SWAT 118: Timing of text message and email communication to improve questionnaire return rates

Objective of this SWAT

To investigate the effects of the timing of text message communication with participants on questionnaire return rates in a randomised trial. Participants will be randomised to receive all trial reminder text messages in the morning (approximately 8am) or in the evening (approximately 7pm).

Study area: Data Quality, Follow-up, Outcomes Sample type: Participants Estimated funding level needed: Low

Background

Failure to collect outcome data in randomised trials is inefficient and can result in bias and loss of statistical power.[1] A great deal of effort is often expended in recruiting participants to trials and ensuring that as many of these participants as possible are retained and provide outcome data can greatly improve research efficiency and minimise the risk of bias resulting from incomplete data.

This SWAT is embedded in the DEVA study (ISRCTN91800263), in which the participants do not return to clinic after receiving their treatment. Outcome data are collected at 4 weeks and 12 weeks after randomisation through questionnaires (online or postal), which participants are alerted to via text messages and/or e-mail. It is not known whether the timing of these text messages may have an effect on the return of questionnaires but informal feedback from a previous trial and discussion with the patient and public involvement (PPI) group found that the timing may be important. [2]

Interventions and comparators

Intervention 1: Reminder emails and text messages sent in the morning (approximately 8am) Intervention 2: Reminder emails and text messages sent in the evening (approximately 7pm)

Index Type: Method of Follow-up

Method for allocating to intervention or comparator

Randomisation

Outcome measures

Primary: The proportion of participants returning their week 4 questionnaire.Secondary: 1) The proportion of participants returning their week 12 questionnaires2) The time to return of the week 4 and week 12 questionnaires from randomisation3) The number of primary outcomes (in main trial) obtained by questionnaire, text message and phone call.

Analysis plans

The SWAT analyses will not include between treatment group comparisons but will include treatment as a co-variate. One interim analysis is planned 12 months after the first participant has been randomised, examining the week 4 questionnaire return rates only. If the difference between return rates is such that the lower limit of the 95% CI between the two groups has an absolute value of 3% or more, the strategy showing the greatest return rate will then be implemented for all future participants. Otherwise, the SWAT will continue until the end of the host trial. Analyses will include appropriate descriptive statistics and between-group comparisons for each strategy using multivariate regression models, with site and treatment group as covariates.

Possible problems in implementing this SWAT

The text messages will be sent out via an automated system so there could be instances where this system fails.

References

1. Brueton VC, Tierney J, Stenning S, Harding S, Meredith s, Nazareth I, Rait G. Strategies to improve retention in randomised trials. Cochrane Database of Systematic Reviews 2013; 12: MR000032.

2. HTA Project: 15/110/02 - A randomised controlled trial to assess the clinical and cost effectiveness of topical lactic acid gel for treating second and subsequent episodes of bacterial vaginosis

Publications or presentations of this SWAT design

Examples of the implementation of this SWAT

People to show as the source of this idea: Trish Hepburn, Clare Brittain, Rebecca Haydock, Jane Daniels, Mara Ozolins, Richard Swinden, Janet Wilson and Jonathan Ross Contact email address: deva@nottingham.ac.uk Date of idea: 9/SEP/2019 Revisions made by: Date of revisions: