Randomised Controlled Trial Evaluation of "Putting Kitbag to Work"

Intervention Developer	International Futures Forum (IFF)
Delivery Organisations	International Futures Forum, University of Sussex
Evaluator	What Works for Children's Social Care
Principal Investigator	Aoife O'Higgins
Protocol Author(s)	Michael Sanders, Vicky Clayton, Nick Fitzhenry
Type of Trial	Cluster Randomised Controlled Trial (2-arm; parallel design; multi-site)
Age or Status of Participants	Children and young people (aged 4-18 years old) on child in need plans, on child protection plans, or in care
Number of Participating Local Authorities	4
Number of Children and Families	c.9300 children aged 4-18 years old
Primary Outcome(s)	Children and young people: **emotional literacy** (as measured by the prosocial subscale of the Strengths and Difficulties Questionnaire)
Secondary Outcome(s)	Children and young people: ● level of social care involvement (please see Outcomes section for operationalisation of measurement) ● behaviour (as measured by the total difficulties score of the Strengths and Difficulties Questionnaire) Social worker outcomes: ● self-efficacy (as measured by the competency subscale of the Work-Related Basic Needs Satisfaction scale) ● stress (as measured by the 8-item "Stress in General" scale) ● number of sick days Foster carer outcomes: ● self-efficacy (as measured by an adapted parental self-efficacy subscale of the "Me as a parent" scale)
Contextual Factors	Caseload (quantity and complexity)

Version	Version 1.1 This protocol has been updated to reflect the dropping of the primary data collection from the impact evaluation. The primary data collection has been dropped due to low numbers of consents to contact the child / young person collected. The implication of dropping the primary data collection is restricting the outcomes to those that can be collected via administrative data or online surveys.

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Background and Problem Statement

Kitbag is a resource that was developed by the International Futures Forum (IFF), a Scottish charity, "with a mission to enable people and organisations to flourish in powerful times"[1]. It was designed to help people develop their inner capacity for calm, resilience and communication for individuals, families, groups and teams. Since its conception in 2005, Kitbag has been used in a variety of settings (a women's prison, a disabled adults' support group, a domestic abuse group, a Scottish Health Board department and schools) on a relatively small scale (the largest being 71 schools). In 2007, IFF received a grant from Nesta to develop a Kitbag for children.

Since 2019, social care researchers at the University of Sussex have partnered with the IFF to embed and support the tool's wider development, particularly in its use with vulnerable children in social work settings. The aim of using Kitbag in social work settings is to support both the social and emotional wellbeing of the child (and their family) as well as the professional. With a grant from the University of Sussex / ESRC Impact Accelerator, small groups of social workers in eight local authorities have received Kitbags and support to use them through workshops and webinars. Two of the local authorities participating in this trial (Bexley and Oxfordshire) received a Kitbag each through this grant. In July 2020, the University of Sussex obtained funding from the Higher Education Impact Fund to buy Kitbags for all the social workers and foster carers in two local authorities, Brighton and Hove and Rotherham[2], and have further developed the programme of support. Brighton and Hove distributed the Kitbags to social workers and foster carers with some delay due to Covid-19, whilst Rotherham distributed the Kitbags to the social workers and also introduced them within their school settings. Covid-19 disruptions meant that planned light touch evaluation activities did not take place.

The initial evidence to date has been implementation and process evaluation, focusing on the implementation of Kitbag in school settings and at a small scale in eight children's services. The IFF conducted a qualitative evaluation[3] looking at the resources used in 71 schools (70 primary schools and 1 secondary school) in Fife, Scotland. The schools had 1-3+ Kitbags each and a small number of staff were trained within each school. Kitbag was mostly used weekly, usually in designated sessions and occasionally in full classroom settings. The evaluation was based on 24 survey responses and a framework and thematic analysis of 8 semi-structured interviews with staff who had used Kitbags. There was a perceived impact on the culture of the school and the majority of the survey respondents rated that the materials were "excellent". Although it was difficult for some schools to find time for external training, further training was identified as an essential component, particularly with high turnover of staff. Some schools commented that with the number of nurture-based approaches they already use in school, using Kitbag additionally may overexpose the children to the discussion of feelings. A barrier identified was that Kitbag may be less suitable for particular age groups (older young people who see themselves as "too cool" and very young children who may not have the emotional maturity to make the most of Kitbag).

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[1] https://www.internationalfuturesforum.com/

[2] Putting Kitbag to Work, (n.d.) Retrieved 9th May 2021 from http://www.sussex.ac.uk/socialwork/cswir/research/researchhighlights/kitbag

[3] International Futures Forum / Playfield Institute. (2017). *Fife Schools Evaluation Report 2017.* https://whatworks-csc.org.uk/wp-content/uploads/IFF-Kitbag-Fife_Schools_Evaluation_2017.pdf

The University of Sussex led some early-stage research[4], which explored how social workers communicate with vulnerable children. The research found that resources to elicit concerns in a child-centred way would be helpful. Where such resources were used, they were usually provided privately by the social worker themselves instead of by their employer. The aim of this current trial is to evaluate the impact of Kitbag within a social care setting specifically on children and young people's social and emotional wellbeing and CSC-specific outcomes such as placement stability. The trial also evaluates the impact on the social and emotional wellbeing of professionals. We will also conduct an implementation and process evaluation to understand how the use of Kitbag differs from usual practice, is adapted for the social care setting, the impact perceived by social workers and its suitability for different subgroups.

As mentioned above, alongside this trial, the IFF and the University of Sussex recently received a Higher Education Impact Fund (HEIF) grant to provide all social workers and foster carers in two local authorities with Kitbags. The HEIF-funded project is focused on the confidence of the practitioner in eliciting information from the children and building relationships. This trial aims to complement the HEIF-funded project by giving many more social workers access to a Kitbag to embed the Kitbag within practice.

Intervention and Theory of Change

Why:

Reports from practitioners indicate that social workers are not often provided with resources to support direct work with children and young people[5]. Where resources are provided to teams, these are sometimes lost or not replenished. Kitbag is a resource for direct work designed to promote emotional literacy, positive behaviour and good relationships between children, professionals and carers. Additionally, anecdotal evidence suggests that social workers don't receive much training on direct work and so the programme involves support around the resource.

Who:

The Kitbag is designed to be used with children and young people between the ages of 4 and 18 years old and by those who care for children and young people for reflective practice. Its use has not been assessed with children with multiple, profound sensory or learning difficulties.

Kitbags will be provided to social workers, family support workers, kinship carers and foster carers to use with the children and young people and families they support. Kitbags can also be used by the professionals themselves either individually or in team meetings.

[4] Ruch, G., Winter, K., Morrison, F., Hadfield, M., Hallett, S. and Cree, V. (2019) From Communication to Co-operation: Re-conceptualising Social Workers' Engagement with Children in Child & Family Social Work. https://onlinelibrary-wiley-com.ezproxy.sussex.ac.uk/doi/epdf/10.1111/cfs.12699

[5] Ruch, G., Winter, K., Morrison, F., Hadfield, M., Hallett, S. and Cree, V. (2019) From Communication to Co-operation: Re-conceptualising Social Workers' Engagement with Children in Child & Family Social Work, https://onlinelibrary-wiley-com.ezproxy.sussex.ac.uk/doi/epdf/10.1111/cfs.12699

What:

The “Putting Kitbag to work” programme involves:

- The distribution of “Kitbags”, bespoke resources for direct work with children and families, to social workers and family support workers across 4 local authorities in England. Social workers and family support workers use the Kitbag when they visit the children and young people they support to build a relationship, better understand the situation from the child’s point of view and / or discuss a particular issue. Social workers and family support workers can also use the Kitbag to support themselves and / or as part of team meetings to build emotional awareness within the team.
- The distribution of Kitbags to foster carers and kinship carers to use with the children they look after, for example, to help them calm down after a distressing episode.
- Social workers and family support workers will be given access to Kitbag Online to facilitate virtual direct work with children and families (in particular whilst Covid-19 social distancing measures are in place).
- The appointment of a “Kitbag Super Lead” to lead the adoption of Kitbags across the local authority, and two “Designated Kitbag Leads” in each team (in the intervention group only) to support colleagues in their team to use Kitbags. The Super Lead coordinates the project overall, getting the necessary buy-in and arranging the logistics of distributing Kitbags. In this case, they also play a major role in setting up the evaluation. The Kitbag Leads are appointed on the basis of an expression of interest - some of the local authorities have chosen for one of the Kitbag Leads to be a team manager or senior practitioner.
- Monthly workshops for Designated Kitbag Leads facilitated by IFF/UoS to support them in their role of encouraging uptake and use of Kitbag by social workers and foster carers within their local authorities.
- Support by Designated Kitbag Leads to social workers and foster carers to provide support to use the Kitbags and facilitate sharing of ideas for how to use the Kitbag. Due to time constraints, it is expected that the support takes place in routine team meetings. The Designated Kitbag Leads in the fostering teams support their colleagues to support foster carers.

- Social workers and family support workers completing recording sheets as a space to reflect on using the Kitbag as part of direct work.

A Kitbag contains:

- Aromatic oil
- Timers: to time mindfulness exercises and in conversations for people to take turns with equal amounts of time
- Feelings cards: which open up a way to describe and share feelings
- A talking stick: which encourages listening and taking turns for people to speak and others to listen with respect
- Animal cards: cards with a picture of an animal and an associated quality e.g. love, communication etc. designed to encourage affirmation and empathy.
- Presence cards: which feature mindfulness exercises
- A “Wonder journey”: a story which acts as a visualisation and relaxation exercise
- Finger puppets: to enable role play and for soothing

Kitbag Online replicates elements of the Kitbag in an online form, for example, the user can display all of the animal cards and click on each card to turn it over and reveal the characteristic associated with the animal.

The workshops emphasise that Kitbag enables and enhances what social workers and family support workers are trained to do when working with children and families. There is no prescription as to how to use the Kitbag - the programme also gives practitioners and foster carers permission to be creative. Some examples of previous uses include:

- The child chooses an animal card for themselves and gifts a card to someone else in the family.
- The child projects their feelings onto one of the puppets so that they can discuss their feelings at some distance.

Where:

Under non-Covid-19 arrangements, it is expected that social workers would carry the Kitbag with them on visits and use the Kitbag at the family's home, on local authority premises or in public settings e.g. a park or a cafe.

Under Covid-19 arrangements, whilst social workers have (to varying extents) continued to conduct home visits during the lockdowns, there has been limited use of resources to facilitate direct work to reduce the risk of spreading Covid-19 to and between the families they work with. Use of Kitbag during Covid-19 restrictions is evolving and social workers are finding ways of using it for their interactions in creative ways and putting the resource into quarantine if necessary. Social workers may use the Kitbag Online during a virtual visit as well as or instead of using the physical resource on a home visit. On the other hand, foster carers will have a Kitbag available for use with those in the same household.

Support workshops and use of Kitbags in team meetings are also likely to take place virtually for at least the initial months of the programme.

When:

Social workers have a statutory obligation to visit children on a child protection plan every 10 days, and children on a child in need plan every 4 weeks and children in care every 6 weeks.

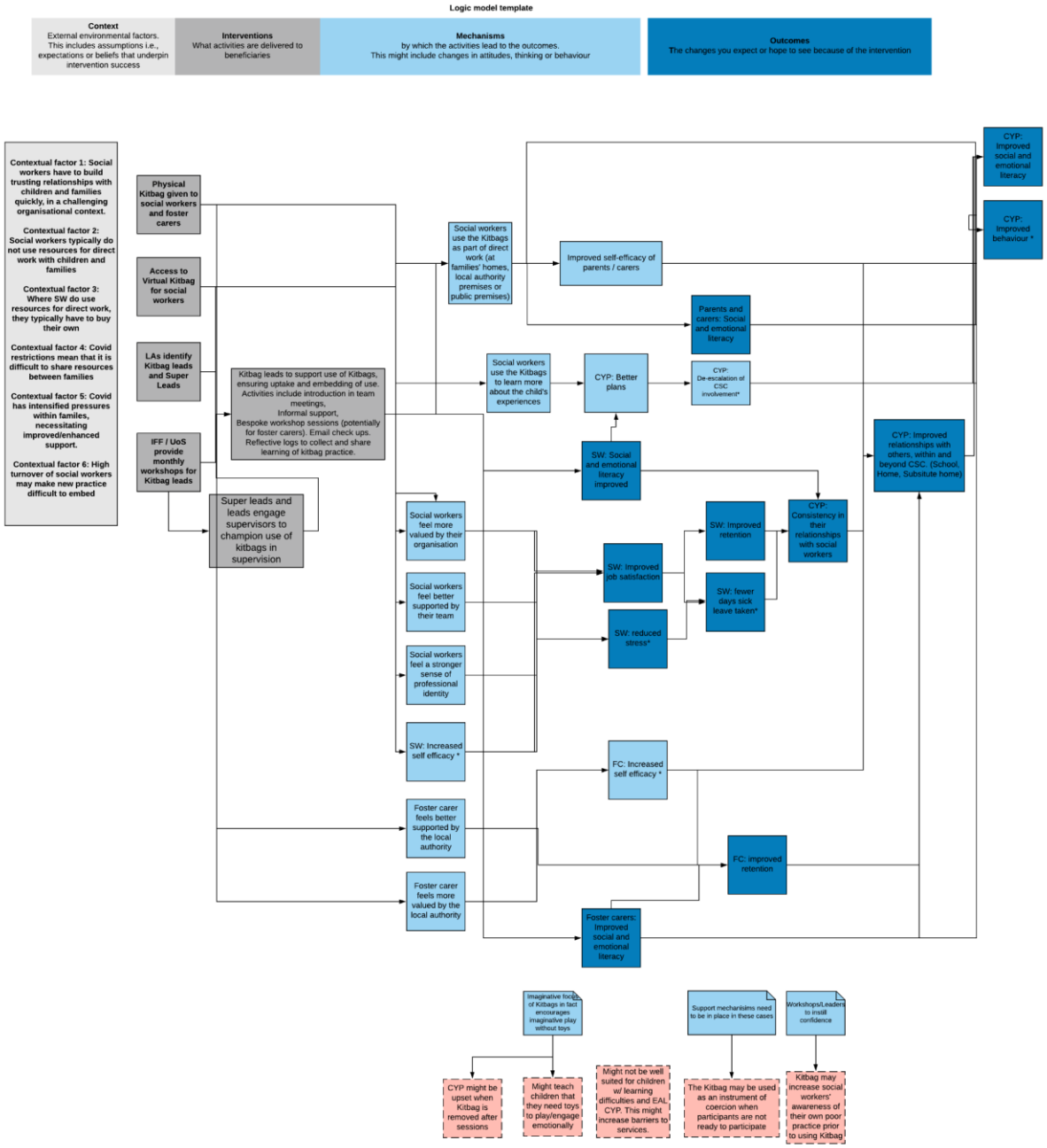
Social workers do not have to use the Kitbag on each visit so this represents the maximum frequency of use. The maximum frequency of use is determined by the extent of children's social care involvement. The intervention developers estimate that 3-4 sessions would be the minimum use of Kitbag for it to be beneficial.

Adaptation:

There has been no additional adaptation of the Kitbag itself from the school setting but the support is tailored to the social work setting, focusing on the relationship-based and reflective practice skills of the social workers and their role in leading the shift in practice within their teams.

As mentioned above, we expect that the version of the programme trialled will involve considerably more use of the Kitbag Online than in non-Covid-19 times. We attempt to address the generalisability of the findings in the implementation and process evaluation (please see below).

Logic model



* indicates outcomes that will be measured.

Impact Evaluation

Research questions

Primary research questions

Child outcomes:

- Primary outcome 1: What is the impact of the "Putting the Kitbags to work" programme on the number of **escalations and de-escalations** of eligible children supported by social workers? The comparison is between eligible children supported by social workers in teams randomly allocated to the intervention arm compared with eligible children supported by social workers in teams randomly allocated to the control arm within the intervention period.
- Secondary outcome 1: What is the impact of the "Putting the Kitbags to work" programme on the **behaviour** of eligible children supported by social workers? The comparison is between eligible children supported by social workers in teams randomly allocated to the intervention arm compared with eligible children supported by social workers in teams randomly allocated to the control arm. The outcome will be measured by the total difficulties score of the Strengths and Difficulties Questionnaire. The population will be restricted to children who've been looked after continuously for 12 months or more whose SDQ has been assessed from T4 - T12.

Social worker outcomes:

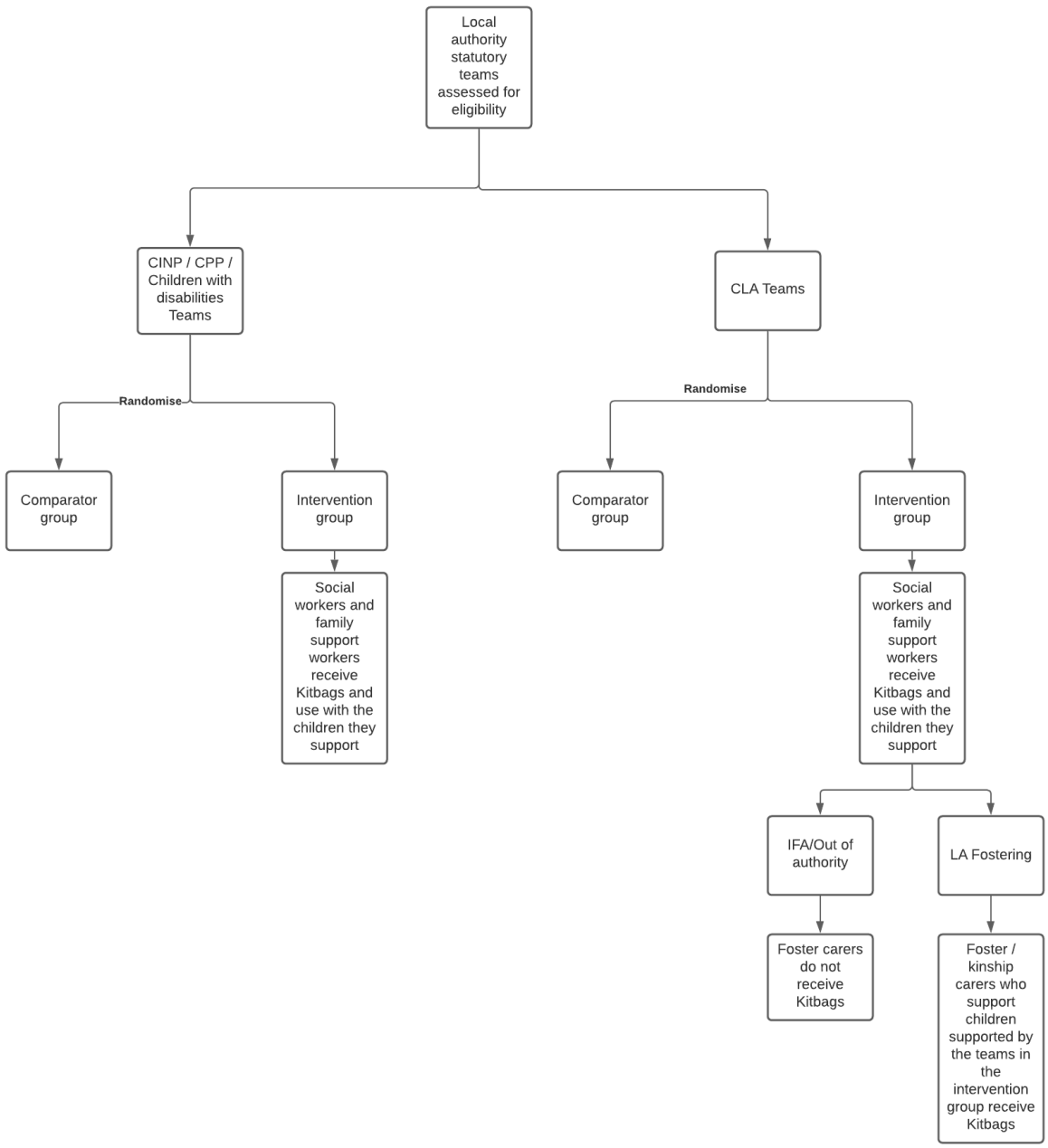
- Secondary outcome 2: What is the impact of the "Putting the Kitbags to work" programme on the **self-efficacy** (as measured by the competency subscale of the Work-Related Basic Needs Satisfaction scale) of social workers and family support workers in teams randomly allocated to the intervention arm compared with social workers and family support workers in teams randomly allocated to the control arm? The outcome will be measured at month 6 and month 13 after intervention began.
- Secondary outcome 3: What is the impact of the "Putting the Kitbags to work" programme on the **stress** (as measured by the "Stress in General" scale) of social workers and family support workers in teams randomly allocated to the intervention arm compared with social workers and family support workers in teams randomly allocated to the control arm? The outcome will be measured at month 6 and month 13 after intervention began.
- Secondary outcome 4: What is the impact of the "Putting the Kitbags to work" programme on the **number of sick days** taken by social workers and family support workers in teams randomly allocated to the intervention arm compared with social workers and family support workers in teams randomly allocated to the control arm from T1 to T13?

Foster carer outcomes:

- Secondary outcome 5: What is the impact of the "Putting the Kitbags to work" programme on the **self-efficacy** of foster and kinship carers supported by social worker teams randomly allocated to the intervention arm compared with foster carers supported by social worker teams randomly allocated to the control arm as measured? The outcome will be measured at month 6 and month 13 after intervention began. The population will be restricted to local authority employed foster carers only..

Design

Trial type and number of arms	Parallel multi-site cluster RCT (2 arms)
Unit of randomisation	Social Work Team (6-8 social workers)
Stratification variables (if applicable)	Local authority and team type (CIN+CP/CLA/Children with disabilities)



Participants

Oxfordshire County Council, the London Borough of Bexley, Haringey Council and Warwickshire County Council shall be participating in the trial.

Teams

Since the intervention is allocated by team, we define eligibility criteria for teams: statutory teams who we would typically expect to conduct longer term (4+ months) work with children and young people to allow for the minimum number of sessions with a Kitbag. This includes safeguarding teams who work with child and young people who are subject to a child in need (CIN) plan or a child protection plan (CPP), teams that work with children who are looked after (CLA) or teams who work with children with disabilities. Please see Table 1 for the number of eligible teams per local authority. As different local authorities have slightly different names for each team, we've included the type of team in brackets. The teams we have determined are not eligible to participate therefore, are MASH / front door, assessment, early help, youth justice and leaving care teams as they do less of the longer term direct work. Please see Table 2 for the number of social workers, family support workers and foster carers.

Table 1: Eligible teams within each local authority

Local authority	Eligible teams
Bexley	Family support and child protection teams (North, East, Central and South, South West) (4 CIN / CPP teams) Looked After Children team (1, 2, 3) (3 CLA teams) Children with Disabilities team (1, 2) (2 Children with disabilities teams) Total: 9 eligible teams
Haringey	Children in Care team (1, 2) (2 CLA team) Disabled Children's team (1, 2) (2 Children with disabilities teams) Safeguarding and Support team (1-6) (6 CIN / CPP teams) No Recourse to Public Funds team (1 CIN / CPP teams) Total: 11 eligible teams
Oxfordshire	Children's Disability Teams (North, South, City) (3 Children with disabilities teams) Family Solutions Plus Teams (North 1-6, Central 1-5, South 1-6) (17 CIN / CPP teams) Rosehill Statutory Teams (1, 2) (2 CIN / CPP teams) Unaccompanied Children (1 CLA team) Children in Care (North 1, North 2, South 1, South 2, Central 1a, Central 1b, Central 2) (7 CLA teams) Total: 30 eligible teams
Warwickshire	Safeguarding and support (Bedworth and North Warwickshire, Nuneaton, Rugby, Stratford, Warwick) (5 CIN / CPP teams) Children in Care aged 14-18 (1 CLA teams) Strengthening Families (1 CIN / CPP team) Children with Disabilities (safeguarding and support hub, children in need hub, strengthening families hub) (3 Children with disabilities teams) Total: 10 eligible teams
Total	60

Social workers and family support workers

Social workers and family support workers in eligible teams are eligible to receive Kitbags. Family support workers who work in the eligible statutory teams are eligible to be part of our

sample as they do a considerable amount of the direct work with the children and young people. We consider team managers as not eligible because they are unlikely to do much direct work with children and young people. Social workers and family support workers who have permanent contracts are given the Kitbags to keep, and so if they leave the local authority's employment, a new Kitbag will need to be given to their replacement. (Agency workers leave at a sufficiently high rate that they will be asked to leave the Kitbag with their team for their replacement if they leave). We also allow for 15% contingency to account for these circumstances. If social workers or family support workers change teams within the local authority, they are asked to adopt the treatment assignment of their new team to prevent contamination but for analysis purposes they will be considered according to their original team treatment allocation.

Foster carers and kinship carers

Additionally, local authority foster carers and kinship carers who care for children supported by social workers and family support workers in treated teams will receive a Kitbag. Foster carers who care for children supported by social workers and family support workers in treated teams and employed by independent fostering agencies or other local authorities are not eligible to receive a Kitbag. This is to concentrate the resources with the participating local authorities. By kinship carers, we mean carers of children who are looked after on a voluntary, interim or full care order whose placement type is a placement with a relative or friend. The children supported by social workers and family support workers in treated teams will still have the opportunity to benefit from the Kitbag through their social worker or family support worker.

Local authorities may recruit new foster carers and kinship carers may start their caring responsibilities over the intervention period, and these foster carers and kinship carers who are caring for children supported by a social worker in a treated team will be given a Kitbag. We also allow for 15% contingency to account for these circumstances.

Table 2: Number of Kitbags for each local authority

Local authority	Number of social workers and family support workers in teams in the intervention group	Hold back for staff turnover (assume 15%)	Number of foster carers (including kinship carers) in the intervention group	Hold back for new foster carers (assume 10%)	Number of Kitbags for social workers in the fostering service	Total
Bexley	33	5	57	6	2	103
Haringey	28	4	100	10	2	144
Oxfordshire	120	18	119	12	4	273
Warwickshire	119	18	148	15	10	310
Total	300	45	424	43	18	830

Children and young people

Children and young people aged 4-18 years old who have an open case in May 2021 or whose case opens betweeen May 2021 and December 2021 and supported by social workers and family support workers in eligible teams are eligible for the programme. Only those whose

case starts before December 2021 will be eligible to allow for the minimum number of sessions to feasibly be delivered with a Kitbag before the evaluation period concludes (May 2022).

The number of children and young people who are classified as children in need (according to the Department for Education's broad definition including children on a child in need plan, child protection plan and children in care) across these four local authorities is approximately 13,000. We estimate that there are approximately 9300 eligible children and young people across the four local authorities (henceforth we refer to them as the population).[6]

Table 3: Number of children in need in Bexley, Haringey, Oxfordshire and Warwickshire between 2019 and 2020

Local authority	Number of children in need at 31 March (2019)	Number of children in need at 31 March (2020)
Bexley	1594	1757
Haringey	2073	2284
Oxfordshire	4511	4750
Warwickshire	3914	4073
Total	12092	12864

Recruitment

Social workers / family support workers
Social workers will be identified from their membership in eligible teams, as per the HR IT systems of the local authorities. The social workers and family support workers will be asked to provide their informed consent before participating in the primary data collection (survey, interviews). They will also be notified of the use of their absence data in the email inviting them to participate in the survey at T6 (prior to the data sharing) and of their rights in relation to the processing.

Children and young people
Children and young people will be identified as eligible by their allocation to a social worker in an eligible team.

Carers (including kinship and foster carers) will be identified and recruited through the same mechanisms as social workers/family support workers.The birth parents of children in care will not be included as participants.

English as an additional language

In order to complete their working responsibilities, we assume that social workers and most foster carers have a level of English language comprehension that would allow them to fully participate in the evaluation if they wish to. Where this is not the case (e.g. EAL is a bit more common for foster carers who foster unaccompanied asylum seekers), we shall ask social workers if they can support the foster carer to answer the questions.

Randomisation

Randomisation will take place at the level of the team in a two-armed clustered trial, stratified by local authority and the team type (CIN / CP; CLA; children with disabilities). We will

[6] Department for Education (2019) Characteristics of children in need tables: 2019, Table B4.https://www.gov.uk/government/statistics/characteristics-of-children-in-need-2018-to-2019

randomise at the social worker team level for three reasons. Firstly, the randomisation is not at the level of the child or young person because the resource is not given to the child or young person but used in direct work with the child and family by the social worker, family support worker, or foster carer. Secondly, the randomisation is not at the social worker level because social workers in the same team would be expected to discuss practice and there would be a risk of contamination. Thirdly, an element of the intervention is the use of Kitbag by social workers and family support workers in their team setting, for example in team meetings. While contamination may still be possible cross-team (or even cross-organisation), we believe that this is sufficiently limited that team-level randomisation remains most appropriate, when considering trade-offs with statistical power.

Each social worker or family support worker gets their own Kitbag if they are in one of the treated teams. Each in-house foster carer or kinship carer who is caring for a child or young person supported by a social worker or family support worker in a treated team will receive a Kitbag.

We will stratify at the local authority/team type level to ensure balance on the level of children's social care involvement that the teams focus on[7].

If the sample is imbalanced with respect to team type (CIN / CP, CLA, children with disabilities) within the local authority, we will re-randomise (setting a new seed). We take imbalance to be the proportion of teams of that type within the local authority assigned to the intervention to be greater than 0.75 or less than 0.25 (i.e. ¾ or ¼ teams) except where there is only one team of that type in the local authority.

We will also report the mean proportion of social workers to family support workers, and the mean proportion of permanent staff to agency staff, by treatment allocation but will not re-randomise if there is imbalance in treatment allocation on these variables. With a relatively small number of teams to allocate, we have decided to prioritise team type (within the local authority) to enable us to compare the impact of the programme on these subgroups.

Data collection

We have several data collection methods:

Impact evaluation

- Children and young people:
    - administrative data to measure children's social care involvement
- Social workers:
    - online survey to measure self-efficacy, stress
    - administrative data to measure sickness absence
- Foster/kinship carers:
    - online survey to measure self-efficacy

[7] Due to a delay of the required data from Oxfordshire County Council, the randomisation was conducted for the three other local authorities first, and the teams from Oxfordshire County Council were allocated separately.

Sample size / MDES calculations

		MDES (Proportion of a Standard Deviation)
MDES		0.127
Proportion of variance in child's outcome explained by:	Child covariates (including baseline measure)	0.8
	Social Worker team covariates	0.1 (3 covariates)
Intracluster correlations (ICCs)	Team	0.03
Alpha		0.05
Power		0.8
One-sided or two-sided?		Two-sided
Level of intervention clustering		Social worker team
Average cluster size		150 children in each team
Sample Size (children)	Intervention	4500
	Control	4500
	Total	9000
Sample Size (teams)	Intervention	30 (15 per local authority)
	Control	30 (15 per local authority)
	Total	60

MDES was determined by the Excel macro PowerUp[8] for a 3-level fixed effects blocked cluster random assignment design with treatment at level 2 (BCRA3_2f). The three levels are individual (as we're detecting power for the primary outcome this is the child / young person), social worker team and local authority with treatment assigned at the social worker team level to 50% of the teams. One would not expect high intraclass correlation within teams themselves

[8] Dong, N. and Maynard, R. A. (2013). *PowerUp!*: A tool for calculating minimum detectable effect sizes and sample size requirements for experimental and quasi-experimental designs. *Journal of Research on Educational Effectiveness*, *6*(1), 24-67. doi: 10.1080/19345747.2012.673143

as cases aren't assigned to a team on the basis of similarity other than the level of social work involvement (child in need, child protection etc) (0.03). Baseline is expected to be highly predictive of endline SDQ score (0.8).

