

**Pilot Evaluation Protocol  
Happier Healthier Professionals:  
Social Worker Recognition - Coffee  
Evaluator (institution): WWCCSC  
Principal investigator: Michael Sanders**

**Happier Healthier Professionals: Coffee Machines Pilot**

<b>Intervention Developer</b>	What Works Centre for Children's Social Care
<b>Delivery Organisations</b>	Kent, Sandwell
<b>Evaluator</b>	What Works Centre for Children's Social Care
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<b>Type of Trial</b>	Clustered Randomised Controlled Trial (Pilot)
<b>Age or Status of Participants</b>	Children's social workers
<b>Number of Initial Participating Local Authorities</b>	2
<b>Number of Children and Families</b>	0
<b>Primary Outcome(s)</b>	Staff sickness absence
<b>Secondary Outcome(s)</b>	Staff turnover, staff wellbeing, mediating outcomes (extrinsic motivation and affective/organisational commitment)
<b>Contextual Factors</b>	Local authorities volunteered to be part of the trial. In terms of the intervention: the intervention interacts with prior experience with the employer, family life and demographic characteristics of the social workers.

## Table of contents

<b>Background and Problem Statement</b>	<b>3</b>
<b>Objective:</b>	<b>3</b>
<b>Intervention and Logic Model</b>	<b>4</b>
Logic Model	5
Intervention: what will be implemented	6
Recipients: who is taking part	6
Materials	6
Procedures; how will it be implemented	6
Location: where will it be implemented	7
Dosage: how often will it be implemented	7
<b>Impact Evaluation</b>	<b>7</b>
Design	7
Randomisation	7
Participants	8
<b>MDES calculations</b>	<b>8</b>
Outcome measures	10
Analysis plan	11
Primary analysis	11
Secondary analysis	11
<b>Cost-benefit analysis</b>	<b>14</b>
<b>Ethics &amp; Participation</b>	<b>14</b>
<b>Registration</b>	<b>15</b>
<b>Data protection</b>	<b>15</b>
<b>Personnel</b>	<b>15</b>
<b>Timeline</b>	<b>15</b>
<b>Risks and Mitigation</b>	<b>16</b>

## Background and Problem Statement

More than most professions, the high risk and emotional nature of social work means that the sector faces particularly acute challenges with employee stress. Likely as a result, children's social workers have high rates of turnover (15.2% per year across England). Absence and turnover create disruption within children's services; social workers picking up additional cases means they have less time available with each family, at the risk of decreasing the quality of support they are able to provide.

Social worker absence and turnover has also been shown to have a direct impact the experience of the children and families they work with. A report published by Coram and the University of Bristol in February 2018 indicated that children's wellbeing between the ages of four and seven was negatively associated with not knowing their social worker<sup>1</sup>. However, there have been no rigorous evaluations of social worker wellbeing interventions in the UK.

An important factor in low levels of social worker wellbeing may be their perception that their efforts are undervalued. In site visits to speak to local authorities participating in the wider Happier Healthier Professionals programme, social workers often highlighted the discrepancy in the seriousness of the challenges they face, as well as the time pressure associated with high and complex caseloads, and how they feel they are perceived as a workforce from within and outside the field. The absence of any kind of 'perks' in their work environment - exacerbated by council budget-cuts - are seen as symptomatic of this wider issue. This perceived lack of recognition can lead to increased stress, which in turn contributes to increased rates of sickness absence and staff turnover. Wellbeing is also important by itself -- all workers, especially those doing a public good -- deserve to be in environments that promote their wellbeing.

This research programme aims to support the profession by understanding how local authorities might address rates of employee sickness absence and turnover by introducing interventions designed to alleviate stress and increase employee wellbeing (in this case by increasing social workers' sense of recognition and appreciation by providing them with access to free coffee in their offices).

Recruitment of local authorities for this programme took place between January and March 2019 with a public call for local authorities interested in being part of a wider set of trials to test interventions focused on improving social worker wellbeing. Local authorities recruited earlier in the process took part in the co-development of the intervention; the research team from the What Works Centre gathered information about the challenges faced by social workers in the local authorities and used these insights in the intervention choices and design.

One important point on this research piece is that LAs were matched where possible with interventions that seemed to match local conditions and taking part was on the basis of applications by LAs. This to at extent may decrease the external validity of the work, as participating LAs may have expended more time making the interventions work or had more enthusiastic senior leadership teams.

### Objective:

This research aims to support the social work profession by understanding how local authorities might address rates of employee sickness absence and turnover by providing social workers with access to free, high-quality tea and coffee in the office to increase the sense that they are valued and their efforts appreciated by the senior management team.

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<sup>1</sup> <http://www.bristol.ac.uk/media-library/sites/sps/documents/hadleydocs/our-lives-our-care-full-report.pdf>

The research questions are:

1. Does the introduction of a simple intervention emphasising employers' recognition and appreciation for social workers' efforts - the provision of tea and coffee machines in the office - reduce staff sickness absence?
2. Does the provision of tea and coffee machines in the office increase reported staff wellbeing?
3. Does the provision of tea and coffee machines in the office increase extrinsic motivation **and/or** affective/organisational commitment?
4. What is the cost effectiveness of the intervention, and how does this compare to other HHP interventions?

## Intervention and Logic Model

### *Overview*

We aim to test whether a display of recognition - providing social workers with access to free, high-quality tea and coffee in the office - improves social worker wellbeing and reduces rates of sickness absence. Coffee machines will be installed in the kitchen areas of buildings and floors where buildings of social workers are stationed, and in sufficient number to ensure that all buildings in the intervention groups have convenient access. A laminated note will be attached to the side of the coffee machines, addressed to the social worker teams in the building, explaining that it is a token of thanks for the 'compassion, integrity and dedication' they display in their service to the children and families in the region.

### *Logic Model (see page over)*

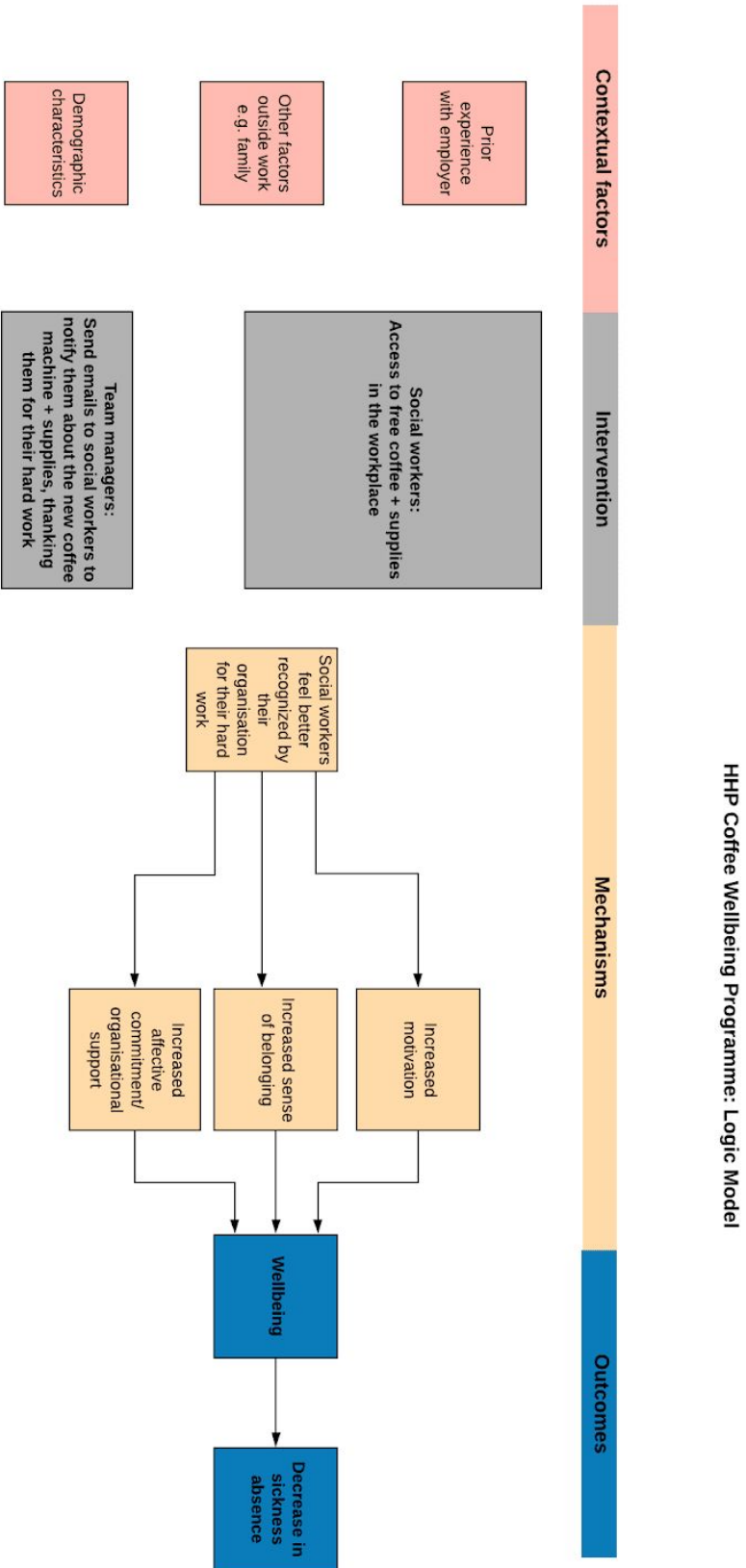
The intended operation of the intervention, as well as the contextual factors around it, are described in the logic model over the page. The intervention section describes the parts of the programme, which lead to a series of mediating outcomes which in turn help produce our final outcomes. However, we anticipate the programme's effectiveness is itself affected by a series of mediators that impair engagement with the intervention (which we have tried to partially mitigate), as well as other background mediators that affect outcomes directly.

The intervention is designed to:

- A. Help social workers feel valued and recognised for their hard work by their local authority,
- B. Increase social workers' sense of belonging at their local authority,
- C. Boost social workers' sense of intrinsic and prosocial motivation in the workplace,
- D. Increase social workers' commitment and positive feelings towards their employer.

Our hypothesis is that social workers will derive an increase in their perception of recognition from their organisation via being part of the coffee trial (a), which will in turn increase in organisational/affective commitment, their sense of belonging at the LA and their intrinsic and prosocial motivation (b-d). Thus, their wellbeing will be positively impacted and they are subsequently absent less at work.

**Figure I. Logic Model**



### ***Intervention: What will be implemented?***

In introductory phone calls, the senior management building in Kent identified issues with low staff morale as a primary motivation for their participation in research programme. In subsequent calls - and site visits to speak to social workers in Kent - a combination of factors, including a perceived lack of appreciation and recognition from within and outside the field, as well as the nature of the cases they encounter, were identified as contributors to this. These factors seem likely to be drivers of high levels of sickness absence and staff turnover, which further increase strain on the children's services workforce.

However, research suggests that non-cash rewards which emphasise recognition for employees' efforts can produce disproportionately large effects given the monetary cost, and therefore might be effective in boosting staff wellbeing.<sup>2</sup> We hypothesise therefore that this simple intervention will send a strong signal that their daily efforts are valued and that this may subsequently improve employee wellbeing.

Coffee machines will be provided to each of the treatment buildings, along with a small budget for refreshing the milk and coffee for the machines. Building managers, or a member of teams' support staff, will be assigned responsibility for restocking the machine and making sure that the resources are kept stocked up. Social workers will receive an initial email notifying them that the coffee is being provided as a way to recognise their hard work. A laminated note (appendix 2), printed on headed paper, will also be attached to the coffee machine, stating that the coffee is a token of gratitude from the local authority to social workers for their hard work and dedication to the families and young people in their region.

### ***Recipients: Who is taking part?***

Eligible participants are children's social workers at the level of team manager and below, working in Kent and Sandwell.

All children's social workers at or below the level of team manager will be eligible, working in the local authorities listed above. In some cases, the recipient group is extended to other teams in cases where local authorities felt they could benefit from the programme. More detailed eligibility criteria by authority are included in [here](#), and will be updated with details of any LAs added after the start of the trial.

### ***Materials***

Coffee machines will be provided to each LA, with an initial supply of milk, tea, coffee beans. A budget for teams to replenish these supplies over the course of the six-month pilot will also be supplied. A laminated note, thanking social workers for their efforts, will also be attached to the coffee machine.

### ***Procedures: How will it be implemented?***

The coffee machines will be delivered to each LA prior to the intervention start date. LAs will be provided with guidance on how to install the coffee machines on the specified start date. They will also be sent communications to be sent from the team managers to social worker teams prior to the intervention start date to state that they will be provided with free coffee and tea.

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<sup>2</sup> Gallus, J. (2016). Fostering public good contributions with symbolic awards: A large-scale natural field experiment at Wikipedia. *Management Science*, 63(12), 3999-4015.

### **Location: Where will it be implemented?**

It will be implemented across LAs, randomised at the building level (i.e. some buildings receive coffee machines and tea, others do not).

### **Dosage: How often will it be implemented?**

Social workers will have access to the free coffee and tea on a daily basis over the course of the 6-month intervention.

## **Impact Evaluation**

At its current size, this pilot is likely to be underpowered at conventional power and significance thresholds. However, using adjusted thresholds for indicative evidence of impact, outlined below, the MDES reported below for sickness absence might be considered a stretch goal. We will therefore assess whether there is indicative evidence of impact in our outcomes of interest; staff rates of sickness absence and levels of subjective wellbeing, with a view to adding more local authorities to the sample in a continuation of the pilot if this evidence is observed.

### **Design**

<b>Trial type and number of arms</b>	Clustered randomised controlled trial, two-armed (pilot)
<b>Unit of randomisation</b>	Building
<b>Stratification variables (if applicable)</b>	Number of social workers situated in the building
<b>Primary outcome</b> variable measure (instrument, scale)	Sickness absence Administrative data
<b>Secondary outcome(s)</b> variable(s) measure(s) (instrument, scale)	Wellbeing (combining cognitive and affective components) Survey measures (intrinsic / pro-social motivation, affective / organisational commitment, sense of belonging)

This is a cluster randomised trial, conducted as a pilot evaluation, with buildings as the clusters because of the need to install the machines by building. Randomising at the building level was designed to mitigate the potential negative spill-over effects in the social workers who did not have access to the coffee machines, and also recognises the practical challenge of stopping participants in the control group from using a coffee machine that was installed in their building.

Our primary outcome measure is focused on the policy priority of local authorities which is reducing sickness absence. This has the advantage of being an objective measure, as it is routinely recorded by local authorities, and also on which we might hope to see an effect size larger than the MDES (reported overleaf) as we continue to recruit local authorities to the trial after the initial launch. While administrative measures may contain measurement error, we are assuming that due to the randomisation in the trial this will be uncorrelated with treatment assignment.

Wellbeing is included as it is both an intermediate outcome measure - our logic model hypothesises that it will directly influence sickness absence - and has inherent value. We have also included measures to test three different mechanisms we believe may influence wellbeing and subsequently the administrative measures outlined above. Therefore, scales are included to measure participants' organisational / affective commitment, sense of belonging and motivation. These are included in part to test our causal pathway and as they are part of promoting a good workplace environment.

**Randomisation**

Randomisation will be done at the building level, using baseline data and team location information provided by LAs before the commencement of the trial. We will stratify on the number of social workers situated in each building to ensure there are roughly balanced samples in the intervention and control groups.

**Participants**

All staff in Kent and Sandwell's children's social worker teams, including managers, are eligible for inclusion in the trial, while local authorities were also given the option of including employees from other teams, such as Early Help teams, who they felt experienced similar challenges in their roles and therefore might benefit from the intervention. In Kent, who took part in the co-development of this intervention, the coffee machines are to be trialled alongside an intervention testing the impact of a goal-setting intervention.

Participants will be given the option to opt out of the trial before the intervention is introduced, while data collection of our secondary outcome measure (wellbeing) is voluntary. Participants may not opt out of data collection for the primary outcome measures, as these are administrative and collected by local authorities on an ongoing basis.

**MDES calculations**

For this pilot, we define results that are significant at the 10% level, and at 0.7 power, as indicative evidence of impact. Though the MDES reported below might still be considered a stretch goal at these thresholds and current sample size, we intend to continue to recruit additional local authorities to the pilot.

MDES was calculated with Stata using the 'clustersamps' package.

