SWAT 109: The effectiveness of a text message reminder which participants can respond to, compared with a 'no reply' text message on questionnaire response rates

Objective of this SWAT
To evaluate the effectiveness on completion of follow-up postal questionnaires of sending a two-way text message reminder compared with a standard one-way text message with no option to reply.

Study area: Retention, Follow-up
Sample type: Participants
Estimated funding level needed: Low

Background
Many trials struggle with participant retention and completion of follow-up questionnaires. Text messaging is a simple and cost effective form of communication that has been shown to be effective for improving trial recruitment [1] and increasing return rates of postal questionnaires in trials.[2] However, messages are often sent from automated services that are issued 'one-way' only, which means participants are not able to reply to the reminder message. Sending messages to participants from a 'two-way' messaging service allows participants to reply and interact with the trial team and seek support for trial-related queries. This may improve retention, completion of questionnaires and/or participant attendance at trial appointments. This SWAT is being undertaken in collaboration with the PROMoting THE USE of SWATs (PROMETHEUS) programme (Medical Research Council Grant number MR/R013748/1)
https://www.york.ac.uk/healthsciences/research/trials/research/swats/prometheus.

Interventions and comparators
Intervention 1: "Two way" text messages sent at the same time as host trial participants are expected to receive their postal follow-up questionnaire. The text message will encourage them to text back if they have any queries.
Intervention 2: "One way" text message sent at the same time as host trial participants are expected to receive their postal follow-up questionnaire. Participants will not be able to reply to this message.

Index Type: Reminder

Method for allocating to intervention or comparator
1:1 randomisation

Outcome measures
Primary: Proportion of questionnaires completed at the 3-month follow-up.
Secondary: ~ Time to questionnaire return (number of days between the questionnaire being mailed to participants and it being recorded as returned).
~ Proportion of patients requiring at least one return reminder notice (a letter at 2 and 4 weeks and a telephone call at 6 weeks if the questionnaire is not returned).
~ If possible, qualitative methods will be used to interrogate the text message responses sent by participants to explore topics and reasons for contacting the trial team.
~ If possible, a descriptive exploration will be done of whether text message topics sent by participants were associated with response rates to questionnaires.

Analysis plans
For the primary outcome, the difference in proportions of participants who returned a valid questionnaire to the trial team will be calculated with 95% confidence interval, and the Chi Square test will be used to assess statistical significance of any difference between the SWAT groups. Additionally, a logistic regression adjusting for age, gender and host trial allocation will be performed to assess the effect of the text message allocation.
The secondary outcome of time to questionnaire return will be assessed by a Kaplan Meier curve and the text message interventions compared by log rank test. Cox regression will be applied adjusting for age, gender and host trial allocation, and the effect of the intervention reported.

Analysis of the requirement for any questionnaire return reminder will be done in the same way as the analysis of the primary outcome.
Qualitative content analysis methods will be used to interrogate the text message responses from participants, to explore their topics and reasons for contacting the trial team and whether text message topics sent by participants were associated with response rates to questionnaires.

Possible problems in implementing this SWAT
None anticipated.

References
1. Free C, et al. Three controlled trials of interventions to increase recruitment to a randomized controlled trial of mobile phone based smoking cessation support. Clinical Trials 2010; 7(3): 265-73.
2. Clark L, et al. Electronic prompts significantly increase response rates to postal questionnaires: a randomized trial within a randomized trial and meta-analysis. Journal of Clinical Epidemiology 2015; 68(12): 1446-50.

Publications or presentations of this SWAT design

Examples of the implementation of this SWAT

People to show as the source of this idea: Dr Adwoa Parker, Dr Stephen Brealey, Prof Hemant K. Sharma, Mr Charlie Welch, Ms. Ada Keding, Ms. Lydia Flett, Ms Debbie Hunkins, Mr. Jonno Witts, Dr. Catriona McDaid
Contact email address: adwoa.parker@york.ac.uk; prometheus-group@york.ac.uk
Date of idea: 1/SEP/2017
Revisions made by:
Date of revisions: