# Trial Evaluation Protocol

**Schwartz Rounds**

**Evaluator (institution):** CASCADE, Cardiff University  
**Principal investigator(s):** David Wilkins

Template last updated: June 2019

<table>
<thead>
<tr>
<th>Intervention Developer</th>
<th>Point of Care Foundation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Delivery Organisations</td>
<td>Local authorities in England and the Point of Care Foundation</td>
</tr>
<tr>
<td>Evaluator</td>
<td>Cascade</td>
</tr>
<tr>
<td>Principal Investigator</td>
<td>David Wilkins</td>
</tr>
<tr>
<td>Protocol Author(s)</td>
<td>David Wilkins and Sarah Thompson</td>
</tr>
<tr>
<td>Type of Trial</td>
<td>Randomised control trial</td>
</tr>
<tr>
<td>Age or Status of Participants</td>
<td>Members of local authority staff working for children’s services departments</td>
</tr>
<tr>
<td>Number of Participating Local Authorities</td>
<td>Eleven</td>
</tr>
<tr>
<td>Number of Children and Families</td>
<td>None</td>
</tr>
<tr>
<td>Primary Outcome(s)</td>
<td>Psychological well-being of staff</td>
</tr>
<tr>
<td>Secondary Outcome(s)</td>
<td>Sickness-related absence, psychological well-being of staff</td>
</tr>
<tr>
<td>Contextual Factors</td>
<td>Schwartz Rounds have been evaluated in health settings in the UK and the USA. This trial will help evaluate their impact in the context of children’s services in the UK. Midway through the trial, the UK underwent the Covid-19 pandemic, and associated lockdowns.</td>
</tr>
<tr>
<td>Version</td>
<td>V 2.0 published December 2020. Details are provided of how this differs from the previous published version on page 3.</td>
</tr>
</tbody>
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Background and Problem Statement

This protocol supersedes a previous protocol published in March 2019. This is due to the addition of more local authorities to the trial in a second phase of data collection in order to increase statistical power after there were challenges with initial recruitment. In addition, in phase two there has been a significant change in the mode of delivery of the intervention. Due to the Covid-19 pandemic, rounds cannot be delivered face-to-face and so the five new authorities to join the trial will deliver their rounds virtually. The key changes in this version of the protocol compared to the original version are as follows:

<table>
<thead>
<tr>
<th>Section</th>
<th>Changes made</th>
</tr>
</thead>
<tbody>
<tr>
<td>Protocol authors (p. 1)</td>
<td>This second version was written by David Wilkins and Sarah Thompson (the previous version by David Wilkins and Donald Forrester)</td>
</tr>
<tr>
<td>Secondary outcomes (p. 1)</td>
<td>Previously, we were intending to collect data from local authorities about staff retention rates, however we were unable to collect this data and so we will no longer be measuring this outcome (staff retention).</td>
</tr>
<tr>
<td>Contextual factors (p. 1)</td>
<td>In this version, we have added in a reference to the Covid-19 pandemic as a significant contextual factor, necessitating a change in the mode of delivery for the intervention (from face-to-face, to virtual).</td>
</tr>
<tr>
<td>Background and problem statement (p. 3-4)</td>
<td>Updated to reflect the inclusion of five additional local authorities, and the use of virtual Schwartz Rounds, compared to face-to-face rounds.</td>
</tr>
<tr>
<td>Intervention and theory of change (p. 5-6)</td>
<td>Updated to reflect the inclusion of five additional local authorities and the delivery of rounds virtually due to the Covid-19 pandemic and associated lockdowns and social distancing measures. Information added about the similarities and differences between rounds delivered face-to-face and virtually. These differences and similarities have been identified by the provider of the intervention (Point of Care Foundation).</td>
</tr>
<tr>
<td>Primary hypothesis (p. 8)</td>
<td>The primary hypothesis has been modified, to say that levels of stress (measured by the GHQ-12) will be lower in the intervention group, compared to the control group, but not that levels of stress will necessarily decrease for either group (this is to take account of the impact of the pandemic on working conditions, which may have increased overall levels of stress for local authority staff).</td>
</tr>
<tr>
<td>Secondary hypothesis (p. 9)</td>
<td>The third secondary hypothesis has been modified, so that while we will still compare rates of sickness-related absence between the two groups, we no longer specify that this will take place during the 6 to 8 months of the trial period. This is because there is too much variation between the authorities in terms of the length of the trial period.</td>
</tr>
<tr>
<td>Design (p. 10)</td>
<td>This section now notes that the intervention is delivered to groups of staff.</td>
</tr>
<tr>
<td>Data collection points (p. 12)</td>
<td>Removed a reference to the collection of administrative data on sickness-related absence. We were unable to collect these data from the original six local authorities in the study as planned and will now rely on self-report data instead. Updated versions of the survey now request work email addresses (as an optional response); this is to aid with matching between different data collection instruments. Information about observations of the intervention, sessional feedback questionnaires, focus groups and interviews have been moved to the ‘Implementation and Process Evaluation’ section.</td>
</tr>
<tr>
<td>Randomisation (p. 12 – 13)</td>
<td>More details added to explain how we randomised staff between the two groups.</td>
</tr>
<tr>
<td>Sample size calculations (p. 14)</td>
<td>Updated to include the five additional local authorities and to reflect the impact of different response/attrition rates.</td>
</tr>
<tr>
<td>Outcome measures (p. 15)</td>
<td>Information added in relation to the five additional local authorities, and about the collection of T2 data in March and April 2021. We are also now intending to collect data about staff absence based on self-report, rather than administrative data (as this proved too difficult to collect in phase one).</td>
</tr>
<tr>
<td>Primary analysis (p. 15)</td>
<td>Clarification that our hypothesis is one-sided.</td>
</tr>
</tbody>
</table>
Working in children’s services is challenging, with workers often reporting high levels of stress and ‘burn out’. Such difficulties can contribute to high rates of sickness-related absence and turnover (Ravalier, 2018). Recent Department for Education (2019) figures indicate a headcount turnover rate of 16% in the year ending September 2018, compared to a turnover rate for teachers of 9% over a similar period. Previous research has shown that the expected working life for a social worker is eight years, compared with twenty-five years for doctors and fifteen years for nurses (Curtis et al, 2010). Levels of stress may be exacerbated by limited resources, high workload and insufficient organisational support. Yet even in ideal circumstances children’s services would still be a stressful place to work. Social workers and others will regularly encounter people living in very difficult situations, who have experienced abuse, neglect, poverty and social exclusion. Helping staff to provide the best possible levels of service means taking account of the nature of the work itself, and how it can create stressful emotional responses.

Schwartz Rounds is an intervention aimed at improving the psychological well-being of staff and improving the nature of care provided. There is some evidence that it works in health settings. This study will evaluate whether it improves psychological well-being and reduces staff stress in English children’s services.

As set out in the previous protocol, we initially planned to work with six local authorities in total, with all of them providing Schwartz Rounds face-to-face. We expanded the study to include five additional local authorities in order to increase the sample size and the chances of avoiding a false negative result (i.e., failing to identify a positive effect on staff levels of stress caused by Schwartz Rounds). The original six authorities are referred to as phase one (of the trial), and the additional five authorities as phase two (of the trial). The plan at the outset, at the point when the five new authorities were recruited, was that they would also provide face-to-face Schwartz Rounds for their staff, in the same way the authorities in phase one had done. However, due to the Covid-19 pandemic and associated lockdowns and social distancing requirements this was not possible. Therefore, the phase two authorities will deliver virtual Schwartz Rounds (also called Team Time) instead.

Although there are no published studies that we could find which compare the effectiveness of face-to-face Schwartz Rounds with virtual Schwartz Rounds, there are studies of face-to-face counselling compared to online counselling, which tend to find similar levels of effectiveness (e.g., Barak et al, 2008; Stefanopoulou et al., 2018). This could suggest that virtual Schwartz Rounds may have a similar effect to that of face-to-face Schwartz Rounds (albeit we intend to consider this empirically as part of our exploratory analysis).
**Intervention and Theory of Change**

Name of the intervention: Schwartz Rounds (face-to-face or virtual).

Why: To improve the psychological well-being of staff.

Who: Members of staff employed by children’s services (including social workers, managers, family support workers, administrative/professional support staff and others).


How much: The six local authorities in phase one will hold at least six face-to-face Schwartz Rounds between May and December 2019. The five local authorities in phase two will hold at least four virtual Schwartz Rounds between November 2020 and April 2021, but ideally up to six. The original plan was for phase two authorities to also hold six face-to-face rounds (between February 2020 and September 2020), but this was not possible due to the Covid-19 pandemic.

A previous study of Schwartz Rounds in health-care settings found that attendance at four rounds was a suitable threshold for comparison with non-attendance (Maben et al., 2018). Based on this previous study, using the General Health Questionnaire-12, regular attenders (those who attended at least four rounds) experienced a 13% decrease in their chances of crossing the ‘caseness’ threshold, compared to a 3% decrease for non-attenders.

The same evaluation provided a description of the intervention as follows:

> “Schwartz Rounds provide a regular open forum for multidisciplinary staff to come together [and] reflect on, explore and tell stories about the difficult, challenging and rewarding experiences they face when delivering care. Rounds last for 1 hour and are often held during lunch periods (with food provided). The focus is on the psychosocial, ethical and emotional issues surrounding [relationships] – and attendees are encouraged to be open and honest, and reflect, discuss and explore their experiences, thoughts and feelings. [Rounds can lead to] improved communication and teamwork between staff and [families], improved well-being, enhanced resilience [and] improved compassionate care” (Maben et al., 2018, p.14).

In children’s social care, the intention is to adhere to this approach as closely as possible. Schwartz Rounds will be open to all staff in the intervention group – including social workers and other professionals and non-professionals who are directly employed to work in children’s services across the trial sites (e.g., family support workers, specialist adult workers, administrative and professional support staff, etc.). This reflects the multidisciplinary nature of the rounds in healthcare settings. Staff will be notified by email, via staff newsletters and other communications, and by presentations at team meetings. Sites will also be asked to convene steering groups, and to nominate a senior champion (or Practice Lead). Each site will also have a number of trained facilitators (at least two in each LA) and an administrator to support delivery. The facilitators, administrators and Practice Leads will be identified prior to randomisation and will not formally be part of either the intervention or the control groups. The Point of Care Foundation (the licensed provider of Schwartz Rounds in the UK) will train the facilitators and Practice Leads. Facilitators and Practice Leads will also receive ongoing mentoring support from the Point of Care Foundation throughout the trial and beyond. Point of Care Foundation mentors will observe one to two rounds at each site, in order to support implementation and advise on fidelity.

Phase two local authorities will deliver Schwartz Rounds virtually but will adhere to the approach outlined above as closely as possible. Facilitators and Practice Leads will undergo specific training with the Point of Care Foundation in order to facilitate virtual rounds.

The key similarities and differences between virtual Schwartz Rounds (or Team Time) and face-to-face Schwartz Rounds, as described by the Point of Care Foundation, are as follows:
**Similarities:**
Schwartz Rounds and Team Time are run by two trained facilitators, who assist those in attendance to avoid problem solving and to focus instead on emotional containment. They are open to members of staff from different backgrounds and roles, with story tellers acting as role models for sharing narratives from an emotional and social perspective. Those in the audience interact with one another based on shared experiences and resonances with the stories. Attendance is optional and the stories and experiences shared are kept confidential. The sessions are run on a strict time frame.

**Differences:**
Schwartz Rounds and Team Time differ because Team Time is aimed at smaller groups of people, not the whole organisation. There are fewer story tellers, and a shorter timeframe for the session overall, although they may be run more frequently. The focus of the stories is on current experiences, rather than past events. Team Time relies on virtual forms of communication without physical contact and interaction, including the sharing of food (which is a key feature of Schwartz Rounds). There is typically less preparation time involved with Team Time, and other techniques may be used such as mindful breathing.

You can read more about Team Time on the Point of Care Foundation’s website [here](#).
Logic Model

Schwartz Rounds Logic Model

Pre-requisites and contexts
- Senior management supportive of the intervention
- Available space to host Rounds
- Sufficiently skilled staff willing to be trained as facilitators

Activities
- Practice Lead
  - Attends training provided by Point of Care Foundation
  - Provides Schwartz Rounds in adherence to the core components
  - Takes lead responsibility

- Facilitator
  - Attends training provided by Point of Care Foundation
  - Provides Schwartz Rounds in adherence to the core components
  - Runs 6 x sessions per year

- Staff
  - Attend Schwartz Rounds

- Steering Group
  - Oversees implementation of Rounds and respond to any challenges/problems e.g. low attendance
  - Promotes attendance at Rounds with regular and helpful communication

- Administrator
  - Ensures rooms and catering are booked for each Round

Mechanisms
- Schwartz Rounds create a counter-cultural space, not decision-making or action orientated
- Staff feel able to share their personal experiences
- Staff recognise they have more shared experiences than they realised
- Staff have greater trust and empathy with one another
- Senior staff members share experiences
- Staff get to know each other better

Outcomes
- Improved psychological well-being for staff
- Reduced sickness rates
- Reduced staff turnover
This logic model is based on Maben et al. (2018, p. 99). For this trial, the primary aim is to measure the effect of Schwartz Rounds in children’s social care rather than to evaluate this logic model. In their report, Maben et al. (2018) suggest that Schwartz Rounds ‘work’ by offering staff a space in which they can share personal experiences of work. By being explicitly not a decision-making or action-oriented space, staff feel able to have different kinds of conversations about their work. By sharing personal work-related experiences with one another, staff come to recognise their shared experiences. This can be particularly powerful when senior members of staff are involved and share their stories. As staff feel more connected, they develop greater trust and empathy with one another. This in turn leads to an enhanced sense of connectedness between staff and better teamwork which leads to better psychological well-being for the staff involved.