	<b>Days absent through sickness</b>
<b>MDES</b>	0.33 (7.9 p.p. reduction over baseline)
<b>Baseline measures</b>	4.16
<b>Baseline/Endline correlations</b> Social Worker	0.6
<b>Intracluster correlations (ICCs)</b> Building	0.08
<b>Alpha</b>	0.1
<b>Power</b>	0.7
<b>One-sided or two-sided?</b>	Two-sided



<b>Level of intervention clustering</b>	Building	
<b>Average cluster size</b>	60	
<b>Coefficient of cluster variance</b>	0.5	
<b>Assumed attrition</b>	10%	
<b>Sample Size (Social Workers)</b>	Intervention	500
	Control	500
	<b>Total</b>	1000

We now explain the assumptions that led to these numbers.

### **Sample and cluster size**

Sample and cluster sizes were estimated from data provided at the baseline and are:

Kent’s combined Early Help and Social Care workforce consists of around 1000 individuals, spread roughly evenly across 11 buildings in the region. Kent are trialling the coffee machines alongside an intervention testing the impact of a goal-setting intervention in a factorial trial design (25% of the workforce receiving neither intervention, 50% receiving either coffee or goal-setting and 25% receiving both), meaning that around 750 of these will be included in this trial. We are assuming that the effects of the two interventions in Kent would be additive, therefore a sample of 750 from Kent has been included in the MDES calculations.

Sandwell estimated that they have around 220 children’s social care staff across 5/6 buildings. Cluster sizes were estimated to be smaller in Sandwell, with between 10 and 50 social workers situated in each building.

### **Attrition / inability to match data**

Though both primary outcomes are administrative data recorded by local authorities, we assumed an additional 10% rate of inability to match baseline and endline measures, likely due to errors in data recording and data loss.

### **Coefficient of cluster variation**

Coefficient of cluster variation (the standard deviation divided by the mean of the cluster size) was estimated as  $30/60=0.5$ , based on the previous estimate of the average cluster sizes from discussions with local authorities and a further estimation of the distribution of the cluster sizes across organisations.

### **Sickness absence**

A baseline rate of sickness absence was calculated to be 4.16 days absent through sickness in 6 months. This was done by multiplying the national average sickness absence rate from the [Local Authority Interactive Tool](#) (LAIT) by the number of working days in a six-month period. Annual leave provision was excluded, as it was not included in the calculation of the national rate.

A ICC of 0.08 was assumed to account for:

- the close physical proximity of social workers, who could therefore pass on illness,
- the fact that members in buildings will often work closely together and therefore experience similar workplace pressures as a product of high numbers of complex cases,
- the fact that buildings share managers,
- the countervailing fact that a large part of wellbeing (and relatedly absence/turnover) relates to how an individual reacts to different circumstances and their own life experiences (both before and after the trial).

Correlation between the baseline and endline measure of sickness absence was assumed to be 0.6. It is likely that social workers with higher levels of sickness absence pre-treatment will continue to experience the same environmental and psychological pressures that caused this after the introduction of the intervention. This value was not to account for the effect of covariates, as we do not have access to this data.

## *Outcome measures*

### **Administrative Data**

The primary outcome measure for this trial is individual social worker sickness absence - recorded as an average number of days missed due to sickness per social worker over the course of the trial. Local authorities will return individual-level baseline data on [this outcomes and other covariates](#) prior to the randomisation process.

The intervention logic model implies that the mechanism designed to positively impact social worker wellbeing should, in turn, influence rates of sickness absence and therefore improve the service provided by local authorities to the children and families they work with. While these administrative measures may contain measurement error, we are assuming that due to the randomisation in the trial this will be uncorrelated with treatment assignment.

The primary outcome measure will be reported by the local authorities at three time periods; pre-treatment (including absence patterns at the individual level for the previous 12 months to provide a baseline), interim (3 months after the introduction of the intervention) and post-treatment (6 months after the introduction of the intervention to provide the endline measure).

These are data recorded administratively by local authorities. The primary outcome variable is included to reflect the central motivation for the research programme: to positively impact the effectiveness of local authorities' children's services.

### **Survey Data**

The secondary outcome variable, subjective wellbeing, will be recorded twice - at the pre-treatment and post-treatment periods (T1 and T2) - using a validated measure by standardising and summing three scales on cognitive and affective aspects from Whillans and Dunn (2018)<sup>3</sup>:

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<sup>3</sup> Whillans, Ashley V., and Elizabeth W. Dunn. "[Valuing Time Over Money Predicts Happiness After a Major Life Transition: A Pre-Registered Longitudinal Study of Graduating Students.](#)" Harvard Business School Working Paper, No. 19-048, October 2018.

- We will combine cognitive component (satisfaction with life) and affective components (PA and reverse-scored NA) into a single subjective well-being composite if we observe an R-squared value above 0.50 between these measures. Providing the correlations are above 0.50, we will standardise and combine these measures to create a Subjective Well-Being (SWB) composite. Otherwise, we will do separate regressions on each component.
- Cognitive component:
  - First, respondents will report their overall life satisfaction by answering the following question: “Taking all things together, how happy would you say you are?” on a scale from 0 = Not at all to 10 = Extremely<sup>4</sup>.
  - Next, participants will complete the Cantril Ladder<sup>5</sup>, reporting where they currently stand in life on a ladder spanning from the worst possible to the best possible life imaginable (from 0 = Bottom Rung to 10 = Top Rung).
- Affective component:
  - To capture the affective component of SWB, we asked participants to rate their positive and negative affect in the last four weeks using the Schedule for Positive and Negative Affect<sup>6</sup>.

We also included two validated measures to test the effectiveness of the intervention on the four mediating outcomes in our logic model: Affective Commitment/Perceived Organizational Support<sup>7</sup> (which includes a measure of sense of belonging), and Intrinsic/Prosocial Motivation.<sup>8</sup> We will analyse the internal reliability of each scale to ensure that is high (and if high, we will average the items to form a composite score for each scale).

## Analysis plan

### Primary Analysis:

#### General Principles

For both primary and secondary outcome measures, we will employ an intention-to-treat (ITT) approach. This means that we analyse the effect of being randomised into a group (treatment or control).

We have not conducted multiple comparisons corrections, as this is a two-arm trial with two primary outcomes so there will be two primary comparisons in total.

#### Sickness Absence

We will use a linear regression model with clustered standard errors at building level, with the following model specification for individual  $i$  in building  $k$ :

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<sup>4</sup> Jowell, R. (2007). European Social Survey 2006/2007. Round 3: Technical Report. City University, Centre for Comparative Social Surveys, London.

<sup>5</sup> Cantril, H. (1965). Pattern of human concerns. New Brunswick, NJ: Rutgers University Press

<sup>6</sup> Diener, E., Wirtz, D., Tov, W., Kim-Prieto, C., Choi, D. W., Oishi, S., & Biswas-Diener, R. (2009). New well-being measures: Short scales to assess flourishing and positive and negative feelings. *Social Indicators Research*, 97(2), 143-156.

<sup>7</sup> Rhoades, L., Eisenberger, R., & Armeli, S. (2001). Affective commitment to the organization: The contribution of perceived organizational support. *Journal of applied psychology*, 86(5), 825.

<sup>8</sup> Grant, A. M. (2008). Does intrinsic motivation fuel the prosocial fire? Motivational synergy in predicting persistence, performance, and productivity. *Journal of applied psychology*, 93(1), 48.

$$Y_{ik} = \alpha + \beta_1 * T_k + \gamma_1 * Gender_i + \gamma_2 * Role_i + \gamma_3 * PT_i + \gamma_4 * LE_i + \gamma_5 * BA_i + \gamma_6 * goal-setting_i + c_a + \delta_{ik}$$

where:

- $Y_{ik}$  is the sickness absence of social worker  $i$  in building  $k$  (which for those that leave we will calculate how many days they would have been absent had they stayed the whole time),
- $T_k$  is the treatment assignment of building  $k$  (which is 0 if control group and 1 if treatment group),
- $Gender_i$  is the gender of person  $i$  (coded as a binary variable),
- $Role_i$  is the role of the social worker  $i$  (which is a dummy variable with base level 'student social worker' and other levels: Newly Qualified Social Worker, Social Worker, Senior Practitioner, Social Work building Manager or Other),
- $PT_i$  is a binary variable for whether social worker  $i$  is part-time or not,
- $LE_i$  is a continuous variable for length of service at that LA in years of social worker  $i$ ,
- $BY_i$  is baseline level of the outcome variable for social worker  $i$  (this is zero for new workers),
- $goal-setting_i$  is 1 if the social worker  $i$  is in the treatment arm of the goal-setting intervention and 0 otherwise,
- $\delta_{ik}$  is the error term, clustered at the building level  $k$ .

We cannot include a fixed effect for buildings because that would be perfectly collinear with treatment assignment, though we did stratify on baseline absence rates in the buildings which should partially account for this.

We anticipate there being a significant amount of missing or incomplete sickness absence data, in both baseline and outcome measures. Local authorities reported that a high proportion of their staff are either new (and therefore will not have 12 months of historical sickness absence data), or agency staff (whose sickness absences are not always routinely recorded), resulting in incomplete baseline sickness absence data. There may also be instances where staff sickness data is missing at random due to administrative error.

To account for these, we intend to use a pro-rata calculation of sickness absence for those who had been in post for over three months but less than a year. Intuitively, this provides a reasonable time period from which to extrapolate the 12 month measure. Those who had not worked over three months will be assigned the mean sickness level. Sickness data for staff whose data is missing entirely, including agency staff, will be null imputed.

We also anticipate that a significant proportion of staff will leave the local authority over the course of the trial, resulting in incomplete outcome measures. To address this, we will impute each individual's pro-rata rate of sickness absence were they to have stayed for the course of the trial.

New staff - those who join the local authority after the start of the trial - will be excluded from the analysis.

## Secondary Analysis

### Secondary Outcome: Wellbeing Measure

We will use the same regression specification as for the sickness absence analysis, except using  $BW_i$  (baseline wellbeing) as well as baseline absence. The way this measure is constructed is

explained above. We will also undertake the same analysis, but replacing the composite measure with each of its subscales.

Wellbeing data is the most likely to be missing, due to non-response both from social workers leaving and due to non-completion of the surveys by social workers who are in the trial. Unfortunately, these are unlikely to be missing at random -- those who leave or those who stay but do not take the survey are likely to have lower wellbeing and perhaps be less responsive to the treatment. With those that do stay, we can use both rewards and reminders to increase survey completion, but we cannot do this with those that have left employment.

We will report the following ways of dealing with this:

- Removing the data and only using complete cases,
- Using a Heckman selection model (unfortunately there is not an instrument available for missingness so we will have to make strong parametric assumptions),
- Multiple imputation using the available covariates.

We do this knowing that the models may give different results - we will report all of them and discuss how robust they are for the actual level of missingness. This is in part why we have not relied on the wellbeing measure as our primary outcome.

### **Secondary Outcome: Mediators**

We have measured from the survey three mediators for this trial (for full survey measures, see appendix I):

- Organisational/affective commitment, which includes measures capturing LA recognition
- Intrinsic/prosocial motivation
- Sense of belonging

We will use the same regression specification as for the sickness absence analysis, except that we will control for baseline absence, as well as the baseline level of the mediating outcome.

### **Secondary Outcome: Bradford Score**

We will also compute a Bradford score (outlined below) for each of the individuals in the trial, and use the same regression specification as for the sickness absence analysis, except using Bradford score as well as baseline absence. The motivation for measuring the intervention's impact on the Bradford score is the principle that many, repeated sickness absences have a greater operational impact than fewer, long term spells sickness absences of the same total number of days. Therefore, we will analyse whether the intervention has an impact on sickness absence in shorter spells of sickness.

However, as spells of absence are not recorded in all local authorities, we will only do this for LAs that routinely capture this data.

### **Exploratory Analysis**

Staff turnover; MDES calculations indicate that this trial will not be powered to detect a statistically significant difference in turnover at the current sample size. In addition, we hypothesise that a light-touch intervention of this kind will be insufficient to impact an individual's decision of whether

or not to change jobs. However, we will capture this data as indicative evidence because it is a policy priority for LAs and therefore reported throughout wider HHP programme.

### **Contextual Factors Analysis**

We do not think this is applicable here, because this is a light-touch behavioural intervention which are directed at individual social workers and buildings rather than whole-system changes.

We will provide a qualitative description of the LAs involved and why the interventions were chosen as part of the final report.

### **Implementation and process evaluation**

As this is a light-touch intervention, we will not conduct an IPE.

### **Cost Effectiveness Analysis**

We will not calculate a fiscal benefit cost ratio of the intervention as local authorities will rarely hire agency staff to cover for sickness absence, even if it is long-term, meaning that there is no immediate monetary cost to the organisation. However, we will produce a cost effectiveness analysis to calculate the impact on sickness absence for the amount spent by local authorities per social worker on the intervention for the period of the trial. We will calculate this as follows:

Total cost of intervention / number of social workers in intervention group = average impact on sickness absence per social worker over 6 months.

### **Ethics & Participation**

Coffee machines do not require the introduction of new processes within local authorities, and therefore there is little chance of disruption of services. There is also very little potential for them to distress participants. Local authorities will be free to keep the coffee machines at the end of the trial. While we anticipate that they will be motivated to continue to stock the machines after this period, it is possible that they will decide not to fund the maintenance / restocking, which could demotivate staff. Therefore, we will liaise with local authorities and give them estimates for the costs of continuing prior to the end of the trial, so that they can decide whether to remove the machines entirely or to allocate budget towards continuing to supply coffee and other supplies.

No children will be directly impacted by the intervention, though it is possible that improvements to social worker wellbeing, and subsequently reductions in social worker sickness absence might improve the service provided to children and families in contact with children's services in the participating local authorities. For these reasons, the decision was made not to put the trial to an ethics board.

### **Registration**

We will pre-register the protocols on OSF (<https://osf.io/registries>).

## Data protection

We will gather data in two main ways:

- Administrative data on absence, turnover, relevant demographic information and an anonymised building ID - individuals are identified via a meaningless identifier;
- A survey filled in by social workers - individuals are identified using their first and surnames and email addresses.

We will seek opt-in informed consent as our legal basis to process the survey data and allow for matching to administrative data. This is necessary because of the need to match pre- and post-intervention survey data in a way which is not too much of an administrative burden to social workers (meaningless identifiers are unlikely to be remembered between the pre- and post-intervention surveys). Immediate identifiers will be stored separately from the trial data and destroyed 6 months after the completion of the publication of the final report.

We anticipate the local authority will match the names and email addresses from our survey to meaningless identifiers which correspond to the same individuals in the administrative datasets.

## Personnel

Delivery team:

- Michael Sanders, Executive Director at the What Works Centre for Children's Social Care
- Ashley Whillans; Assistant Professor at Harvard Business School
- Shibeal O'Flaherty, Researcher at the What Works Centre for Children's Social Care and Research Fellow at University College London: overall project management, intervention design including co-development with local authority partners.
- Chris Mitchell, Researcher at the What Works Centre for Children's Social Care: intervention development

Evaluation team:

- Shibeal O'Flaherty, Researcher at the What Works Centre for Children's Social Care and Research Fellow at University College London
- Chris Mitchell, Researcher at the What Works Centre for Children's Social Care

## Timeline

Dates	Activity	Staff responsible/leading
July 2019	Trial launched in 2 local authorities	Shibeal O'Flaherty, Chris Mitchell
September 2019	Interim data collection	Shibeal O'Flaherty
September / October 2019	Interim data analysis	Shibeal O'Flaherty
January 2020	Endline data collection	Shibeal O'Flaherty
March 2020	Results published	Shibeal O'Flaherty

## Risks and Mitigation

Risk	Mitigation
Data is not returned by local authorities	We will follow up with LAs via email and phone to ensure that they return the data, however there is a degree to which this cannot be mitigated.
Wellbeing survey is not filled out	Incentives provided to motivate survey completion. Social worker teams in which everybody completes the survey will be entered into a draw to win vouchers in a competition within their local authority.
Treatment group receive the intervention	Local authorities given clear information of which buildings are in the intervention group, and instructions for how the programme is to be introduced to building by their managers.
Spillover of intervention to participants in control group (e.g. through word of mouth)	In the initial email to social workers about the intervention, social workers will be informed this is part of a trial and asked to be discreet when interacting with colleagues from other buildings who may not have received the intervention.
Coffee machine fails to be noticed by social workers	Social workers will receive an initial email from their managers highlighting that they now have a coffee machine in their building / on their floor.
Coffee machine costs	We will provide the local authority with funds to supply (coffee refills and milk) the coffee machine for up to 6 months.



## Appendix I - Wellbeing survey: Daily Experience of Social Workers

Thank you for completing (taking part in) this survey! This contributes to exciting research led by What Works Centre for Children's Social Care (WWCCSC, hosted by Nesta) in collaboration with your local authority to help us improve wellbeing amongst social workers.

The purpose of the survey "Daily Experiences of Social Workers" is to understand more about your unique experience as a social worker, how this impacts on individual wellbeing, and from this exploring ways to improve social worker wellbeing.

We are only requesting data that is necessary for the purposes of this research. Your survey responses are anonymous, and will be matched via a unique code so that we can match your responses before and after the programme. Your unique code will also allow us to match your responses to administrative data. The WWCCSC will be unable to identify you from your answers. Your answers will be analysed by the research team at the WWCCSC, and all data will be deleted 12 months after analysis and quality assurance is complete.

If you have any questions after you have completed the survey, and/or later decide that you do not want to participate in this research, and/or you would like your responses to be deleted or rectified, please contact the research team by emailing Shibeal O' Flaherty, Researcher at the WWCCSC: shibeal.oflaherty@nesta.org.uk.

The WWCCSC can be contacted at:

The What Works Centre for Children's Social Care  
58 Victoria Embankment  
London  
EC4Y 0DS

Email: [wwccsc@nesta.org.uk](mailto:wwccsc@nesta.org.uk)

Telephone: 02073601208

Clicking on the "agree" button below indicates that:

You have read the above information  
You voluntarily agree to participate in the research

Note: If you do not wish to participate, please decline participation by clicking on the "disagree" button.

Agree to participate in the research  
Do not agree to participate in the research

## Section 1: Subjective Wellbeing Questions

### **Q1. Subjective Well-Being**

#### Overall life happiness (1-item)<sup>9</sup>

Taking all things together, how happy would you say you are?

0            1            2            3            4            5            6            7            8            9            10

Not at all

Extremely

#### Cantril Ladder<sup>10</sup>

Please imagine a ladder with steps numbered from zero at the bottom to ten at the top. Suppose we say that the top of the ladder represents the best possible life for you and the bottom of the ladder represents the worst possible life for you.

If the top step is 10 and the bottom step is 0, on which step of the ladder do you feel you personally stand at the present time? (Please circle your response).

0            1            2            3            4            5            6            7            8            9            10

Bottom  
Step

Top Step

#### PANAS (Schedule for Positive and Negative Affect)<sup>11</sup>

Please think about what you have been doing and experiencing during the past four weeks. Then report how much you experienced each of the following feelings, using the scale below. For each item, select a number from 1 to 5, and indicate that number on your response sheet.

1                            2                            3                            4                            5

Very rarely/never

Rarely

Sometimes

Often

Very often/always

Positive

<sup>9</sup> Jowell, R. (2007). European Social Survey 2006/2007. Round 3: Technical Report. City University, Centre for Comparative Social Surveys, London.

<sup>10</sup> Cantril, H. (1965). Pattern of human concerns. New Brunswick, NJ: Rutgers University Press.

<sup>11</sup> Diener, E., Wirtz, D., Tov, W., Kim-Prieto, C., Choi, D. W., Oishi, S., & Biswas-Diener, R. (2009). New well-being measures: Short scales to assess flourishing and positive and negative feelings. *Social Indicators Research*, 97(2), 143-156.

Negative  
 Good  
 Bad  
 Pleasant  
 Unpleasant

**Q2. Turnover Intentions<sup>12</sup>**

Indicate to what extent you agree with the following statements. Use the following scale to record your answers.

(7-point scale: Do not agree at all 1, Very Slightly Agree 2, Slightly Agree 3, Moderately Agree 4, Mostly Agree 5, Strongly Agree 6, Very Strongly Agree 7).

1. I think a lot about leaving the organization.
2. I am actively searching for an alternative to the organization.
3. As soon as possible, I will leave the organization.

**Q3. Job Satisfaction<sup>13</sup>**

Below are two items with which you may agree or disagree. Using the 1-7 scale below, indicate your agreement with each item. *Please circle the relevant number with each question.*

	Strongly disagree	Disagree	Somewhat disagree	Neither agree nor disagree	Somewh at agree	Agree	Strongly agree
In most ways, my job is close to my ideal.	1	2	3	4	5	6	7
I am satisfied with my job.	1	2	3	4	5	6	7

**Q4. Burnout<sup>14</sup>**

<sup>12</sup> Cohen, A. (1993b). Work commitment in relation to withdrawal intentions and union effectiveness. *Journal of Business Research*, 26, 75-90.

<sup>13</sup> Adapted from Diener, E. D., Emmons, R. A., Larsen, R. J., & Griffin, S. (1985). The satisfaction with life scale. *Journal of personality assessment*, 49(1), 71-75.

<sup>14</sup> Bacharach, Samuel B., Bamberger, Peter, & Conley, Sharon. (1991). Work-home conflict among nurses and engineers: Mediating the impact of role stress on burnout and satisfaction at work. *Journal of Organizational Behavior*, Vol 12(1), 39-53. doi: 10.1002/job.4030120104

Please think about your experience at your job during the past four weeks. Then, indicate how much you experienced each of the following states, using the scale below.

	Never 1	Very rarely 2	Rarely 3	Occasionally 4	Frequently 5	Very frequently 6
Periods of fatigue when you couldn't 'get going'						
Being tired						
Being physically exhausted						
Being emotionally exhausted						
Feeling 'burned out'						
Being 'wiped out'						
Feeling 'run down'						
Being weary						

### Q5. Strong and Weak Ties<sup>15</sup>

Please think about all of the coworkers that you know who you work with. Each person might be either a strong tie or a weak tie.

A strong tie is someone you are very close to, someone who you know really well and knows you really well, someone who you confide in or talk to about yourself or your problems (e.g., a good friend).

On the other hand, a weak tie is someone you are not very close to, who you don't know very well and who doesn't know you very well, someone who you consider a friend, but would be unlikely to confide in (e.g., a casual friend, an acquaintance).

Don't include someone who is an absent tie: Someone you don't recognize or who probably doesn't recognize you. It could be someone that you've met, but haven't really talked to.

Please estimate the number of strong ties you have at your work:

Now, please estimate the number of weak ties you have at your work:

<sup>15</sup> Adapted from Sandstrom, G. M., & Dunn, E. W. (2014). Social interactions and well-being: The surprising power of weak ties. *Personality and Social Psychology Bulletin*, 40(7), 910-922.

## Q6. Motivation<sup>16</sup>

*Intrinsic and Prosocial Motivation* (1=disagree strongly to 7=agree strongly)

Why are you motivated to do your work at your organization?

- Because I enjoy the work itself.
- Because it's fun.
- Because I find the work engaging.
- Because I enjoy it.
- Because I care about benefiting others through my work.
- Because I want to help others through my work.
- Because I want to have positive impact on others.
- Because it is important to me to do good for others through my work.

## Q7. Affective Commitment and Perceived Organizational Support (including Sense of Belonging)<sup>17</sup>

Rated on a 7-point Likert scale from “strongly disagree” to “strongly agree”

### *Affective Commitment*

I feel strong sense of belonging to my organization.  
I feel personally attached to my work organization.  
I am proud to tell others I work at my organization.  
Working at my organization has a great deal of personal meaning to me.  
I would be happy to work at my organization until I retire.  
I really feel that problems faced by my organization are also my problems.

### *Perceived Organizational Support*

My organization really cares about my well-being.  
My organization strongly considers my values and goals.  
My organization shows little concern for me. (R)  
My organization cares about my opinions.  
My organization is willing to help me if I need a special favor.  
Help is available from my organization when I have a problem.  
My organization would forgive a mistake on my part.  
If given the opportunity, my organization would take advantage of me. (R)

## **Section 2: Demographics**

### **Q1. Age**

How old are you? (insert number)

### **Q2. Marital status**

What is your marital status?

- Married/domestic partner

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<sup>16</sup> Grant, A. M. (2008). Does intrinsic motivation fuel the prosocial fire? Motivational synergy in predicting persistence, performance, and productivity. *Journal of applied psychology, 93*(1), 48.

<sup>17</sup> Rhoades, L., Eisenberger, R., & Armeli, S. (2001). Affective commitment to the organization: The contribution of perceived organizational support. *Journal of applied psychology, 86*(5), 825.

- Widowed
- Divorced
- Separated
- Single/never married
- Prefer not to say

### **Q3. Number of children**

How many children do you have who currently live at home with you?

- 0
- 1
- 2
- 3
- 4 or more
- Prefer not to say

### **Q4. General Health**

In general, how would you rate your health?<sup>18</sup>

- Excellent
- Good
- Fair
- Poor

### **Q5. Contract Length**

On which of the following basis are you employed?

- On a permanent contract
- On a fixed term or temporary contract
- Via an agency

### **Q6. Overtime Worked**

On average, how many extra hours (above your contracted hours) do you work per week?  
(Insert number from 0)

If so, how many on average per week?

### **Q7. Caseload**

Do you feel your caseload is manageable? Please use the scale provided to indicate your answer.  
(7-point scale where 1=not at all, 7=completely)

### **Q8. Additional Comments**

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<sup>18</sup> DeSalvo, K. B., Fisher, W. P., Tran, K., Bloser, N., Merrill, W., & Peabody, J. (2006). Assessing measurement properties of two single-item general health measures. *Quality of Life Research*, 15(2), 191-201.

Thank you for your time. If you have any thoughts about the study, you can provide them in the space below.

## **Appendix 2 - Letter of appreciation attached to coffee machine**

Dear [team manager name] and your team,

This coffee machine is just a small token of thanks for your hard work to improve the futures of the most vulnerable children and families in Kent.

Your compassion, integrity and dedication make a huge difference to these families every day, and gives our children and young people the best chance to fulfill their potential.

Thank You



## Appendix 3 - Baseline administrative data returned by LAs

	A	B	C	D	E	F	G	H
1	Please enter the data related to each children's social worker below and return to us by emailing <a href="mailto:svwprogramme@nhs.uk">svwprogramme@nhs.uk</a> by Friday, 3 May, 2019							
2	In accordance with GDPR, please ensure that you use anonymised unique IDs only (please let us know if you need us to provide these). Do not include names of any individuals. It is very important that you keep a record of which staff IDs relate to which individuals until the end of the project in January 2020 (but please do not share this information with us). It is essential that the same IDs are used for the same staff members when returning the data each time (at the mid-point and end of the project) to allow us to track individual outcomes.							
3	<b>Local Authority:</b>							
4	<b>Date data returned:</b>							
5								
6								
7								
8	<b>Unique Staff ID</b> (Please use a unique identifier for each team)	<b>Team ID</b> (Please use a unique identifier for each team)	<b>Role</b> (Please select the option which best describes the role)	<b>Gender</b>	<b>Length of employment at LA (months)</b>	<b>Over the last 12 months: Overall absence, incl. holiday (no. of days)</b>	<b>Illness related absence (no. of days)</b>	<b>Number of illness related spells of absence</b>
9								
10								
11								
12								
13								
14								
15								
16								
17								