Outcome measures

The aim of Kitbag is to improve children's emotional literacy and ability to understand, express and regulate their emotions as well as improving their behaviour and relationships with others. The primary outcome measure is emotional and behavioural difficulties. The other outcomes are secondary outcomes.

Primary Outcomes

Child Outcomes

1i) Children's social care involvement
Given that we may have concerns about selection bias into the primary data collection, we shall also estimate the impact of the Kitbag programme on administrative outcomes which can be collected for all children and young people in the eligible population. Although children's social care administrative outcomes are more tangentially related to Kitbag and are also more difficult to change in a relatively light touch intervention, they have the benefit of not being subject to attrition bias. Kitbag will be delivered to children and young people with all levels of social work involvement, and the logic model does not suggest that it will be particularly beneficial for children and young people with particular children's social care profiles. The third secondary outcome measure is the level of children's social care involvement (2iii). Specifically, this is operationalised as the sum of escalations and de-escalations over the course of the intervention (May 2021 - May 2022):

- case closed
- child on child in need plan
- child on child protection plan
- child in care

Children's cases can "escalate" to increased involvement (+1 for each step), stay the same (0) or "de-escalate" to lower levels or no involvement (-1 for each step). If the child's case closes and then another is opened, we would count that as an escalation. We consider a decrease in CSC involvement a positive impact.

Secondary Outcomes

2i) Emotional and behavioural difficulties
The Strengths and Difficulties Questionnaire (SDQ) is a brief emotional and behavioural screening questionnaire for children and young people. The SDQ has been tested in large samples (10,000+) with a variety of age ranges (4-17 years old). It has satisfactory to strong internal consistency (Cronbach's alpha of 0.73[9], 0.81[10]) , moderate test-rest reliability (Pearson's coefficient of 0.71 over an 8-week period[11]), good concurrent validity (e.g. a

[9] Goodman. R. (2001). Psychometric properties of the strengths and difficulties questionnaire. Journal of the American Academy of Child and Adolescent Psychiatry, 40 (11), 1337-1345.
[10] Yao, S., Zhang, C., Zhu, X., Jing, X., McWhinnie, C. M., & Abela, J. R. Z. (2009). Measuring Adolescent Psychopathology: Psychometric Properties of the Self-Report Strengths and Difficulties Questionnaire in a sample of Chinese adolescents. Journal of Adolescent Health, 45, 55–62.
[11] Yao, S., Zhang, C., Zhu, X., Jing, X., McWhinnie, C. M., & Abela, J. R. Z. (2009). Measuring Adolescent Psychopathology: Psychometric Properties of the Self-Report Strengths and Difficulties Questionnaire in a sample of Chinese adolescents. Journal of Adolescent Health, 45, 55–62.

Pearson's coefficient 0.7 for the correlation between SDQ total difficulties score and Child Behaviour Checklist total score) and good discriminatory validity of the subscales[12]. The SDQ is recorded annually for children in care and so is a familiar measure to at least a subsample of the participants in the intervention. The SDQ has been used in over 4000 research studies[13].

We measure this outcome through a decrease in the total difficulties score of the SDQ (the sum of the emotional, peer, behavioral and hyperactivity subscales - all except the prosocial score as scored according to the instructions by the SDQ developers[14]). The score ranges from 0 to 40 with a lower score representing better behaviour. Although the individual subscales appear to measure distinct concepts in high total difficulty score populations (like children with a social worker)[15], we use the total difficulty score instead of the individual subscales to reduce measurement error.

For this outcome, the population is restricted to children who've been i) continuously looked after for 12 months or more and ii) who have used Kitbag for four months or more at the time of their SDQ being assessed. i) is the population for whom SDQs are available in administrative datasets and we further restrict this population to ii) to allow for the minimum number of uses of the Kitbag.

Social Worker and Family Support Worker Outcomes

2ii) Social worker / family support worker self efficacy

As represented in the logic model, one of the hypothesised mechanisms is that social workers feel they have the tools to do their job well. We shall measure whether Kitbag improves social workers' self-efficacy through the competence subscale of the Work-Related Basic Needs Satisfaction scale. The competency subscale is a 4-item scale which respondents agree or disagree on a 5-point Likert scale with good reliability (a Cronbach's alpha of .85), and reasonable predictive validity (correlates positively with job satisfaction and vigour, and negatively with exhaustion)[16]. The fourth secondary outcome measure is the mean of the responses for the 4 items where "totally disagree" is coded as 1 and "totally agree" is coded as 5 (2iv).

2iii) Stress

As represented in the logic model, one of the hypothesised mechanisms is that social workers feel more valued by the local authority and feel better supported by their team, reducing their stress. Social worker stress will be measured by the 7-item "Stress in General" scale which has good reliability (above 0.7) and good convergent validity (it correlates negatively as expected with job satisfaction and positively with intention to quit)[17]. Higher scores represent

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[12] Lundh, L.G., Wangby-Lundh, M., & Bjarehed, J. (2008). Self reported emotional and behavioral problems in Swedish 14 to 15-year-old adolescents: A study with the self-report version of the Strengths and Difficulties Questionnaire. Scandinavian Journal of Psychology, 49, 523–532.

[13] https://youthinmind.com/products-and-services/sdq/

[14] Scoring the Strengths & Difficulties Questionnaire for age 4-17. (2014). https://www.ehcap.co.uk/content/sites/ehcap/uploads/NewsDocuments/236/SDQEnglishUK4-17scoring-1.PDF#page=4

[15] Goodman A, Lamping DL, Ploubidis GB. When to use broader internalising and externalising subscales instead of the hypothesised five subscales on the Strengths and Difficulties Questionnaire (SDQ): data from British parents, teachers and children. J Abnorm Child Psychol. 2010 Nov;38(8):1179-91. doi: 10.1007/s10802-010-9434-x. PMID: 20623175.

[16] Van den Broeck, A., Vansteenkiste, M., De Witte, H., Soenens, B., & Lens, W. (2010). Capturing autonomy, competence, and relatedness at work: Construction and initial validation of the Work-related Basic Need Satisfaction scale. Journal of Occupational and Organizational Psychology, 83(4), 981-1002.

[17] Stanton, J. M., Balzer, W. K., Smith, P. C., Parra, L. F., & Ironson, G. (2001). A General Measure of Work Stress: The Stress in General Scale. Educational and Psychological Measurement, 61(5), 866–888. https://doi.org/10.1177/00131640121971455

more stress. The sixth secondary outcome measure is the mean of the responses for the 8 items[18] where "no" is coded as 0, "?" is coded as 1.5 and "yes" is coded as 3 (2vi)[19].

2iv) Days attended

The hypothesised lower stress may lead to fewer sick days of social workers. We measure this over the entire intervention period from T1 to T13. Instead of measuring the number of sick-days, we will instead measure the number of 'days attended' in work. This allows us to include social workers who leave their posts over the course of the trial - these individuals will be classified as absent every day after they leave. Excluding these participants from the absence analysis would risk biasing the results, as individuals' likelihood to leave is correlated with their rate of sickness absence. The number of days not attended may include holidays and parental leave in addition to sickness absence. If possible, we will control for the number of days of holiday and parental leave.

Foster and kinship Carer Outcomes

2v) Self-efficacy

As represented in the logic model, one of the hypothesised mechanisms is carer self-efficacy. We measure parental / carer self-efficacy - "the parents' beliefs about their effectiveness in overcoming or solving specific parenting problems" - using the parental self-efficacy subscale of the "Me as a parent" scale. The subscale consists of 4 questions and has been validated for parents of children aged 6 months to 15 years old. The subscale has good internal reliability (Cronbach's alpha of .75), good test-retest reliability (.73), and good convergent validity (Pearson r = .63, p.001 between the 4 items of the MaaP self-efficacy subscale and the 8 items of the efficacy subscale of the 17-item Parent Sense of Competence scale[20]). The questions will be adapted to account for those in non-parental caring roles. The population will be restricted to local authority employed foster carers only as these are the foster carers whom we will be able to access.

Analysis plan

Primary and Secondary Analysis

Primary analysis estimates the impact of the programme on our primary outcomes, whilst secondary analysis estimates the impact of the programme on our secondary outcomes. As the approach is the same, we outline it jointly below.

Models

The dependent variables are continuous and we will use an OLS regression. The regression coefficient on the treatment variable is interpreted as the impact of the intervention on the dependent variable (in the units described in the "Outcomes" section). Please see the "Outcomes" section for the expected direction of the impact.

[18] Yankelovich, & Broadfoot, & Gillespie, Michael & Guidroz, Ashley. (2012). The Stress in General Scale Revisited: A One-factor Structure.. Stress and Health. 28. 137-148. The items (p.144) are Demanding, Pressured, Calm (R), Many things stressful, Nerve-wracking, Hassled, More stressful than I'd like, Overwhelming where (R) means reverse coded.

[19] The Scale is usually calculated as the sum; however, we use the mean to allow for non-response.

[20] Hamilton, V. Matthews, J. & Crawford, S. (2014). Development and Preliminary Validation of a Parenting Self-Regulation Scale: "Me as a Parent". Journal of Child and Family Studies. 24. 10.1007/s10826-014-0089-z.

Independent variable of interest: treatment

For the outcomes of social workers, family support workers and foster carers, treatment is coded as a binary variable where treatment = 1 if:

- for social workers and family support workers: the social worker or family support worker was a member of a team assigned to the intervention at point of randomisation and 0 else;
- for foster / kinship carers: the carer cares for a child or young person whose case is held at the point the foster carer enters the sample, by a social worker who is a member of a team assigned to the intervention at point of randomisation and 0 otherwise.

Although there is some turnover of social workers, family support workers and foster carers, about 80% of those at T0 (April 2021) will still be working with the local authority at T13 (May 2022), and so 80% will have received the full 12 months of the intervention. Binarising the treatment seems a reasonable proxy in this case.

For the outcomes relating to children, treatment is coded as a binary variable. When children enter the sample, at either the point of randomisation, or the point they become eligible (e.g. their case opens and meets other criteria) they will be allocated to treatment if the team of their allocated social worker was randomised to treatment.

Covariates

Including control variables increases the precision of the estimate. In each regression, we control for a number of relevant covariates. We outline different categories of covariates below.

Site effects

We include site fixed effects but not site-treatment interaction terms.

Previous outcome measures

We control for the previous measurements of the outcome variable where data is available. For the survey-based measures for social workers, family support workers and foster carers, the same measures will be asked at T6 (October 2021) and T13 (May 2022), and for administrative data we expect previous values to be available. For the outcomes of the CYP and parents / carers (including kinship carers), the previous measure of the outcome will be at T0 (April 2021) or when they entered services if they entered services after T0 (April 2021).

Other covariates

For CYP outcomes (primary outcome i) and secondary outcome i)), we include the following vector of individual-level covariates:

- gender (coded as male, female, or other/missing)
- age group (4-11, 12-17, 18 years, or missing with 4-11 as the reference category)
- ethnicity (Asian / Asian British, Black / African / Caribbean / Black British, Mixed / Multiple ethnic groups, Other ethnic group, White, missing; with the majority group as the reference category)
- disability status (Yes, No, Don't know/missing with No as the reference category)
- most recent type of CSC intervention (coded as :
    - Child in Need
    - Child Protection Plan
    - Looked After - LA fostering / kinship care
    - Looked After - IFA / other LA fostering other placement type
    - missing;
    - with Child in Need as the reference category)

- unaccompanied asylum seeking child (yes, no, or missing with no as the reference category)
- if possible, whether their social worker has changed over the intervention period (yes, no, missing with no as the reference category)
- for the primary outcome 1-3 only, the number of status changes within the intervention period (numeric: as per the children's social care interaction outcome variable)

For social worker and family support worker outcomes, we include the following individual-level covariates:

- gender (coded as male, female, or other/missing),
- role (social worker, family support worker, or missing; with social worker as the reference category)
- contract type (permanent, agency or missing; with permanent as the reference category)
- the number of years experience (Associated and Supported Year in Employment / years<1, 1≤ years<4, 4≤years<9, 9years<15, ≥15 with ASYE as the reference category)

We include the following team-level characteristics (measured at T0):

- team type as categorised in Table 1 above (CINP / CPP, CLA, children with disabilities with CINP / CPP as the reference category)
- team size (numeric)
- percentage social worker or family support worker (numeric)
- percentage permanent or agency workers (numeric)

For foster carers (where we can match the data):

- gender (coded as male, female or other/missing)
- employer (LA foster carer, employed by an independent fostering agency or another local authority, or missing; with LA foster carer as the reference category)
- number of years experience (numeric)

Where the foster carer answering the survey is different between pre and post intervention data collection (e.g. the foster carer who answered at baseline isn't available or no longer fosters the child), the post data will be collected from the available foster carer and their pre data will be recorded as missing. The data collected from the foster carer who answered at the pre data collection point will be discarded (we won't impute their outcome data).
Please see the regression specification.

Standard errors

Children are clustered into sibling groups, households (e.g. with other children in foster care) and caseloads (i.e. a group of children have the same social worker) and social worker teams. Because of this clustering, observations within one group (sibling group, household etc) may be more similar with each other on various characteristics compared with observations in other groups violating the assumption of independence. When data is structured in this way, the estimation of the treatment effect remains unbiased but the standard errors may be misspecified, leading to problems with inference. To correct for this, standard errors will be clustered at the level of randomisation, the social worker team level, in line with WWCSC statistical guidance. This also accounts for correlations between observations at lower levels of nesting.

Handling non-compliance

If CYP are transferred to another team (e.g. due to a change of status), it is possible that the team to which they are transferred was ineligible for participating in the programme or had a different intervention / comparator group allocation. If a social worker or family support worker changes teams, it is possible that their new team had a different intervention/ comparator allocation. For all our analysis, we will conduct intention to treat analysis where a CYP is considered as treated if they are / were supported by a social worker who is a member of an intervention team at the point they entered the sample (either at randomisation or when their case started), irrespective of their use of Kitbag.

Multiple Comparison Adjustments

We will adjust for multiple comparisons within the secondary outcomes using Hochberg's step-up procedure, as per WWCSC statistical guidance.

Regression specification

For social workers, family support workers and foster carer outcomes:

$$Y_{ict13} = \beta_0 + \beta_1 D_c + \beta_{2:4} A_c' + \beta_5 Y_{ict0} + \beta_{6:k+6} X_i' + \beta_{k+6:k+11} M_c' + \epsilon_c$$

Where:

- $Y_{ict13}$is the dependent variable for individual i, team c at the end of the trial, $t13$. β_0 is the intercept
- D_c is the treatment variable
- $A_c$is a vector of the local authority fixed effects
- $Y_{ict0}$is the "pre" outcome of individual i in team c, at their "pre" data collection point, $t0$
- X'_i is an $Nx\ k$ matrix of characteristics of individual i
- $M_c'$is an $Nx\ 5$ matrix of characteristics of team c
- $\epsilon_c$is the error term clustered at the team level c

For child outcomes:

$$Y_{ict13} = \beta_0 + \beta_1 D_c + \beta_{2:4} A_c' + \beta_5 Y_{ict0} + \beta_{6:k+6} X_i' + \epsilon_c$$

Where all is defined as above.

Exploratory Analysis

Site effects

In line with WWCSC statistical guidance, we account for potential site effects by including a site (local authority) fixed effect and interaction terms between the treatment and sites. The coefficients on these interaction terms can be interpreted as the difference in intervention group mean for that site and the overall treatment mean. The trial is not powered to detect site-specific effects, and so we report only the direction of the site-dosage effects and the standard errors as exploratory analysis. The interpretation of the coefficient on the treatment variable is the simple average between sites (rather than an average weighted by sample size at each site).

Site effects will be tested for all outcomes. The regression specifications will follow the above with the addition of a vector of interaction terms between treatment and local authority fixed effects. E.g. for social workers and foster carer outcomes:

$$Y_{ict13} = \beta_0 + \beta_1 D_c + \beta_{2:4} A_c{}' + \beta_{5:8} D_c * A_c{}' + \beta_9 Y_{ict0} + \beta_{9:k+9} X_i' + \beta_{k+9:k+14} M_c{}' + \epsilon_c$$

Where:

- $D_c * A_c{}'$ is a vector of interaction terms between treatment and local authority fixed effects.
- And all else is defined as above

Dosage

Although the total intervention period lasts for 12 months, children and young people enter and leave services throughout the year with an estimated 50% of children and young people at T0 having left services by T13. Because of the extent of the dropoff and because an insight into the impact of the number of sessions Kitbags are used may affect future planning of how Kitbags are used in direct work, we considered it important to analyse the "dosage" of the treatment (where number of months of exposure is taken as a proxy of the number of sessions). Thus for CYPs' and parents' / carers' outcomes (which are collected at the same time as the child's), we have four possible "dosages" of the treatment: 0 months (control), 0-4 months, 4-8 months and 8-12 months. We test whether the programme affects the duration of the interaction with children's social care (end date - start date) by regressing the duration of interaction with children's social care on the independent variables defined in the regression specification above. If the coefficient on the treatment dummy is insignificant, we can be less concerned that the impact of the treatment is determining dosage and we code the treatment variable for the children and young people's outcomes and the parent / carers' outcomes as categorical:

- 0: control
- 1: 0-4 months' treatment
- 2: 4-8 months' treatment
- 3: 8-12 months' treatment

The control condition (coded as 0) will be the base category, and so the coefficient on each of the dosages of the treatment can be interpreted as the impact of 0-4 months / 4-8 months / 8-12 months of the treatment on the outcome compared to control.

Dosage will only be tested for child and parent / carer outcomes as the dosage is likely to vary much for them than social workers and family support workers:

$$Y_{ict13} = \beta_0 + \beta_{1:3} D_c{}' + \beta_{4:6} A_c{}' + \beta_7 Y_{ict0} + \beta_{7:k+7} X_i' + \epsilon_c$$

Where:

- D_c is a vector of treatment dosages
- And all else is defined as above

Impact on CYP with different levels of CSC involvement

It may be that there is a differential impact for CYP depending on the type / extent of social care involvement (if the child is on a child in need plan or a child protection plan or whether they are looked after). We add an interaction term of treatment and most recent type of CSC intervention at the start of the intervention period:

$$Y_{ict13} = \beta_0 + \beta_1 D_c + \beta_{2:4} A_c{}' + \beta_5 Y_{ict0} + \beta_{6:9} I'_i + \beta_{10:k+10} X_i' + \epsilon_c$$

Where:

- D_c is a binary treatment variable for all participant groups to conserve power. Where treatment = 0 if they are in the comparator group and treatment = 1 if:
    - the social worker or family support worker is a member of a team assigned to treatment,
    - foster carer cares for a child or young person who case is held by a social worker who is a member of a team assigned to the intervention group, or
    - the child or young person's case is held by a social worker in a team assigned to the intervention group.
- $I'_i$is a vector of interaction terms between treatment (again binarised) and the categories of the most recent type of CSC intervention (coded as Child in Need, Child Protection Plan, or Looked After - LA fostering / kinship care, Looked After - IFA / other LA fostering / other placement type, or missing; with Child in Need as the reference category).
- $X'_i$is a vector of covariates including the most recent type of CSC intervention.
- All other variables are the same as the regression specification (depending on the outcome under consideration) outlined under the "Primary and Secondary Analysis" section.

We interpret the coefficient on each interaction term as the differential impact of Kitbags on each cohort in comparison with CYP with a CINP. Whether there is a differential impact by CSC involvement may be related to a few factors: whether Kitbags are more helpful for a particular cohort, whether Kitbags are used differently with different cohorts or whether Kitbags are used at different frequencies with different cohorts. This trial of Kitbags where social workers use Kitbags on their visits is the intervention developer's current best guess about the way that social workers would use Kitbags if the programme were to be rolled out more generally. Given this, it isn't necessarily problematic that the coefficient estimates on the interaction terms encompass these reasons why the treatment may be different for different cohorts. However, it is helpful for the future development of the intervention to try to pick apart these.

Although the statutory requirements are different, in practice the frequency of visits is similar for children with a CINP and children with a CPP and so the coefficient on the treatment x CPP interaction is likely to represent the impact on the different cohorts and how it's used (rather than the frequency).

Foster carers and kinship carers in the intervention group also receive a Kitbag. This means that children and young people in foster care placements or placed with kinship carers will likely use the Kitbag more frequently than children and young people fostered by foster carers employed by independent fostering agencies or other local authorities - they may use it with their social worker and their foster / kinship carer. The coefficient on the treatment x Looked After - IFA / other LA fostering / other placement type is thus perhaps a better indication of the impact of Kitbags on CYP who are looked after than the coefficient on the treatment x Looked After - LA fostering / kinship care group (although there will be different selection mechanisms into foster / kinship care and the IFA / other LA / other placements).

We will try to understand how Kitbags are used with the different cohorts in the implementation and process evaluation.

To give some indication of the additional treatment effect of the Kitbag being used with the CYP by the foster carer or kinship carer, we change the reference category to Looked After - IFA / other LA fostering / other placement type. We interpret the coefficient on the Looked After - LA fostering / kinship care category interacted with treatment as indicative of the additional treatment effect of the Kitbag being used with the CYP by the foster carer or kinship carer. However, this analysis is non-causal as there may be different selection into placement type.

Impact on CYP by age

Additionally, we will conduct analysis looking at whether there is a differential impact for young people by age (age category at the beginning of the trial). We add an interaction term of treatment and age category at the start of the intervention period:

$$Y_{ict13} = \beta_0 + \beta_1 D_c + \beta_{2:4} A_c{}' + \beta_5 Y_{ict0} + \beta_{6:8} I'_i + \beta_{9:k+9} X'_i + \epsilon_c$$

Where:

- D_c is a binary treatment variable for all participant groups to conserve power. Where treatment = 0 if they are in the comparator group and treatment = 1 if:
    - the social worker or family support worker is a member of a team assigned to the intervention group,
    - foster carer cares for a child or young person who case is held by a social worker who is a member of a team assigned to the intervention group, or
    - the child or young person's case is held by a social worker in a team assigned to the intervention group.
- I'_i is a vector of interaction terms between the treatment (binarised) and age group (4-11, 11-17, 18 years, or missing with 4-11 as the reference category)
- All other variables are the same as the regression specification outlined under the "Primary and Secondary Analysis" section.

These are exploratory because the analysis was not designed to be sufficiently powered for subgroup analysis.

Contextual Factors Analysis

Where caseloads are high and complex, we would expect that there is less time for direct work. Ideally, we would be able to track the caseload and complexity of each social worker but caseload numbers may have different definitions in each local authority and case complexity is not routinely recorded. We thus ask social workers' for their subjective judgement of their caseload and case complexity over the last year in the social worker survey at T13. We multiply the responses to these two questions to get a proxy for workload (a continuous variable).

We add an interaction term of treatment and workload:

$$Y_{ict13} = \beta_0 + \beta_1 D_c + \beta_{2:4} A_c{}' + \beta_5 Y_{ict0} + \beta_6 I_i + \beta_{7:k+7} X'_i + \epsilon_c$$

Where:

- D_c is a binary treatment variable for all participant groups to conserve power. Where treatment = 0 if they are in the comparator group and treatment = 1 if:
    - the social worker or family support worker is a member of a team assigned to the intervention group,
    - foster carer cares for a child or young person who case is held by a social worker who is a member of a team assigned to the intervention group, or
    - the child or young person's case is held by a social worker in a team assigned to the intervention group.
- I_i is an interaction term between the treatment (binarised) and workload
- All other variables are the same as the regression specification outlined under the "Primary and Secondary Analysis" section.

Missing data strategy

Missing post-intervention data is a risk for this trial as some of the secondary outcomes are collected via primary data collection (an online survey) and the attrition is likely to be high given that the follow-up period is over a relatively long period of time (4 months - 12 months later) and the professionals may have left their employer.

Covariates

- If the covariate has more than 30% of the data missing, we will drop the covariate.
- For each covariate in the main model (see the "Covariates" section) that has up to 30% of the data missing, we will regress an indicator of missingness on the other covariates in the main model and outcomes using logistic regression, clustering the standard errors at the team level. If any of the coefficients on the covariates of the missingness model are statistically significant at the 5% level, then data is not missing completely at random (MCAR).
- To distinguish between whether the data is missing at random (MAR) i.e. missing conditional on observables or missing not at random (MNAR) i.e. missing conditional on unobserved variables, for all the covariates that were not MCAR we then impute the missing values of the covariate of interest (using a missing category for categorical variables and multiple imputation for numeric variables) and compare the treatment estimates using the imputed data and data restricted to the complete cases. If the results are similar (i.e. significant / insignificant, the same direction and only differing in magnitude of up to 20%), then data is likely to be missing at random (MAR). If the results are dissimilar, the data is likely to be missing not at random (MNAR).

If the data on covariates are MCAR or MAR, then complete case analysis is likely to be unbiased but less well powered. To maintain power we use a missing category for categorical variables as missingness is likely to be a predictor in itself and multiply impute missing numerical covariates (including pre outcome measures). We ignore the clustered structure of the data because cluster sizes are small, cluster follow-up rates may be highly variable and we expect the ICC to be low (we assume the ICC to be 0.03 in power calculations)[21].

Outcomes

- For each outcome, we will regress an indicator of missingness on the covariates in the main model (see the "Covariates" section) using logistic regression with standard errors clustered at the team level. If any of the coefficients on the covariates of the missingness model are statistically significant at the 5% level, then data is not missing completely at random (MCAR).
- In particular, we are interested in the coefficient on the treatment dummy. If it is not significant, this suggests that the data is missing experimentally at random (MEAR) (where data may be correlated with observable or unobservable variables, but not with treatment assignment) and we will only include observations for which we have the outcome data controlling for any variables which are significant (if they are not already specified in the "Covariates" section above).
- In line with WWCSC statistical guidance, if the data on outcomes is missing experimentally not at random (MENAR) e.g. due to large differential attrition, then we will multiply impute within the treatment condition.

Sensitivity analysis following multiple imputation

Given that there may be a substantial proportion of outcome data to impute, we check the sensitivity of our results to the imputation strategy. We will:

[21] See Taljaard, M., Donner, A., & Klar, N. (2008). Imputation strategies for missing continuous outcomes in cluster randomized trials. Biometrical journal. Biometrische Zeitschrift, 50(3), 329–345. https://doi.org/10.1002/bimj.200710423

- impute using baseline observation carried forwards (BOCF)
- impute using control drifted observation carried forward (CDOCF). This is done by carrying forward the baseline observation and then adding the “drift” from the comparator group to take into account the amount their outcome would have changed in the absence of treatment. The drift is calculated using an autoregression model for the comparator group.

Reporting

In addition to handling missing data and conducting sensitivity analyses, we also report some summary statistics to allow for a qualitative assessment of the impact of missing data on the treatment effect estimate.

- For each outcome and covariate, we will report the percentage of missing data alongside summary statistics
- Rates of loss to “post” data collection for the arms of the trial
- A table of baseline characteristics broken down by treatment arm and response to “pre” data collection and response to “post” data collection (including both those who remained in the sample and those who joined) to check whether characteristics have become more imbalanced by “post” data collection.
- Missing data is likely to be most problematic for data collected via primary data collection (vs routinely collected data). For the outcomes collected via routinely collected data, we will add in an indicator of missingness in the primary data collection and an interaction term between treatment and missingness in the primary data collection. The interaction term can be interpreted as the additional treatment effect on those who are missing from the primary data collection. This gives some proxy as to the likely direction and magnitude of attrition bias for the outcomes collected in the primary data collection.

Reporting

Some of the statistics we will report have been mentioned in earlier sections but we gather them here for ease of reference:

- For each outcome and covariate, we will report the percentage of missing data alongside summary statistics
- Rates of loss to “post” data collection for the arms of the trial
- A table of baseline characteristics broken down by treatment arm and response to “pre” data collection and response to “post” data collection (including both those who remained in the sample and those who joined)
- Description of sites (to allow for qualitative assessment of generalisability of findings)
- ICC at the team level (pre and post for all outcomes)
- Direction and standard errors of the site-treatment effects

Implementation and process evaluation

Aims

This implementation and process evaluation aims to prioritise three key areas. Firstly, we seek to understand the *implementation* of Kitbag in a children's social care context, how staff are supported to use Kitbag, and whether and how Kitbag changes direct work in any way. Here, we also want to get an understanding from staff of the contextual facilitators and barriers of using Kitbag in a children's social care context. The next area we seek to explore is *acceptability and adaptation*, so we want to understand - from those delivering and receiving the intervention - their experience of Kitbag, and whether they would like to see any changes to the content or delivery of the intervention. Finally, we will explore a range of people's views on the *perceived impacts* (both positive or negative changes) of Kitbag, and we will explore whether these perceived impacts are in line with the changes we expect to see.

Research Questions

Implementation:

RQ1: What does direct work look like, in participating local authorities, after implementation of Kitbag? What is the range and diversity in use of Kitbag with different subgroups and team types?

RQ2: How are practitioners (social workers, family support workers and foster carers) supported to use Kitbag in practice? What are the contextual facilitators and barriers to implementation?

Acceptability and adaptation:

RQ3: What do practitioners (social workers, family support workers and foster carers) who receive Kitbag and children who work with a Kitbag think of Kitbag and would they make any changes to the content or how the direct work is completed?

Perceived impacts:

RQ4: What do practitioners (social workers, family support workers and foster carers) who receive a Kitbag and children who work with a Kitbag think are the perceived impacts (both positive and negative) of Kitbag and are these in line with the changes we expect to see?

Design and Methods

Research question	Indicator	Method
Implementation **RQ1:** A). What does direct work look like, in participating	• How staff describe their approach to direct work and use of Kitbag (if at all) • How staff describe the circumstances under which they use Kitbag	Focus group discussions at T10-T12 with staff in the intervention group only

local authorities, after implementation of Kitbag?	● Self-reported resources staff use (in both intervention and comparator groups) in their direct work with families including how they fund and access them ● How direct work is recorded and discussed between social worker and team manager	Survey questions (multiple choice and free-text) at T6-T13 with both intervention and comparator groups Additional questions on recording use of Kitbag will be asked for those in the intervention group and a review of Kitbag recording sheets will also take place
B). What is the range and diversity in use of Kitbag with different subgroups and team types?	● The average reported frequency of use of Kitbag ● Whether there is any difference in use of Kitbag depending on the team type ● Whether use of Kitbag differs depending on factors such as: disability or additional needs, age, and level of need of the child ● Frequency of use of Kitbag at team meetings ● How staff describe use of Kitbag with different subgroups e.g. across age, disability, level of need of the child, and also at their own team level	Survey at T6-T13 with the intervention group Focus group discussions at T10-T12 with the intervention group only
Implementation RQ2: A). How are staff supported to use Kitbags in practice?	● Staff satisfaction with how the programme was implemented (e.g. distribution of Kitbags, workshops, support from Kitbag leads, replacing materials as needed) ● Average proportion of Kitbag leads attending the monthly workshops (The number of Kitbag lead attendees divided by	Survey with intervention group at T6-T13 Admin data collected by UoS / IFF at T13

	the number of Kitbag leads, averaged across all workshops) ● The proportion of social workers and family support workers in intervention teams who agree that information from the monthly workshops is being disseminated well ● How staff describe the information disseminated around using Kitbag and whether staff can identify any improvements ● How staff describe what prevents or supports them to use Kitbag and whether they can identify any other contextual factors	Survey with intervention group at T6-T13 Focus group discussions at T10-T12 with the intervention group only
B). What are the contextual facilitators and barriers to implementation?	● How staff describe what prevents or supports them to use Kitbag and whether they can identify any other contextual factors ● Whether there is any sustainability planning around use of Kitbag (i.e. cost of replacing items, on-going training needs etc.)	Focus group discussions at T10-T12 with the intervention group only Survey with the intervention and comparator group at both T6-T13 Focus group discussions at T10-T12 with the intervention group only Focus group discussions at T10-T12 with Kitbag super leads and Kitbag leads in the intervention group only
Acceptability and adaptation RQ3). What do practitioners (social workers, family support workers and foster carers) who receive a Kitbag and children who work with a Kitbag think of	● How practitioners who've received a Kitbag describe the intervention Kitbag and whether they think any changes are needed to content or delivery ● How children who've worked with a Kitbag	Focus group discussions with social workers and family support workers and interviews with foster carers at T10-T12 Interviews with children at T10-T12 with the intervention group only

Kitbag and would they make any changes to the content or how the direct work is completed?	describe the intervention Kitbag and whether they think any changes are needed to content or delivery	
Perceived impacts RQ4). What do practitioners (social workers, family support workers and foster carers) who receive a Kitbag and children who work with a Kitbag think are the perceived impacts (both positive and negative) of Kitbag and are these in line with the changes we expect to see?	• How practitioners describe any current positive or negative changes arising from use of Kitbag, or that could come from Kitbag in the future • Whether the reported impacts from staff are in line with the changes we expect to see e.g. changes in child emotional resilience and behaviour • Whether staff report any impacts on a). Their practice and b). For children, young people or families • How children describe any current positive or negative changes arising from use of Kitbag, or that could come from Kitbag in the future	Focus group discussions with social workers and family support workers and interviews with foster carers at T10-T12 with the intervention group only Review of logic model Survey with the intervention group at T6-T13 Interviews with children at T10-T12 with the intervention group only

Methods

Focus group discussions

The T10-T12 five focus group discussions:

- One focus group with each local authority with representation from social workers, family support workers and Kitbag Leads from each team type in the intervention group (6-8 individuals per focus group discussion).
- One focus group with the Super Leads from each local authority.

Interviews

At T10-T12 with the intervention group only.

- Two children or young people in the intervention group from each local authority will be interviewed (making a total of eight). We anticipate the children and young people being aged 8-18 years old.
- Two foster carers in the intervention group from each local authority will be interviewed (making a total of eight).

Children will have the choice to be interviewed with a parent / carer or sibling if they feel more comfortable. We hope that there will be the opportunity to interview the children in person in their own home or another setting they feel comfortable in.

The interviews with foster carers will be semi-structured, via telephone or a virtual platform, and will last up to half an hour. Participants will be given the choice of platform between Zoom, Microsoft Teams and a phone call. Prior to the interview an information sheet will be shared with participants and the researcher will discuss the evaluation and measures taken to ensure confidentiality and privacy. The participant will have the chance to ask any questions and will be asked whether they consent to the interview being audio-recorded. If consent to record the call is not given, descriptive notes will be written by the researcher and written up following the call.

Interviews will be recorded, with consent, transcribed and pseudonymised prior to analysis.

Survey

A survey, asking different questions at different timepoints, will be shared with social workers and family support workers (including Kitbag Leads and team managers) from the eligible teams at T6 and T10-T13. The plan in v1 of the protocol was to send social workers and family support workers the survey at T1 instead of T6. The survey was delayed to allow social workers and family support workers to prioritise collecting the consents from the individual with parental responsibility and to avoid the confusion of too many forms.

The survey will help us to answer all four research questions and in particular we seek to understand:

- Confidence with using Kitbag
- How often social workers complete direct work with children and families
- The kinds of activities completed and the resources used for direct work
- How staff are supported to complete direct work with children and families
- How staff record direct work
- Whether staff feel supported to use Kitbag and how they are supported
- Frequency of use of Kitbag including whether some components are used more often than others
- Frequency of use of the Kitbag within the social worker team
- Support from team manager in supervision to use Kitbag

A survey will also be sent to foster and kinship carers in the intervention group at T6 and T10-T13. This will assess use of Kitbag and the outcome measure of self-efficacy.

Observation of workshops

Researchers will observe a subset of the workshops conducted by the intervention developers. The attendees of the workshops are intended to be the Kitbag leads in the treated teams. The workshops are monthly and will be either separate for each local authority or in pairs (depending on the number of attendees).

We will observe four workshops: 2 by each delivery partner (the University of Sussex and IFF). The observations will take place Summer 2021 - they will not be the first session to allow some time for embedding but most likely after the second or third session. The workshops will not be recorded (for the purpose of the evaluation), however the researcher will take descriptive notes to answer RQ1 and RQ2.

Administrative data

As mentioned above, we expect that social workers will predominantly use the Kitbag Online for at least the initial months of the trial to reduce the risk of transmitting Covid-19 between families. We will seek anonymous records of log-ins as a proxy for frequency of use of Kitbag Online. We will conduct the following analysis:

- calculate the proportion of social workers and family support workers logging onto Kitbag Online at least once in the 12 month period out of all social workers and family support workers in the intervention group
- calculate the mean number of times a social worker logs on to Kitbag Online in the 12 month period (pro rata-ed for those who have access to it for a shorter time period)
- calculate the mean number of times a social worker logs on to Kitbag Online over 3 month windows (May-July, August-October, November-January, February-April, again pro rata-ed for those who have access to it for a shorter time period)

We will additionally request from the delivery partners the number of workshops that have taken place, and the number and proportion of leads that attended each workshop. We will request from local authorities the date that social workers were given Kitbags, and the number that were distributed.

Review of Kitbag recording sheets

A researcher will review up to five Kitbag recording sheets per local authority. These will be sent to the delivery partners who identify 5 sheets per local authority at random and will pseudonymise the sheets prior to sending them to WWCSC.

Data collection schedule

Method (Sample size)	Provisional timeline	Sample and stratification
Focus groups	T10-T12	We will send information about the focus groups to the practitioners via the Kitbag super lead and then purposively sample aiming for a heterogenous sample of practitioners from different team types and of different roles. For the focus group discussions for the super leads, all will be invited to attend.
Interviews (n=16)	T10-T12	Children: Practitioners who attend the focus group discussion will be asked to identify children on their caseload who may be open to participating. Foster carers: the Kitbag leads in the fostering teams will be asked to send information about the interviews to the foster carers. We

		will purposively sample aiming for a heterogenous sample of foster carers of children of different ages.
Survey (assume 10% response rate)	T1 T13	A survey will be shared with all staff (i.e. no sampling) across intervention and comparator teams: ● Social workers and family support workers (includes Kitbag Leads) ● Inhouse foster carers (the survey will be adapted slightly for this group) ● Team Managers
Observations of workshops (n=4)	T3-T4	A researcher or research assistant will observe at least one workshop per local authority.

Analysis

Qualitative data preparation and analysis of interview and observational data

Interviews will be recorded, transcribed and pseudonymised prior to analysis. Qualitative analysis of interview and observational data will use NVivo software and follow a thematic analysis approach. This will involve data familiarisation, checking accuracy of transcription, labelling the data with descriptive codes and developing themes which describe patterns across the data to answer the pre-specified research questions. Analysis will look for patterns, consistencies and inconsistencies across different informants and time points that might be informative for the research questions.

The following steps will be taken to ensure rigor in the analysis and reporting of qualitative data:

- Confidence that the findings are an accurate reflection of participant experience will be ensured through presentation of examples of participant responses using quotes, and triangulation between different informants and data collection methods.
- The degree to which findings are transferable to other contexts will be considered through detailed description of contextual factors, and collection of data from a range of informants to gather a range of perspectives.
- Transparent reporting of the research and analysis process will ensure the study methods are clear and repeatable.
- When interpreting findings, consideration will be given to contrasting and inconsistent accounts.
- Qualitative data analysis will be overseen by WWCSC's Senior Qualitative Researcher.

Quantitative analysis of survey and administrative data

Quantitative data will be analysed descriptively, in order to present characteristics of delivery and acceptability. The results will be triangulated with the qualitative findings by looking for consistencies and inconsistencies between the different data sources.

Cost evaluation

Whose costs
We consider the costs from the perspective of the local authorities if they were to implement the programme themselves. We shall report the total costs for each local authority and the costs per family (total costs / (total caseload for treated teams at the beginning of the intervention + the total caseload who start within the intervention period)).

We do not consider costs to families. The use of the Kitbag will be during their usual sessions with social workers and family support workers so there is no additional cost to them in terms of time or otherwise.

What costs
Given that the programmes team of WWCSC is funding the programme, we shall request the budget submitted to them from the intervention developers. We shall include all costs related to the provision of the programme (but not the development) broken down by the following categories:

- **Kitbags** for social workers and family support workers in the treated teams. Kitbags for foster carers and kinship carers of the children supported by these teams. An additional 15% of the total Kitbags required to allow for staff turnover (permanent staff can take their Kitbag with them) and an additional 10% for foster / kinship carers (due to placement change and / or carer turnover).
- **Access to Kitbag Online** (if a licence is required)
- **Distribution of Kitbags**
- **Workshops by the intervention developers**
- **Support for using Kitbags other than the workshops**
- **Other costs associated with delivering the programme**

Additionally, we shall ask the local authorities (via a survey to the local authority lead contact) if they incurred any additional costs associated with the programme e.g.:

- **Resources:** the replacement of lost or empty items from Kitbags; additional resources for the workshops
- **Personnel:** the cost of hiring agency workers to conduct day-to-day work so that social workers / family support workers could attend the workshops (if applicable)
- **Administration costs:** the cost of hiring additional staff to administer the programme

The costs will be reflective of the current context of Covid-19 restrictions. In some cases, this is likely to increase the costs e.g. distribution, and in other circumstances, it's likely to decrease the costs e.g. virtual workshops instead of in-person workshops.

Where there is additional work required but not sufficient to hire an agency worker or another member of staff, we shall report the additional time commitment in hours over the course of the year for the staff affected.

As well as these costs incurred over the duration of the programme, we shall report prerequisites (anything the local authority needed to run the programme but may already have e.g. laptops) and expected ongoing costs. Costs associated with the development of the programme and the evaluation e.g. the collection of data will be excluded.

Valuing benefits and disbenefits

Although administrative outcomes aren't the outcomes of most interest, we only include the administrative outcomes when valuing benefits as these are the benefits that are "cashable" to local authorities:

- De-escalation in children's social care status as a benefit
- Escalation in children's social care status as a disbenefit
- Number of social worker sick days averted (estimated by the coefficient on treatment in the regression of the number of days attended on treatment and covariates)

For the impact evaluation, we code de-escalation and escalation as a single outcome. But because there are different costs associated with each movement, we shall separately estimate the impact of Kitbags on the likelihood of moving between different levels of CSC intervention. For each movement, we calculate the total monetised benefit:

- Unmonestised benefit = ATE (i.e. the coefficient on the treatment dummy) x number children randomised to the intervention group
- Monetised benefit: total unmonestised benefit x cost (averted) / child

The outcomes do not double count any benefits and we only include outcomes that are significant at the 5% level. We request data from the local authorities on the average costs of supporting a child at each level of CSC intervention and use this to determine the "cost (averted)" value. Whilst placement costs vary, we use an average for simplicity. We sum the monetised benefits and disbenefits to arrive at a net benefit.

We do not monetise the other outcomes such as improved behaviour amongst children and young people. This is not to say that these outcomes aren't valuable but simply that there's less agreement on how to put a monetary value on these outcomes. We report a list of outcomes that are significant.

Discounting
Given that all the benefits and costs occur within the same financial year, we do not discount any of the benefits or costs.

Reporting
We report the benefit-cost ratio, and the net present value per child.

Ethics & Participation

An ethics application for this evaluation was submitted to WWCSC's research ethics committee on 25th February 2021 with a favourable opinion given on 23rd March 2021.

Consent procedures

Information sheet contents
The information sheets will be tailored to the participant group and will detail the purpose of the project, why they have been invited to take part, what will happen if they take part, whether they have to take part, the possible risks, the possible benefits, the data handling, confidentiality and data protection, the right to withdraw their consent, how the project is funded, what will happen to the results of the project, contact details if they wish to ask further questions.

Social workers
Data collection from social workers will be via an online survey. The first page of the survey will be an information sheet and consent elicitation.

Impact Evaluation: Secondary Data Collection

Children and young people

Pseudonymised administrative data on interactions with children's social care (CIN plans, CPP, CLA and case closure) will be requested from local authorities. Consent for the sharing of this data will not be explicitly sought from families. This is because we consider the risk to participants arising from the sharing and processing of this data for the purpose of the evaluation to be very low, and the benefit to accessing the data for all eligible participants to be high. The risk that the eligible participants are identified is very low, and the risk of a data breach will be carefully managed so that it remains low. The benefit of accessing the data for all eligible participants is that we maintain statistical power and reduce the risk of selection bias into the sample, allowing for better - unbiased and more precise - estimates of the treatment effect, making the evaluation much more useful to decision-makers. Having said this, participants will be able to withdraw their consent for their data to be processed for the evaluation if they so choose to via a form on the WWCSC website. Please see the Data Protection section below for more details on the data governance of this.

Social workers and family support workers
Pseudonymised administrative data on the sickness absence of social workers and family support workers will be requested from local authorities. Consent for the sharing of this data will not be explicitly sought from social workers for the same reasoning as above.

Summary statistics about access to Kitbag Online will be requested from IFF. Given that the social worker participants will not have accessed the website before, it may be possible to add consent to share for purposes of the evaluation into the terms of use. We are currently investigating this with the delivery partners.

Implementation and process evaluation

Focus group discussions and interviews
Focus group discussion and Interview participants will be sent an information sheet in advance of the interview. Before the interview commences, the researcher will ask the participant if they have read and understood the information sheet, and whether they have any questions. The researcher will then elicit consent for participation and for the interview to be recorded. When eliciting consent for participation in interviews, researchers will make clear the limits of confidentiality (See Section D for further information).

Observation
Researchers will observe a subset of the workshops conducted by the intervention developers. The attendees of the workshops are social workers and family support workers in the treated teams. The number of participants in each workshop is quite large (approximately 25) and so it would be difficult to seek verbal consent from all participants. Workshops attendees will receive an information sheet explaining that the workshop will be observed as part of the evaluation and be given the opportunity to ask any questions. At the beginning of the workshops, those running the workshops will inform attendees about the observation and introduce the researchers who are observing. The attendees will be informed that:

- The sessions will not be recorded (for evaluation purposes at least);
- The coding frame will be designed such that attendees will not be identifiable;
- (In the likely case that the workshops will take place virtually) attendees can keep off their camera and microphone if they chose to.

Although there is a risk that declining to be observed affects participation in the workshop, we think that this is relatively low risk (as participating in any group setting involves being observed by others to a certain extent).

Withdrawal of consent
Any participant who would like to withdraw their consent to participate and for their data to be processed (alongside exercising any other rights guaranteed under GDPR) can use a form on

the WWCSC website. The email invitation to the survey for social workers and family support workers will include a link to the page containing the form so that participants can easily find it after completing the survey. The email invitation will also include contact details of the evaluators so that participants can submit a request to withdraw consent directly via email also. We anticipate that if a CYP or parent / carer wishes to withdraw, their social worker can assist them to WWCSC. We provide instructions to social workers on how to do this in an FAQ document. The participants will be able to request for their data to be deleted up until the analysis and reporting stage of the project (June 2022).

Risks of the data collection activities:

- **Time burden on social workers:** According to an April 2020 Community Care survey, about 70% of the social workers who responded found their caseload "completely unmanageable" or "hard to manage". We also appreciate that at the current time social workers may be taking on additional work due to Covid-19 (colleagues being sick or shielding, withdrawal of multi-agency partners from conducting home visits, supporting CYP to return to school). Adding to the burden on social workers could have knock-on effects for the families they support in leaving less time for direct work. To reduce the burden as much as possible on social workers, we only ask them to collect the data themselves for new CYP entering services (rather than all CYP with an open case) For those with open cases, we ask them to introduce the evaluation and encourage the parents / carers to participate. In our power calculations, we assumed a 15% rate of parents / carers consenting to be involved in the evaluation. Although we will ask social workers to try to recruit all families (otherwise there is a risk of selection bias into the sample); a conservative estimate of the success rate takes into account the other pressures on their time.

Registration

The trial has been pre-registered on the OSF website: osf.io/zmtus and published on WWCSC's website. The OSF pre-registration will be updated with the final report at the end of the evaluation.

Data protection

We have prepared a data privacy impact assessment for the project, which has been approved by WWCSC's Director of Operations. Please find the link to the data protection notice published to our website here.

Purpose of data processing
The aim of this research is to:

- evaluate the impact of Kitbags on the emotional resilience of children and young people with a social worker (and secondary outcomes for CYP, parents, social workers and foster carers)
- evaluate how the programme is implemented in a social care setting (and during Covid)

The expected benefit of conducting the research is to provide evidence on whether Kitbag "works" in a children's social care setting, and so feed into decision-making of senior leaders in CSC. A secondary benefit is for the findings to feed into the further development of Kitbag.

Categories of personal data
We expect to process:

- Pseudonymised data for c. 13,000 children and young people, c.1000 social workers and c.1000 foster carers

The processing of pseudonymised data involves storing it and conducting analysis on it. The pseudonymised data will contain special category data including ethnicity and health (disability) data. It will also contain data which is not special category but highly sensitive e.g. children's social care status.

The geographical coverage is CYP supported by children's services in four local authorities (a small proportion may be in placements outside of those local authorities' boundaries). The data includes data about children, in particular vulnerable children. The approach is not novel and there are no issues of public concern.

Roles of key parties
WWCSC will be the controller for the primary and secondary data collected.

Legal basis
We rely on different legal bases for different processing activities. Please see the Privacy notice[22] (p.4) for full details.

We will process some special category data, namely ethnicity and health (disability status). The conditions for special category data is archiving, research and statistics.

Data transfers
We shall request for all personal data to be sent via Egress or an equivalent platform of the local authorities' choice.

Storage
For the duration of the project (until Summer 2022), data will be stored on a dedicated drive only accessible to the project team in line with WWCSC's data protection policy. The access will be controlled by WWCSC's access control policy.

Intention to archive data
As with many of our other projects, we anticipate that the data shall be transferred to our secure data archive. This archive is hosted and stored by the Office of National Statistics ("ONS") 'Secure Research Service' on our behalf, we are the data controller and access to any data stored within the archive is therefore controlled by the ONS and WWCSC. We shall ensure that we have all necessary rights, notices and/or consents in place in order to transfer such personal data to us for this purpose. The location of the archive is to be confirmed, we anticipate it will be held by the Office for National Statistics 'Secure Research Service'. The duration of retention is indefinite.

Personnel

Delivery team:

- **Gillian Ruch**, Professor of Social Work and a qualified, registered social worker has extensive experience of, and a national reputation for, conducting high quality, impactful research, benefitting the wellbeing of vulnerable children and the social work workforce. See: http://www.talkingandlisteningtochildren.co.uk/. Gillian has experience of managing and delivering all aspects of research programmes and brings her skills in leadership and programme management to the PI role. Gillian will have

[22] https://whatworks-csc.org.uk/wp-content/uploads/Data-Protection-Notice-Kitbag-1.pdf

overarching responsibility for the programme, be one of two Kitbag Practice Intervention delivery partners and be the point of contact with the WWCSC.

- **Dr Margaret Hannah**, Director of Health Programmes, International Futures Forum (IFF) is a medical doctor by training and former Director of Public Health (Fife). Margaret will bring her experience in public mental health, culture change in health and social care, teaching and training to her role as programme Co-I and delivery partner. Margaret had the original idea for Kitbag, was involved in its design/evolution and has extensive experience of running local, national and international Kitbag workshops and online webinars for diverse groups of professionals.
- **Nicola Yuill**, Professor of Developmental Psychology, University of Sussex, will bring to the programme her expertise in the social development and quantitative analysis of children's social interactions with others and in the use of Video Interaction Guidance in professional settings.
- **Graham Leicester**, Director of the International Futures Forum, who with his extensive expertise in supporting organisational transformation, will facilitate the midway and endpoint reviews.
- **Programme Support Team**: Two experienced part-time co-ordinators, based at IFF and Sussex, will provide day-to-day support for the overall programme and the PI/Co-I specifically.

Evaluation team (WWCSC):

- Dr Aoife O'Higgins, Director of Research, WWCSC, is the principal investigator
- Shibeal O'Flaherty, Research Associate, WWCSC, is responsible for day-to-day management of the project
- Abby Hennessey, Qualitative Researcher, WWCSC, is responsible for the implementation and process evaluation (IPE)
- Emily Walker, Research Assistant, WWCSC, is responsible for research assistance for the project

Timeline

Dates	Activity	Staff responsible/ leading
January 2021	Kick off meeting	All
January 2021	Advisory Board meetings	UoS/IFF
January - March 2021	Site selection, engagement, set up meeting and work	All
March 2021	Ethics approval obtained	WWCSC
March 2021	Randomisation of teams to kitbag	WWCSC
April 2021	Kitbag leads identified and appointed	LA partners
Before data collection	Trial protocol drafted and published	WWCSC
May 2021	Kitbag distribution	UoS/IFF

10th May 2021	Launch of project in 4 sites as one online event	UoS/IFF + LA partners
May 2021 - April 2022	Regular Kitbag use	LA partners
May 2022	Endline data collection	LA partners / WWCSC
June - July 2022	Final analysis and report	WWCSC