - represents the percentage change in the likelihood of a case closing at time T , as a result of being allocated to PC.

Strengths & difficulties questionnaire

The Strengths and Difficulties Questionnaire (SDQ) is a behavioural questionnaire designed for 3-16 year olds. This was conducted either by the family practitioner or a parent. It is a self-reported measure of 25 items which are divided between 5 scales measuring behaviours of the following categories emotional symptoms: conduct problems, activity/inattention, peer relationship problems, prosocial behaviour. The questions are moderated slightly if the questionnaire is being administered to 2-4-year-

old children. A score of total difficulties is constructed as a composite measure of all 5 of the individual measures excluding prosocial behaviour.

As stated in the report, the scores on the SDQ are difficult to interpret linearly, as the scores do not follow an even pattern. Additionally, we have very few observations, and, considering the distribution of our data is non-normal, parametric statistical tests would be inappropriate as they requires an assumption of normal distributions. Thus, we opt for using a Mann-Whitney U test which is the non-parametric test for comparing ordinal outcomes to examine whether there are any significant differences between SDQ scores for children in the PC programme relative to the CEC programme

The Mann-Whitney U test is a non-parametric test of a null hypothesis that it is equally likely that a randomly selected value from one group will be less than, or greater than, a randomly selected value from the other group. In this context, our 2 groups being the cases allocated to PC, and the cases allocated to CEC. Hence its interpretation will be of a probability that the equivalent rank (i.e. when ranking ordinally the 14th value) in one group is greater than, or less than the equivalent rank in the other group.

National Pupil Database – student attendance

The National Pupil Database (NPD) is a pupil-level database which matches pupil and school characteristics to pupil-level attainment and attendance for all students across the UK. We have matched students in our case data to this database to assess whether students receiving PC support have significantly different attendance rates at school than those receiving CEC support. First, we perform the analysis on our whole sample. We then split our sample into primary and secondary school groups under the assumption that secondary school students have greater autonomy in their decision of whether to attend school, and perform the same analysis.

Variables

Our merged dataset consists of a measure of student attendance across the autumn and spring terms of the 2015/16 academic year; an indicator of whether the student was allocated to PC or CEC, and whether the student's family had a previous history of involvement with CIN.

Outcome

Our primary outcome measure is a continuous variable representing the number of absent days a student had over the autumn and spring terms of the 2015/16 academic year.

Linear regression and assumptions

The primary analysis is performed using an Ordinary Least Squares (OLS) model. Please refer to the Linear Model & Assumptions section in part I for further information about OLS regression assumptions.

Specification

We perform all analyses using 3 separate models. Formally, the basic model is defined below:

$$Y_i = \alpha + \beta_1 T_i + u_i$$

Y_i - Continuous variable representing the number of absent days a student had over the autumn and spring terms of the 2015/16 academic year.

α - Constant

T_i - Binary treatment indicator representing which programme a case was allocated to, equalling 1 if Project Crewe and 0 if CEC.

u_i - Error term assumed to be independent and identically distributed across cases.

The second model is identical to the basic model: however, we now include a control variable D_i defined below:

$$Y_i = \alpha + \beta_1 T_i + \beta_2 D_i + u_i$$

D_i - A dummy indicator representing whether the student's family has a previous history of CIN involvement

Our final model is augmented to include an effect between the treatment indicator and our demographic variable representing whether the family had a previous history of CIN involvement. It is formally presented below:

$$Y_i = \alpha + \beta_1 T_i + \beta T_i D_i + u_i$$

$T_i D_i$ - This variable represents a dummy indicator for individuals at each level of the dummy variable D_i (no previous CIN involvement, or previous CIN involvement) who are allocated to the treatment condition.

β - represents a vector of coefficients corresponding to the associated interaction terms.

Adjustments for splitting sample

All specifications remain the same for our separate analysis of the primary and secondary school groups. However, one important thing to note is that an OLS approach

no longer estimates the ATE across the whole sample. Instead, as we have restricted our sample, we are now estimating the average treatment effect for this sub-group only.

Re-weighted means

All specifications control for the background characteristics of the participants to adjust for differences between the control and treatment groups. This raised the question of how to present the average levels of the outcome variables in the 2 groups. We opt for presenting the average predicted levels as the means of the control variables. This accounts for the fact that the composition of the control and treatment groups might be different in terms of these characteristics. In the graphical output, the error bars represent the 95% confidence interval around this re-weighted mean.

Robustness checks

We are assuming the effects of the treatment to be additive. To check this assumption, we transform the data using the logarithmic function and re-run our specifications. This transformation allows us to estimate relative changes (multiplicative) as opposed to additive. After doing so, we observe no difference in results and hence no deviation from our assumption.

Risk analysis

A qualitative risk analysis was conducted to understand, from the case notes, whether, and to what extent, risk changed over time in both the control and treatment group. To do this, a framework was developed by the evaluation team, based on systematic reviews and meta-analyses of factors which correlate with increased or reduced likelihood of harm re-occurring in children (Wilkins, 2015; Barlow et al, 2012; White et al, 2015; Hindley et al, 2006). The matrix can be found in the Appendix 3.

Each case has been codified based on this framework, against 3 categories of scores: risk factors (low school attendance; history of social services), protective factors (supportive family, engaged in school) and engagement factors (denies issues; strongly engages with social care). Each protective factor was marked positively, whilst risk factors were coded negatively. Engagement was rated on a sliding scale between -2 (dissents, lies or avoids) to +2 (strong engagement with social care). This generates 2 overall scores which show the mean difference, and change in mean total risk score between the 2 points: time of referral and latest case information.

As the sample size is too small to use parametric statistical methods (which usually require more than 30 for the data to approximate the normal distribution under central limit theorem), hence, we have used a comparison of the change in mean scores between groups, from the point of referral to the latest information available, but have not attempted to test for statistical significance

Appendix 7: Solutions-focused brief therapy

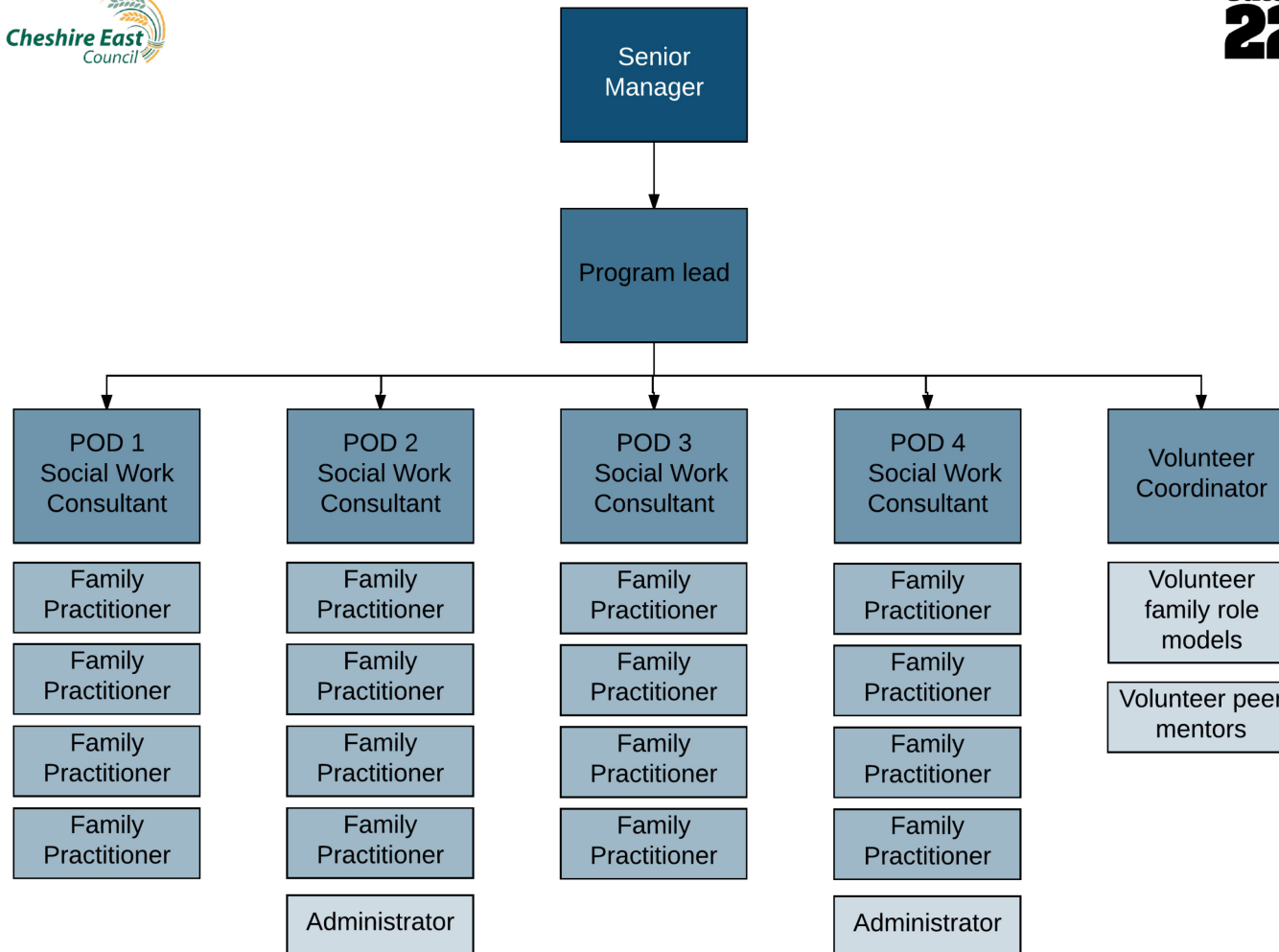
SFBT is a therapeutic technique that emphasises the positive assets possessed by the client, and focuses on optimising these to achieve improvement. Though considerable variation exists in SFBT practice (Kim, 2007), Project Crewe's model includes the following elements:

- use of the “miracle question”
- use of scaling questions
- assignment of homework tasks
- looking for strengths and what is working well
- goal setting/what's better
- looking for exceptions to the problem
- future talk

SFBT has been used in a range of contexts including child behaviour problems, criminal reoffending, marital problems, family conflict, and care-giving for elders and schizophrenic patients (Corcoran & Pillai, 2009). Where robust studies exist, meta-analysis of SFBT across contexts points to positive but statistically insignificant effects, except for a significant effect in improving internalising behaviours (i.e. shyness, anxiety, depression, self-esteem) in children (Kim, 2007).

With respect to SFBT's application in child protection, the evidence base is positive but slim, and suffers from a reliance on practitioner outcome measures (i.e. self-reporting on perceived effectiveness), small samples, and authorship by potentially biased researchers (i.e. SFBT advocates and practitioners) (Bunn, 2013). Antle et al. (2009), one of the few large-scale evaluations of SFBT as applied to child protection, found that cases where the SFBT framework was used experienced significantly fewer recidivism referrals, relative to those that did not use the framework. However, this study suffers from several methodological weaknesses which inhibit the extent to which inferences of SFBT's success can be drawn. A 2011 systematic review commissioned by the UK Government concluded that the use of SFBT in childhood protection is not tried and tested and requires significant further research (Woods et al, 2011)

Appendix 8: Project Crewe staffing model



Appendix 9: Cost benefit analysis

Overall costs

It is important to consider this CBA as illustrative and an example of a method that could be improved by better data. The data used to draw these estimates is insufficient to support any robust conclusions.

In Table 6, this estimated average cost per case is outlined: PC on average cost £2,450, whilst CEC is estimated at £1,795 per case. This is the average time a case is opened multiplied by the weekly staff costs. This data is reflective of our sample and should not be generalised.

Table 6: Illustrative average cost per case

	Weekly Cost	Cost per case (mean average)
Project Crewe	£68.05	£2,450
Cheshire East Council	£55.13	£1,795

Benefits

We divide the benefits into 2 sections, firstly to the individual and then to the local authority. The individual data compares the difference between being a CIN and not being a CIN at the time of taking GCSE exams and consider the benefit of attaining 5 good GCSEs.

Individual benefits

We consider the potential longer-term benefits of closing a CIN case - specifically the difference in longer term outcomes for those assessed at CIN - compared to their peers not receiving social care. To do this, we use available data on academic attainment to compare CIN cases to the average young person in the UK. Despite very little concrete data on CIN outcomes, a recent report outlined the stark difference in GCSE attainment between CIN and the mean (average) of their peers (Morse and Arkell, 2016). Although there are likely to be additional, unobserved, variables influencing this result, only 15 per cent of CIN achieve 5 A*-C's including Maths and English, in comparison to the UK average of 54 per cent (Morse and Arkell, 2016:8). A recent study by the DfE examined the effect of GCSE attainment on lifetime earnings. It estimated the difference between achieving and not achieving these 5 GCSEs to be £80,000 in net present value terms (Hayward, Hunt & Lord, 2014). However, this figure must be taken with caution as the analysis upon which it is based is not statistically significant and therefore cannot be generalised.

This estimate of lifetime earnings is then combined with the primary analysis conducted of the percentage of cases closed by each program (64% for CEC, and 72% for Project Crewe). Through this, we estimate the additional added value of each program on average lifetime earnings per case, and secondly lifetime tax revenue payments per case. These are also presented in Table 7. We see the estimated lifetime earnings per case for Project Crewe (with a higher likelihood of closing a case), is £2,500 greater than for CEC, as our estimates predict it may resolve more CIN cases. Assuming all additional lifetime income predicted by achieving 5 A*- C's will be taxed at the rate of 20% and 12% NI, we calculate the impact on lifetime tax repayments, which again is higher for Project Crewe. From the rate of 'good' GCSE attainment, we can also estimate the likelihood of employment as on average they are 14 per cent more likely to be employed. Table 7 shows the estimated effect of each program on the probability of future employment. The percentage shows the percentage increase of their likelihood of being employed, compared to each program. All figures estimated below must be considered illustrative.

Table 7: Illustrative individual benefits of Project Crewe and Cheshire East to the CIN

Intervention	Estimated lifetime earnings per case	Estimated lifetime tax revenue per case	Estimated likelihood of employment per case (% point)	Details
Project Crewe	£34,464	£11,028	6.16 per cent more likely to be employed	Including management
Cheshire East Council	£31,968	£10,230	5.71 per cent more likely to be employed	CIN/CP Team, excluding management

Local authority benefits

Using our limited data on re-referrals and escalations, Table 8 and Table 9 highlight the potential estimated savings to the Local Authority. Firstly, we compare the re-referral rates between Project Crewe and CEC in the trial. The re-referral rate is 6.7 per cent for CEC and 6 per cent for PC – a 0.7% difference. It must be emphasised that this number is based on very few observations as only 8 cases in our dataset were re-referred. Taking this difference into account, we ascertain how much each programme costs in total and arrive at £3,800 – the cost saving of using CEC as opposed to PC. We then estimate this on a saving per case. So, despite PC closing more cases, the extra length of time they are open for means they are more expensive. All figures estimated below must be considered illustrative as it is based on insufficient data and we are unable to draw firm conclusions.

Table 8: Illustrative analysis of cost of re-referral per case

Intervention	Average re-referral rate	Comparative savings on total re-referral costs in our sample	Estimated saving per CIN case
Project Crewe	6%	/	/
Cheshire East Council	6.7%	£3,800	£29.68

Table 9 assesses the cost savings of reducing case escalation from CIN to Child Protection (CP). Data provided from Catch22 indicates that an average CIN case costs £1,686 whilst a Child Protection case costs £2,464, a difference of £778. Due to a lack of data, we only have escalation information for Project Crewe, where 2 cases from the PC sample have been escalated to Child Protection. To compare this benefit, we compare our PC sample to national average data, which estimates 12% of CIN cases are escalated to CP (DfE, 2016). This reduction in escalation equates, on average, to a £78 saving per case. We estimate this benefit across the Project Crewe sample (the saving of reducing the escalations from 12.5% to 2.5%) and then estimate this figure as a saving per case. All figures estimated below must be considered illustrative as they are based on insufficient data for us to draw firm conclusions.

Table 9: Benefit of reducing escalations to child protection

	Average rate of CIN – CP escalation	Estimated saving in the Project Crewe sample	Estimated saving per cases
National Average	12.5%	/	/
Project Crewe Sample	2.5%	£6,224	£74.98

It must be noted that these estimates are subject to strong assumptions and measurement error and so must be treated with caution. The data used to draw these estimates is insufficient to support any firm conclusions. Firstly, we assume all cases that are closed in our primary analysis remain closed and are not re-referred and assessed as CIN, because we cannot consider re-referrals as we have too few cases to analyse. Secondly, we assume that the difference in closing rates between schemes is constant over time, and that may not hold in practice. The difference we estimate may simply be a result of the point we chose to end the trial, and may vary over time considerably. Thirdly, we used best-estimates of the impact on CIN attainment, and hence future lifetime earnings, as a result of resolving the issues which led to the CIN assessment. However,

this is likely to vary substantially from case to case. The data on which the re-referral and escalation assumptions are based is very weak and relies on very limited numbers of observations.

Finally, it is important to consider the other potential private or social benefits that may result from resolving the issues which led to the CIN status. These insufficiencies in data could contribute to an underestimation or an overestimation to the benefit of each program as we have no means to measure or calculate the value of these outcomes

Appendix 10: Evaluation outcomes and measurements

Table 10: Evaluation outcomes and measurements

Evaluation Question	Sub Question	Measurement
Improves outcomes for CIN when compared to the control group	Improves social care outcomes for the CIN compared to the control group	Case closure data Re-referral data
	Reduces risk factors in the CIN cases compared to the control group	Analysis of protective factors, risk factors and parents and child engagement scores in 30 anonymised cases at referral and at the latest data point
	Improves academic, attendance and behavioural outcomes for the CIN compared to the control group	National Pupil Data (NPD) attendance data from 09/15 - 04/16 NPD data attainment data from 09/15 - 07/16 Behavioural Questionnaire (SDQ) with a sub-sample of CIN
How the intervention appears to be effective and make a difference to CIN case outcomes	Self-reported experience of receiving and delivering support for CIN families	Qualitative Interviews with families in the control and intervention groups Qualitative interviews with frontline staff in the control and intervention groups Administrative data
How the intervention is delivered and its effect upon staff	Effectiveness of delivery and successes of, and barriers to, implementation	Qualitative Interviews with frontline staff and senior leaders of CEC and PC Staff Stress Survey Administrative Data
The intervention's operational costs in comparison to the control	Costs associated with running the intervention	A cost-based analysis of Project Crewe compared to the BAU model of social worker support

Appendix 11 : Glossary of acronyms

PC - Project Crewe – the pilot initiative evaluated in this document

C22 – Catch22 - the organisation that delivers Project Crewe

CEC - Cheshire East Council

CIN - Child In Need - defined under the Children Act 1989 as a child who is unlikely to reach, or maintain, a satisfactory level of health or development, or their health or development will be significantly impaired, without the provision of services, or the child is disabled.

CP - Child Protection - A child will be made the subject of a child protection plan, if they have been assessed as being at identified risk of harm. The CP Plan is the outcome of a child protection case conference and is the vehicle through which the risk will be reduced. Whilst Children's Social Care has lead responsibility for ensuring the CP Plan is in place, agencies named on the plan have an active role in ensuring that the plan is implemented.

FP - Family Practitioner - They are multi-disciplinary workers, without social work qualifications, who lead around 11 'cases' categorised as Child In Need. They work with the family to identify strengths and what already works well, and then agree what needs to change, and make plans to achieve this, and identify any risks and concerns. The family practitioner performs both administrative and frontline support; completes Child in Need plans and updates Liquid Logic - the software that records case data. They are organised into a pod system and managed by a Social Work Consultant.

Pod - The management structure at Project Crewe: one SWC leads a pod of several Family Practitioners

RCT - Randomised Controlled Trial

SW - Social worker - works for Cheshire East Council

SWC - Social Work Consultant - team leader at Project Crewe and social work qualified manager who manages, coaches and supervises a pod of 4 Family Practitioners and has overall case responsibility and accountability. They undertake CIN visits and chair CIN reviews within agreed statutory timeframes and consult with CSC when there are risks and concerns which may lead to reallocation for reassessment.

SFA – Solutions-focused approach

Categories of need

N1 - Abuse or neglect

N2 - Child disability or illness

N3 - Parent disability or illness

N4 - Family in acute stress

N5 - Family dysfunction

N6 - Socially unacceptable behaviour

N7 - Low income

N8 - Absent parenting

N9 - Other than CIN

N0 - Not stated



Department
for Education

© Department for Education

Reference: DFE-RR580

ISBN: 978-1-78105-641-7

The views expressed in this report are the authors' and do not necessarily reflect those of the Department for Education.

Any enquiries regarding this publication should be sent to us at:

richard.white@education.gov.uk or www.education.gov.uk/contactus

This document is available for download at www.gov.uk/government/publications