

# SWAT 164: Effects of increasing incentives on participant response to data collection at 6 months follow up

## Objective of this SWAT

To determine whether the offer of a higher financial incentive for questionnaire completion improves response rate at 6 months follow up.

Study area: Follow-up, Retention

Sample type: Participants

Estimated funding level needed: Low

## Background

Poor retention of participants in clinical trials can result in missing outcome data, which can introduce bias, reduce statistical power and affect the reliability, validity and generalisability of the trial's findings.[1] It is therefore important to develop and test effective means of retaining participants.[2] This might include different levels of incentive and, for example, Bailey et al found that increasing the incentive from £10 to £20 for return of outcome data in an online randomised trial resulted in a 6-10% increase in outcome data at 3 months.[3]

This SWAT will investigate whether the strategy of offering higher incentives for questionnaire completion improves response rates and will be embedded in the Quit Sense Feasibility Randomised Control Trial [4] (ISRCTN12326962, NRES 19/WA/0361). Furthermore, as this SWAT is embedded in a feasibility randomised trial, findings will be used to inform a future full-scale trial. Participants will be randomly allocated to either receive an incentive worth £10 (the currently advertised rate) or £20 (the increased incentive) for completing a questionnaire at 6-month follow-up.

## Interventions and comparators

Intervention 1: £10 voucher incentive as previously mentioned in the trial information, if the 6-month primary outcome data are completed. All participants will be sent automated notifications 1 week before the 6-month questionnaire is due (pre-questionnaire notification), at the 6-month time point with a link to the questionnaire, and 7 days after the questionnaire due date with a reminder message. Two weeks after the questionnaire due date, the Research Associate will attempt manual follow-up to collect the data by telephone. The automated notification will remind the participant of the follow up incentive.

Intervention 2: £20 voucher, the increased rate, if the 6-month primary outcome data are completed. All participants will be sent automated notifications 1 week before the 6-month questionnaire is due (pre-questionnaire notification), at the 6-month time point with a link to the questionnaire, and 7 days after the questionnaire due date with a reminder message. Two weeks after the questionnaire due date, the Research Associate will attempt manual follow-up to collect the data by telephone. The automated notification will state the increased incentive amount.

Index Type: Incentive

## Method for allocating to intervention or comparator

Randomisation

## Outcome measures

Primary: Questionnaire response rate. This will include those responding by all methods (text, online or by telephone follow up) within the allowable window for the primary outcome question (smoking status at 6 months).

Secondary: 1. Time taken for participants to respond to the questionnaire

2. Number of participants requiring manual follow-up by the Research Associate (i.e., cost implications of staff time)

3. Completeness of responses (counted as the number of missing items from all items asked, including secondary outcomes) and comparison to the response rate for the primary outcome (smoking status at 6 months)

## Analysis plans

Response rates and other related response data will be summarised.

We will run a logistic regression model, including stratification variables as co-variates in the model and any participant characteristics that appear to be imbalanced between the different incentive groups, with response rate as the dependent variable. For secondary analyses, we will run further regression models and we will use an appropriate statistical approach (such as a Kaplan-Meier curve) for assessing the effects of incentives on response time.

### **Possible problems in implementing this SWAT**

Increased incentive rate was not costed in the original grant application but funding is available to cover this relatively small extra cost.

Participants are recruited to the host trial online all over England, through Google, social media platforms etc. It is possible that a small number of participants know each other and may discuss their involvement in the trial with each other. Finding out that someone they know was offered a higher incentive may dis-incentivise them, but this is unlikely and no-one has reported this through planned qualitative work in the host trial.

### **References**

1. Gillies K, Kearney A, Keenan C, et al. Strategies to improve retention in randomised trials. *Cochrane Database of Systematic Reviews* 2021;(3):MR000032. doi: 10.1002/14651858.MR000032.pub3
2. Bradshaw LE, Montgomery AA, Williams HC, et al. Two-by-two factorial randomised study within a trial (SWAT) to evaluate strategies for follow-up in a randomised prevention trial. *Trials* 2020;21:529. doi: 10.1186/s13063-020-04373-4
3. Bailey JV, Pavlou M, Copas A, et al. The Sexunzipped Trial: Optimizing the Design of Online Randomized Controlled Trials. *Journal of Medical Internet Research* 2013;15(12):e278. doi: 10.2196/jmir.2668
4. Naughton F, Brown C, High J, et al. Randomised controlled trial of a just-in-time adaptive intervention (JITAI) smoking cessation smartphone app: the Quit Sense feasibility trial protocol. *BMJ Open* 2021;11:e048204. doi: 10.1136/bmjopen-2020-048204

### **Publications or presentations of this SWAT design**

### **Examples of the implementation of this SWAT**

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