Maben et al. (2018) identify four stages in the delivery of each round and nine context-mechanisms-outcome (CMO) configurations, detailing “what it is about [the] initiative that works, for whom and in what circumstances” (p. 95). The four stages are as follows:

1. Trust, emotional safety and containment
2. Countercultural/third space for staff
3. Storytelling
4. Role-modelling vulnerability
5. Shining a spotlight on hidden stories and roles
6. Self-disclosure
7. Contextualising service users and staff
8. Reflection and resonance
9. Group interaction

Detailed explanations of each of these CMOs can be found in Maben et al.’s report (2018, pp. 100-119).
Impact Evaluation

Hypotheses

The primary hypothesis is that at the end of the trial period (at T2), GHQ-12 scores in the intervention group will be lower than in the control group.

The GHQ-12 (General Health Questionnaire) is a screening tool for identifying increased risk of anxiety, depression and related psychiatric disorders in the general population. It is suitable for all ages and is widely validated. It has been used previously with social workers in four local authorities to assess their levels of stress and general wellbeing (Antonopoulou et al., 2017).

Secondary hypotheses are:

a. The proportion of GHQ-12 scores above the 'caseness' threshold (of 3) will be lower in the intervention group than in the control group at T2.

b. The number of days of sickness-related absence during the trial period will be lower in the intervention group than in the control group at T2.

c. Regular attendance at Schwartz Rounds will be associated with lower GHQ-12 scores compared with less regular and non-attendance.

d. Schwartz Rounds will be considered acceptable by the staff who attend.

We will also conduct some other exploratory analyses described in the analysis plan.

Design

The overall study design is an individually randomised control trial with group delivery of the intervention. It is a two-arm study, with an intention-to-treat intervention group and a waiting-list control, with the aim of assessing the effectiveness of Schwartz Rounds within children's social care in relation to the psychological well-being of staff.

<table>
<thead>
<tr>
<th>Trial Type and Number of Arms</th>
<th>Randomised control trial with two arms (intention-to-treat and waiting-list control)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Unit of Randomisation</td>
<td>Individual members of staff</td>
</tr>
<tr>
<td>Stratification Variables</td>
<td>Phase (one or two)</td>
</tr>
<tr>
<td>Secondary Outcome(s)</td>
<td></td>
</tr>
<tr>
<td>Primary Outcome</td>
<td>Psychological well-being of staff</td>
</tr>
<tr>
<td>Variable</td>
<td>GHQ-12</td>
</tr>
<tr>
<td>Measure (instrument, scale)</td>
<td></td>
</tr>
<tr>
<td>Secondary Outcome(s)</td>
<td></td>
</tr>
<tr>
<td>Variable(s)</td>
<td>Sickness-related absence</td>
</tr>
<tr>
<td>Measure(s) (instrument, scale)</td>
<td>Self-report</td>
</tr>
</tbody>
</table>
Enrolment

Staff in children's services at trial sites (n = TBC)

Excluded:
Declined to participate (n = TBC)

Randomised (n = TBD)

Allocation

Allocated to intervention (n = TBC)

Allocated to waiting list control (n = TBC)

Follow-up

Lost to follow-up (n = TBC)

Lost to follow-up (n = TBC)

Analysis

Analysed (n = TBC)

Analysed (n = TBC)
Data collection points

T1 data collection (GHQ-12 plus additional questions about personal and professional characteristics, views about the intervention and current forms of emotional support) will be collected electronically via Qualtrics. Links to the survey will be sent to members of children’s services staff at participating sites. Participants will be asked to include their initials and day and month of birth and/or their work email addresses, so that T1 responses can be linked with sessional feedback questionnaires (see below) and T2 questionnaire responses. Raw data will be downloaded from Qualtrics to a secure Cardiff University computer for analysis via SPSS or STATA. Data from each of the participating sites will be merged together into a single database.

T2 data collection (GHQ-12 plus additional questions about other forms of emotional support utilised within the trial period and views about the intervention) will be collected in the same way as T1 data.

To minimise missing data at T1 and T2, we will work with the Local Authority sites to ensure good communication with participants and ask that two follow-up reminders are sent to participants who do not complete the surveys after the first request. We will follow up any still-missing participants directly with the LA (i.e., they will be informed of participants who have not responded and asked to send a third follow-up request). We will also offer an incentive for completing the surveys at T1 and T2, entering each participant who does so into a draw to win £250, with one winner selected from each LA (Nb. One of the local authorities in phase one – Liverpool – opted out of this prize draw).

Anonymised versions of the entire dataset will be stored at Cardiff University for five years after publication of findings.

Randomisation

A researcher not otherwise involved in the study will use staff lists provided by the LAs to create equal-sized intervention and waiting-list-control groups, with staff randomly allocated to each group.

To achieve this, each LA will provide a pseudonymised list of staff working in children’s services (e.g., based on employee numbers). Using Excel’s randomisation feature a random number will be generated for each employee, the list will then be sorted from smallest to largest, and then split in half at the median value to create two equal sized groups (plus or minus one, if the list contains an odd number of staff; Zelen, 1979). Each LA will then be given a list of staff in each group, which they can re-identify and circulate, so as to ensure that members of staff know which group they are in (this information will not be shared with staff until after the T1 survey has been closed).
The control group will be asked not to attend Schwartz Rounds during the trial period but will continue to receive ‘business as usual’ support from their authorities. The intervention group will also continue to receive ‘business as usual’ support but will also be invited to attend Schwartz Rounds (whether virtually or face-to-face). For social workers, ‘business as usual’ support will likely include monthly one-to-one supervision with a line manager. In some sites, this may also include group supervision, reflective practice groups or other group-based interventions. Some sites may also provide staff with counselling services where this is required. For non-social work staff, ‘business as usual’ support may include some or none of these elements. We will ask staff about what other support they have available and what other support they have accessed as part of the T2 survey.

Direct contamination (by members of the control group attending Schwartz Rounds) will be measured via sessional feedback questionnaires. The extent and significance of indirect contamination (by members of the intervention group talking about the intervention outside of rounds) will be explored via focus groups at T2.

Analysts will be blinded to group allocation in relation to GHQ-12 and group-level absence data.

**Participants**

All local authorities in England were eligible to apply to take part in the trial. An initial call was made to the sector in January 2019, asking for applications, with a closing date of 8th February. Local authorities were selected on the basis of pre-set criteria: senior leadership support, ability to deliver the intervention, ability to facilitate randomisation and ability to support data collection. A second call was made to the sector in September 2019, asking for applications for phase two of the trial. Local authorities were selected on the basis of the same pre-set criteria. More details about the application process and the criteria can be found on the What Works for Children’s Social Care website.

All members of staff in participating children’s services departments are eligible to take part.
# Sample Size Calculations

<table>
<thead>
<tr>
<th></th>
<th>MDES (Proportion of a Standard Deviation)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>MDES</strong></td>
<td>0.23</td>
</tr>
<tr>
<td><strong>Baseline/Endline Correlations</strong></td>
<td></td>
</tr>
<tr>
<td>Child</td>
<td>n/a</td>
</tr>
<tr>
<td>Family</td>
<td>n/a</td>
</tr>
<tr>
<td>Social Worker</td>
<td>0.33</td>
</tr>
<tr>
<td><strong>Intracluster Correlations (ICCs)</strong></td>
<td></td>
</tr>
<tr>
<td>Family</td>
<td>n/a</td>
</tr>
<tr>
<td>Social Worker</td>
<td>n/a</td>
</tr>
<tr>
<td>Team</td>
<td>n/a</td>
</tr>
<tr>
<td><strong>Alpha</strong></td>
<td>0.05</td>
</tr>
<tr>
<td><strong>Power</strong></td>
<td>0.8</td>
</tr>
<tr>
<td><strong>One-sided or Two-sided?</strong></td>
<td>One-sided</td>
</tr>
<tr>
<td><strong>Level of Intervention Clustering</strong></td>
<td>Individual</td>
</tr>
<tr>
<td><strong>Average Cluster Size</strong></td>
<td>n/a</td>
</tr>
<tr>
<td><strong>Sample size of children’s services staff, including social workers and others (without drop out adjustment)</strong></td>
<td></td>
</tr>
<tr>
<td>Intervention</td>
<td>238</td>
</tr>
<tr>
<td>Control</td>
<td>238</td>
</tr>
<tr>
<td>Total</td>
<td>476</td>
</tr>
<tr>
<td><strong>Sample size of children’s services staff, including social workers and others (adjustment for 50% lost to follow-up)</strong></td>
<td></td>
</tr>
<tr>
<td>Intervention</td>
<td>476</td>
</tr>
<tr>
<td>Control</td>
<td>476</td>
</tr>
<tr>
<td>Total</td>
<td>952</td>
</tr>
<tr>
<td><strong>Sample size of children’s services staff, including social workers and others (adjustment for 75% lost to follow-up)</strong></td>
<td></td>
</tr>
<tr>
<td>Intervention</td>
<td>952</td>
</tr>
<tr>
<td>Control</td>
<td>952</td>
</tr>
<tr>
<td>Total</td>
<td>1904</td>
</tr>
</tbody>
</table>
Outcome measures

Our primary outcome is the psychological well-being of children’s services staff. The main secondary outcome is the amount of sickness-related absence. The primary outcome will be measured using the GHQ-12, administered at T1 (prior to the start of the intervention) and at T2 (which should be after four to six rounds have been provided, however for phase two, T2 will take place in March and April 2021 irrespective of how many rounds have been completed by that stage. The secondary outcome will be measured using self-report data collected as part of T2 (we previously intended to collect sickness-related data directly from LAs, however in phase one, none of the LAs were able to provide this data in relation to their staff groups, hence we will now rely on self-report data instead).

