SWAT 189: How does offering a choice of data collection mode affect recruitment and data collection in a feasibility study of a cancer symptom awareness intervention (TIC-TOC Study)?

Objective of this SWAT
To investigate the effect of being given a choice of mode of data (questionnaire) collection on completion rates.

Study area: Recruitment
Sample type: Participants
Estimated funding level needed: Unfunded

Background
Recruiting participants to trials and studies is seen as the most important challenge for CTUs in the UK.[1] Recruiting participants to a study can be difficult, and many fail to reach the recruitment target necessary for an adequately powered study, which can result in failure to detect group differences or early closure of the study and create ethical issues.[2]

The TIC-TOC study aims to assess the feasibility and acceptability of delivering and evaluating the TIC-TOC campaign, a community-based cancer symptom awareness intervention delivered in an area of high socioeconomic deprivation.[3] One of the main objectives of the study is to determine whether it is feasible to evaluate the TIC-TOC intervention, including whether recruitment rates for completion of a questionnaire as set out in the protocol can be achieved.

Participants identified to take part in the TIC-TOC study were those referred to a Multidisciplinary/Rapid Diagnostic Centre (M/RDC) by their GP after presentation with possible vague cancer symptom(s). In the original study design, it was intended that paper-based self-completed questionnaire data would be collected at the RDC. Other cancer awareness studies have had some success in recruiting similar populations when recruitment was completed face-to-face.[4] However, due to the COVID-19 pandemic, patients stopped visiting the M/RDC at study sites, and were directed instead to other departments for any tests or imaging and then given their results in a telephone consultation.

To adapt to pandemic-related changes in how patients were assessed by the M/RDC, we changed our data collection processes, moving from paper-based questionnaires given to patients while attending the RDC to data collection by telephone-based questionnaire. Participants were approached by RDC staff during a telephone call intended to book an RDC clinic appointment, and verbal consent was obtained to pass their details to the study team. The study team telephoned those who agreed to this, and if the person agreed to take part in the study, consent was taken and a questionnaire completed.

Other methods of remote data collection were also considered, including collecting data via an online platform or a postal questionnaire, but data collection by telephone was considered preferable due to the need for data to be collected before the RDC appointment (which made collection via postal questionnaire problematic because appointments at the RDC tended to be arranged within days of referral). Furthermore, although internet usage has increased among older populations over recent years,[5] access to online/digital platforms for those from a low socio-economic background may still present issues for recruitment to this study.[6]

As COVID-19 restrictions eased, patients started to be seen in person at the clinic, and, therefore, this SWAT aims to test whether (1) choice of data collection method can increase participant recruitment and questionnaire completion, and (2) if there are preferences shown between the different modes of data collection (paper questionnaire in clinic, paper questionnaire at home, online questionnaire, telephone questionnaire).

The findings from this SWAT will be used to inform decision making about the acceptability and feasibility of data collection to help inform whether to progress to a full trial. Findings from this SWAT will also inform the trade-off between whether it would be better to collect more data after the RDC appointment by offering participants a choice of how to complete the questionnaire versus

a potential lower response rate from participants who complete the questionnaire before their appointment.[7,8,9]

The aim of this SWAT is to ascertain whether we can achieve higher consent rates when we let potential participants choose the mode of data collection. We will also seek to identify the most popular mode of data collection.

Interventions and comparators
Intervention 1: Participant given a choice as to mode of data completion.
Intervention 2: Participant not given a choice as to mode of data completion.

Index Type: Questionnaire Format, Method of Recruitment

Method for allocating to intervention or comparator
Non-Random

Outcome measures
Primary: consent rates: the proportion of participants who consent to data collection from those approached when given a choice of data collection mode (data will be collected oncer per week over an 8 weeks) will be compared with the proportion of participants who consent to data collection when not given a choice of data collection mode in each study site.

Secondary: (a) proportions choosing each mode of data collection (paper questionnaire in clinic, paper questionnaire at home, online questionnaire, telephone questionnaire) when given the choice; (b) relationship between participant characteristic and mode of data collection; (c) proportion of missing data for each data collection mode; (d) reason why the participant chose to complete the questionnaire in their chosen mode (based on an additional free text question at the end of the questionnaire); and (e) time interval between approach to participant and completion and return of the questionnaire.

Analysis plans
Descriptive analyses of the number of participants approached during the SWAT time period and the number of participants who consent to completing the questionnaire by mode. We will assess choice of mode by key demographics such as age, sex, education, comorbidities etc. The proportion of missing data for the whole questionnaire for each mode of data collection will be analysed. We will also describe if some questions are more complete than others. We will reflect on the fact that telephone interview is completed with an interviewer whereas other modes are not. Qualitative analyses (thematic) will be conducted on the answers to the free text question regarding why a participant chose a particular mode.

Possible problems in implementing this SWAT

References
1. Tudur Smith C, Hickey H, Clarke M, et al. The trials methodological research agenda: results from a priority setting exercise. Trials 2014;15:32.
2. McDonald AM, Knight RC, Campbell MK, et al. What influences recruitment to randomised controlled trials? A review of trials funded by two UK funding agencies. Trials 2006;7:9.
3. Smith P, Moody G, Clarke E, et al. Protocol for a feasibility study of a cancer symptom awareness campaign to support the Rapid Diagnostic Centre referral pathway in a socioeconomically deprived area: Targeted Intensive Community-based campaign To Optimise Cancer awareness (TIC-TOC). BMJ Open 2022;12(10): e063280.
4. Kolovou V, Moriarty Y, Gilbert S, et al. Recruitment and retention of participants from socioeconomically deprived communities: lessons from the Awareness and Beliefs About Cancer (ABACus3) Randomised Controlled Trial. BMC Medical Research Methodology 2020;20:272.
5. Office for National Statistics. Internet users, UK: 2020. Available at https://www.ons.gov.uk/businessindustryandtrade/itandinternetindustry/bulletins/internetusers/2020 (accessed 7 November 2022).
6. Office for National Statistics. Exploring the UK's digital divide. Available at https://www.ons.gov.uk/peoplepopulationandcommunity/householdcharacteristics/homeinternetand

socialmediausage/articles/exploringtheuksdigitaldivide/2019-03-04#what-other-patterns-are-there-in-internet-usage (accessed 7 November 2022).
7. Walter FM, Rubin G, Bankhead C, et al. Symptoms and other factors associated with time to diagnosis and stage of lung cancer: a prospective cohort study. British Journal of Cancer 2015;112(1):S6-13.
8. Walter FM, Emery JD, Mendonca S, et al. Symptoms and patient factors associated with longer time to diagnosis for colorectal cancer: results from a prospective cohort study. British Journal of Cancer 2016;115(5):533-41.
9. Walter FM, Mills K, Mendonça SC, et al. Symptoms and patient factors associated with diagnostic intervals for pancreatic cancer (SYMPTOM pancreatic study): a prospective cohort study. Lancet Gastroenterology & Hepatology 2016;1(4):298-306.

Publications or presentations of this SWAT design

Examples of the implementation of this SWAT
SWAT has been implemented in the TIC-TOC trial, results will be available early 2023.

People to show as the source of this idea: Gwenllian Moody, Pamela Smith, Katherine Brain, Grace McCutchan, Rebecca Cannings-John
Contact email address: moodyg@cardiff.ac.uk
Date of idea: 1/MAY/2022
Revisions made by:
Date of revisions: