

SWAT 162: Testing Online Recruitment Methods Via Social Media

Objective of this SWAT

To determine the effects of different recruitment channels (Facebook, Twitter, and Quick Response (QR) code) on recruitment for the host trial and cost-per-recruited participant, and to establish the user acceptability of the three recruitment channels.

Study area: Recruitment, Retention

Sample type: Participants

Estimated funding level needed: Medium

Background

Fewer than 50% of trials meet their recruitment target [1]. The evidence available to trialists to support decisions on design, conduct, and reporting of recruitment strategies for randomised trials is sparse, suggesting further trial methodology work is needed [2]. The PRioRiTy study publication identified and prioritised 20 key unanswered trial recruitment questions, using a methodologically rigorous process [3]. This SWAT will contribute to the evidence base for the following unanswered priority question, "Does feasibility testing of recruitment procedures lead to improvements in recruitment?".

We know that approximately 80% of adults use social media, yet their efficacy in recruitment for clinical trials remains under-explored [4]. This SWAT will seek to determine which recruitment method (Twitter, Facebook or Quick Response [QR] code [via distributed leaflet]) is most efficient and cost effective for recruiting participants to the primary host trial, using a cluster randomised cross-over design.

Initially, six GAA (Gaelic Athletic Association) sports clubs will be randomly assigned to either Facebook (n=2), Twitter (n=2) or QR Code (n=2) for one month. After one month, the six GAA clubs will be re-randomised to one of the other recruitment methods; i.e., the two Facebook clubs would then be randomised to get either twitter or QR codes, the two Twitter clubs would get either QR codes or Facebook and the two QR code clubs would get either Facebook or Twitter. After a further month (month 3) the clubs will each change to the recruitment method that they have not yet been randomised to, for a period of one month.

Interventions and comparators

Intervention 1: Facebook: GAA club gatekeeper will post a link to the host trial's online survey twice per week where players will log their interest in participating in the host trial.

Intervention 2: Twitter: GAA club gatekeeper will send a tweet containing a link to the survey twice per week.

Intervention 3: QR codes: Flyers with QR codes will be distributed in GAA clubs during matches or training twice per week. QR codes can be scanned using smart devices and will direct players to the survey link.

Index Type: Method of Recruitment

Method for allocating to intervention or comparator

Randomisation

Outcome measures

Primary: 1) Proportion of participants who consent to participate in the host trial, relative to the number of players contacted; 2) proportion of participants who consent to participate in the host trial, relative to the number of players who clicked the link to the consent form.

Secondary: 1) Proportion of participants randomised who remain to the conclusion of the study (primary retention outcome); 2) proportion of players who click the link and consent to the host trial; 3) cost-per-strategy: unit cost per person clicking the link; 4) cost-per-strategy: unit cost per person consented to the host trial; 5) cost-per-strategy: unit cost per person retained at final endpoint of the host trial.

Analysis plans

Denominator for Facebook: The GAA club will have a record of males who are on the club's Facebook page, which will determine the total number targeted (denominator). We will also monitor the number of impressions. It is likely that some of these players will pass the study link to other players. To capture this, we will have two questions on the consent form asking men if (a) they are a member who is on the X GAA Club Facebook and (b) if they learned about the study via the GAA club Facebook page directly, or in a referral from someone else.

Denominator for Twitter: On Twitter there is an Engagement API (cost implication) which measures (a) impressions (a count of how many times the Tweet has been viewed) and (b) engagements (a count of the number of time a user has interacted with the Tweet). It also monitors how often the tweet has been favoured, liked, retweeted, replied, shared and a variety of other metrics. This will give us our denominator.

Denominator for QR code: We will keep a record of the number of fliers with the QR code distributed to a person in each club. This will give us the denominator.

Data will be recorded electronically, monitored from each survey response, and on the host platforms (Facebook, Twitter). Exploratory data analyses will be conducted, and outliers will be reconciled. Analyses will be conducted on an intention-to-treat basis using the cluster randomization scheme. Analyses will be conducted using R and, in all cases, a 2-sided type I error rate of 0.05 will be taken as statistically significant.

Possible problems in implementing this SWAT

We are dependent on the gatekeepers and stakeholders within the GAA clubs. Some difficulty might arise when gaining access to the social media accounts of each club involved.

References

- [1] Gardner HR, Fraser C, MacLennan G, Treweek S. A protocol for a systematic review of non-randomised evaluations of strategies to improve participant recruitment to randomised controlled trials. *Systematic reviews*. 2016;5:131. PMID: 2945841
- [2] Treweek S, Bevan S, Bower P, et al. Trial forge guidance 1: what is a study within a trial (SWAT)? *Trials*. 2018;19:139. PMID: 29475444
- [3] Healy P, Galvin S, Williamson PR, et al. Identifying trial recruitment uncertainties using a James Lind Alliance priority setting partnership—the PRioRiT_y (Prioritising recruitment in randomised trials) study. *Trials*. 2018;19:147. PMID: 29490702
- [4] Fox S. *The social life of health information*, 2011. Washington, DC: Pew Internet & American Life Project.

Publications or presentations of this SWAT design

Examples of the implementation of this SWAT

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