Analysis plan

Primary Analysis

The main outcome of the trial (preliminarily GHQ-12 scores) will be assessed through a linear regression model, specified as:

\[ Y_{it} = \alpha + \beta_1 S_i + \beta_2 Y_{it-1} + \beta_3 X_i + \epsilon_i \]

Where:

- \( Y_{it} \) is the level of an outcome measure observed by participant \( i \) at time \( t \) (the T2 survey).
- \( \alpha \) is a regression constant.
- \( S_i \) is a binary indicator of treatment assignment, set to 1 if participants have been assigned to treatment, and 0 else.
- \( Y_{it-1} \) is participant \( i \)'s baseline score for the outcome measure.
- \( X_i \) is a vector of participant level characteristics (gender, age, ethnicity, phase 1 or phase 2).
- \( \epsilon_i \) is a Huber white robust standard error.

Where participants have T2 data but not T1 data, \( Y_{it-1} \) will be inputted as 0, and a binary variable contained within the vector \( X \) denoting that baseline data are missing will be set to 1 (else 0).

Secondary analysis will be considered using matched exclusion. For this analysis the model used will be identical to the main model, with the data used for the model having been subject to exclusion. Participants for exclusion will be matched on characteristics contained within \( X \) and on their baseline GHQ-12 data.

The sample size for the RCT was based on a one-sided hypothesis and this will be reflected in the reporting of the results of the primary analysis.

Secondary Analysis

The main secondary hypotheses are:

a. The proportion of GHQ-12 scores above the ‘caseness’ threshold (of 3) at T2 will be lower in the intervention group compared to the control group. We will get evidence for this hypothesis by replacing the outcome measure in the primary analysis above with ‘caseness’ status (yes or no).

b. The number of days of sickness-related absence in the intervention group will be lower at T2 in the intervention group compared to the control group. We will get evidence for this hypothesis by replacing the primary outcome measure with the number of days of sickness-related absence and a baseline measure.
c. More regular attendance at Schwartz Rounds will be associated with lower GHQ-12 scores compared with less regular and non-attendance. We will conduct a complier average causal effect (CACE) analysis, with the treatment being replaced by the fraction of sessions attended and the treatment status being used as an instrument.

This will fit using two-stage least squares (2SLS),

\[ \text{Attendance}_i = \alpha + \beta_1 S_i + \beta_2 Y_{it-1} + \beta_3 X_i + \epsilon_i \]
\[ Y_{it} = \text{delta} + \beta_1 \text{Predicted attendance}_i + \beta_2 Y_{it-1} + \beta_3 X_i + \tau_{it} \]

where:

- Attendance is the fraction of sessions attended.
- \( \alpha \) and \( \text{delta} \) are regression constants.
- \( S_i \) is a binary indicator of treatment assignment, set to 1 if participants have been assigned to treatment, and 0 else. This is our instrumental variable.
- Predicted attendance is the fitted value of attendance from the first stage regression.
- \( Y_{it-1} \) is participant I’s baseline score for the outcome measure.
- \( X_i \) is a vector of participant level characteristics.
- \( \epsilon_i \) is a Huber white robust standard error.
- \( \tau_{it} \) is a Huber white robust standard error.

d. Schwartz Rounds will be considered acceptable by the intervention group. We will measure this with the IPE as set out below.

**Exploratory Analysis**

In addition to the primary and secondary analyses outlined above, we will seek to explore whether there are any associations in our data between GHQ-12 scores and the following variables – local authority, team, role, length of time in post, gender, ethnicity and age. We will also look at any differences based on face-to-face or virtual attendance. This analysis is only exploratory, and the study is not powered for this.

**Contextual Factors Analysis**

Although the intervention will be implemented in a similar way within the phase one authorities and within the phase two authorities, each site is likely to be distinctive in some potentially important way.

There are various contextual factors that could influence the effectiveness of the treatment. The four that appear most likely in prospect are:

- Baseline GHQ-12 scores
- Level of support and enablement for staff to attend the rounds
- Workforce composition
- Delivery of the intervention face-to-face or virtually

Other unexpected factors may also influence effectiveness, such as Ofsted inspections or a high-profile incident in the authority.

We will explore these contextual factors via focus groups and interviews at T2.
Implementation and Process Evaluation

The implementation and process evaluation will seek to address the following questions:

• Is it feasible to implement Schwartz Rounds (face-to-face and online) in children’s services?
• What adaptations, if any, are made to the intervention as it is implemented in children’s services?
• How do social workers and other members of staff view the experience of attending Schwartz Rounds?
• For members of staff in the intervention group who do not attend, what reasons do they give for their non-attendance?
• For members of staff who attend irregularly (between 1-3 Schwartz Rounds), what reasons do they give for their irregular attendance?
• For members of staff who attend regularly (4+ Schwartz Rounds), what reasons do they give for their regular attendance?
• How do key informants within children’s services (e.g., Assistant Directors, Principal Social Workers, Heads of Service, facilitators and Practice Leads) view the intervention?
• What impact do attendees think Schwartz Rounds have had on their psychological wellbeing?
• What impact do attendees think Schwartz Rounds have had on their work with children and families?

The primary methods for addressing these research questions will be interviews (with key informants) and focus groups (with members of staff). The data gathered from these methods will be supplemented via sessional feedback questionnaires, completed by participants at the end of each Schwartz Round.

The level of fidelity in each local authority will be assessed jointly by the evaluation and the intervention team, based on Maben et al.’s (2018) nine CMOs. Experienced trainers from the Point of Care Foundation will observe at least one round or virtual round in each site. Researchers from the evaluation team will do the same. The researchers and the experienced trainers will discuss their observations of each site and agree whether they have successfully implemented the intervention.

During both phases of the project, at least two Schwartz Rounds will be observed at each site, one by the Point of Care Foundation and one by a researcher from the evaluation team. Research observations will be recorded in hand-written notes, with reference to the nine CMOs identified by Maben et al. (2018).

Sessional feedback questionnaires will be handed out on paper to every attendee at a face-to-face Schwartz Round and distributed via Qualtrics to each attendee at a virtual Schwartz Round. These forms are used widely in Schwartz Round studies and ask people to report their subjective experience of having attended. We will also use these as a record of attendance, by asking participants to include their initials and day and month of birth. We will also ask each LA for a record of how many people attended each session. The paper forms will be collected back in at the end of each round and collected from each site by a member of the research evaluation team. The data from the forms (both paper and online) will be entered into SPSS. The SPSS database will be stored securely on a Cardiff University computer. Paper copies are kept in a secure locked cupboard at Cardiff University, accessible only to members of the evaluation team.

Focus groups and interviews will be held for each site, either in the local authority offices or online. Interviews and focus groups will be conducted and facilitated by members of the evaluation team. They will be audio recorded using digital Dictaphones. Recordings will be uploaded to a secure Cardiff computer and deleted from the Dictaphone as soon as reasonably possible. Interviews and
focus group recordings will then be transcribed and analysed using Nvivo, based on a coding framework developed from the relevant research questions.

To help compare the experience of attending and providing face-to-face and virtual rounds, we will also conduct interviews with key informants and staff members in two phase one authorities (who provided face-to-face rounds previously and during the Covid-19 associated lockdown have switched to virtual rounds).

**Cost Evaluation**

An economic evaluation will be incorporated into the trial design for the collection of both costs and outcomes data at T1 and T2. A cost-effectiveness analysis (CEA) will be carried out from a social care perspective.

Costs related to the delivery of Schwartz Rounds will encompass the costs of setting-up and delivering the Schwartz Rounds intervention. These will include training costs for the Practice Lead and facilitators of the Schwartz Rounds at each local authority, venue and catering costs for each face-to-face Schwartz Round and staff costs including time spent attending a Schwartz Round as well as time spent on preparation and administrative tasks in-between each round.

Direct and indirect costs of the intervention will be gathered from each local authority:

- The direct cost of the contract with the Point of Care Foundation is £5,000 per authority.
- Data on room use and catering costs will be collected from each local authority conducting face-to-face Schwartz Rounds.
- Staff time for attendance will be calculated based on sessional feedback questionnaires.
- Staff time for preparation and administration will be collected from each local authority, via interviews with facilitators, Practice Leads and administrators.
- We will also consider what different costs might be associated with virtual rounds, compared to face-to-face rounds e.g., no money required for food, additional costs for IT equipment.

In addition, sickness-related absences will be tracked at the level of the individual social worker to calculate any potential savings resulting from the intervention. This will be based on knowledge of the grade of each social worker randomised in the trial applied to administrative data on sickness-related absence and retention collected from each local authority. This data will be used to calculate any potential savings resulting from the intervention.

The results of the CEA will be expressed in an incremental cost per unit reduction in the GHQ-12 score. The impact of uncertainty on the CEA results will be quantified by carrying out a probabilistic sensitivity analysis and summarising the results using cost-effectiveness acceptability curves.
Ethics & Participation

Ethical approval for the study has been given by the School of Social Sciences, Cardiff University.

Staff in participating local authorities will be given information and consent sheets about the study. Each local authority will then implement an individual communication strategy, to ensure staff are aware of the intervention, involving a mixture of email bulletins, intranet blogs and staff briefing sessions. Written consent will be obtained from each attendee at each Schwartz Round (to ensure that irregular attendees, who may not have attended the first round or any round before, are also given the opportunity to consent or not). This will be done as part of the sessional feedback questionnaire. Questionnaires will be given out to each member of staff upon arrival at the round by one of the facilitators or the Practice Lead. At the end of each round, staff will be reminded to fill in the questionnaire and return it to the facilitators on their way out. If staff have already completed a consent form, they will not need to fill in another one on subsequent rounds but may choose to do so as part of completing the feedback questionnaire.

Each member of staff in the department will also be emailed a T1 and T2 questionnaire (including the GHQ-12). Completion of the questionnaire will be voluntary. This will be made clear in the invitational email and at the start of the questionnaire itself.

Data Protection

We will only collect and process data in order to address our research questions. In all circumstances, the identities of individuals taking part in the study and the data they provide will be kept confidential and will only be used for research purposes. Participants will be informed of their right not to take part in the study, either by not attending Schwartz Rounds or by attending without taking part in data collection activities.

Data will be processed only when the data subject has given consent to the processing of his or her personal data for the specific purpose of conducting this trial.

All data collected will be stored securely on Cardiff University computers.

Cardiff University’s research data protection notice can be read – [here](#).

Personnel

Evaluation Team
- David Wilkins, Principal Investigator, Cardiff University (for phase one and two)
- Zoe Bezecky, Research Assistant, Cardiff University (for phase one and two)
- Aimee Cummings, Research Support Officer, Cardiff University (for phase one)
- Sarah Thompson, Research Associate, Cardiff University (for phase two)

Delivery Team
- Julian Groves, Head of Staff Experience Programme and Resources, Point of Care Foundation
- Participating local authorities
**Timeline**

This timeline includes both phase one and phase two local authorities. At the time of writing, data collection in phase one authorities has been completed.

<table>
<thead>
<tr>
<th>Dates</th>
<th>Activity (phase one)</th>
<th>Activity (phase two)</th>
<th>Staff Responsible/Leading</th>
</tr>
</thead>
<tbody>
<tr>
<td>March 2019</td>
<td>First contact between phase one local authorities and the Point of Care Foundation</td>
<td></td>
<td>David Wilkins</td>
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<tr>
<td>March and April 2019</td>
<td>Nomination of Practice Leads, facilitators and administrators</td>
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<td>Local authorities</td>
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<tr>
<td>April and May 2019</td>
<td>Collection of T1 questionnaire data</td>
<td></td>
<td>David Wilkins and Practice Leads</td>
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<tr>
<td>May 2019</td>
<td>Initial training for facilitators</td>
<td></td>
<td>Point of Care Foundation and Practice Leads</td>
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<td>June 2019</td>
<td>First Schwartz Rounds in each local authority</td>
<td></td>
<td>Facilitators and Practice Leads</td>
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<tr>
<td>September 2019</td>
<td>Mid-way key informant interviews</td>
<td></td>
<td>David Wilkins and Practice Leads</td>
</tr>
<tr>
<td>End of December 2019</td>
<td>Completion of the sixth Schwartz Round in each local authority</td>
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<td>Facilitators and Practice Leads</td>
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<tr>
<td>January and February 2020</td>
<td>Collection of T2 questionnaire data</td>
<td></td>
<td>David Wilkins and Practice Leads</td>
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<tr>
<td>February 2020</td>
<td>Focus groups and follow-up key informant interviews</td>
<td></td>
<td>David Wilkins and Practice Leads</td>
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<tr>
<td>July 2020</td>
<td>Set-up discussions with phase two local authorities</td>
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<td>David Wilkins</td>
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<tr>
<td>August, September and October 2020</td>
<td>Training to deliver virtual Schwartz Rounds</td>
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<td>Local authorities/Point of Care Foundation</td>
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<tr>
<td>October and November 2020</td>
<td>Collection of T1 questionnaire data</td>
<td></td>
<td>David Wilkins and Local Authorities</td>
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<tr>
<td>October and November 2020</td>
<td>First virtual Schwartz Rounds held</td>
<td></td>
<td>Local authorities/Point of Care Foundation</td>
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<tr>
<td>December 2020 and January 2021</td>
<td>Mid-way key informant interviews</td>
<td></td>
<td>David Wilkins and local authorities</td>
</tr>
<tr>
<td>Date</td>
<td>Activity</td>
<td>Participants</td>
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<tr>
<td>January to March 2021</td>
<td>Fourth, fifth and sixth Schwarz Rounds held</td>
<td>Local authorities/Point of Care Foundation</td>
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<tr>
<td>April 2021</td>
<td>Collection of T2 questionnaire data</td>
<td>David Wilkins and local authorities</td>
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<tr>
<td>April 2021</td>
<td>Focus groups and follow-up key informant interviews</td>
<td>David Wilkins and local authorities</td>
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<td>June 2021</td>
<td>Final report</td>
<td>David Wilkins</td>
<td></td>
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**Registration**

The protocol was registered with Open Science Framework (osf.io) on 11th December 2020 - osf.io/hvdgt.

**References**


