

# **SWAT 100: Patient and family co-developed participant information to improve recruitment rates, retention, and patient understanding of a randomised trial**

## **Objective of this SWAT**

To examine if participant information co-developed by patients and their families can lead to greater recruitment rates, retention, and participant understanding of the study in comparison to standard participation information leaflets in the Rehabilitation Strategies following Oesophago-gastric and Hepatopancreaticobiliary Cancer (ReStOre II) trial.

Specific objectives are;

- To engage with patients with upper gastrointestinal (UGI) cancer, namely oesophageal/gastric/pancreatic/liver cancer and their family members to develop participant information for ReStOre II.
- To examine the impact of the patient and family co-developed participant information on ReStOre II recruitment rates.
- To determine the impact of the patient and family co-developed participant information on ReStOre II retention rates.
- To explore the impact of the patient and family co-developed participant information on patient's understanding of the ReStOre II trial.

Study area: Recruitment, Retention, Trial Understanding

Sample type: Patients, Carer/Parent

Estimated funding level needed: Medium

## **Background**

As cancer survival rates continue to improve, optimising survivorship care has become a research priority [1, 2]. Exercise rehabilitation is a care strategy with considerable potential to optimise physical function and quality of life in cancer survivorship [3]. However, recruitment and retention in cancer exercise trials remains a challenge [4], which may be detrimental to the validity of trial results. Accordingly, there is strong rationale to investigate strategies which may aid recruitment and retention to cancer exercise trials.

Public and Patient Involvement (PPI) has been described as research being carried out with or by members of the public rather than to, about, or for them [5, 6, 7]. This approach to research is encouraged as it is felt that those affected by research should have say in how it is carried out [8]. There is also evolving evidence that PPI can increase the rate of recruitment to research and improve its quality and impact [9]. A recent systematic review and meta-analysis by Crocker et al [5] investigated the impact of PPI on patient enrolment and retention in clinical trials. The overall results were supportive of PPI as a method of enhancing enrolment. PPI significantly increased the odds of participant recruitment (odds ratio 1.16, 95% confidence interval and prediction interval 1.01 to 1.34). An example of a PPI strategy to enhance trial enrolment is the inclusion of patients and the public in the design of participant information. Traditional participant information has consistently been criticized for being too lengthy, using technical or difficult language, and for lacking navigability and visual appeal [10]. Furthermore, it is reported that patients with cancer may gain little understanding of the potential harms and benefits of research from the participant information they are given [11]. Therefore, participant information may in fact become a barrier to trial understanding and enrolment, and it is important to investigate this so that trial participant information can be optimised.

ReStOre II (NCT03958019) is a randomised trial of a multidisciplinary rehabilitation programme for survivors of cancer of the oesophagus, stomach, pancreas, and liver. The programme will consist of supervised and self-managed exercise, 1-to-1 dietary counselling, and education sessions. In a previous feasibility randomised trial, this programme led to significant improvements in cardiorespiratory fitness [12], and benefits for on physical, mental and social wellbeing [13]. Furthermore, a patient recruitment rate of 40% was achieved [12]. Whilst this rate is higher than those cited by other cancer rehabilitation programmes (11.1%) [14], given the potential benefits of participation even greater rates of enrolment for ReStOre II would be worthwhile. Importantly, an increased recruitment rate would accelerate the progress, completion and dissemination of the trial. To this end, this study within a trial (SWAT) will engage with patients and their families and

ask them to contribute to the development of participant information, and examine its impact by an embedded randomised trial.

### **Interventions and comparators**

Intervention 1: Patient and family co-developed participant information

Intervention 2: Standard participant information

Index Type: Method of Recruitment, Participant Information

### **Method for allocating to intervention or comparator**

Randomisation

### **Outcome measures**

Primary: Recruitment rate

Secondary: Retention rate

Trial Understanding (Decision Making Questionnaire)

### **Analysis plans**

Statistical analysis will comprise evaluation of the impact of the patient and family co-developed participant information on: i) rates of recruitment to the trial (assessed by odds ratios); ii) questionnaire scores, analysed separately for recruited participants and those who refused ReStOre II participation; and iii) rates of retention in ReStOre II (to the first follow-up data collection time point, assessed by odds ratios).

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

We do not foresee any major problems in implementing this SWAT.

### **References**

1. Nekhlyudov L, et al. Developing a quality of cancer survivorship care framework: implications for clinical care, research and policy. *JNCI: Journal of the National Cancer Institute* 2019 May 16 doi: 10.1093/jnci/djz089. [Epub ahead of print].
2. Feuerstein M. Optimizing cancer survivorship. *Journal of Cancer Survivorship* 2007;1(1):1-4.
3. Schmitz KH, et al. American College of Sports Medicine roundtable on exercise guidelines for cancer survivors. *Medicine and Science in Sports and Exercise* 2010;42(7):1409-26.
4. Irwin ML, et al. Recruiting and retaining breast cancer survivors into a randomized controlled exercise trial: the Yale Exercise and Survivorship Study. *Cancer*, 2008;112(11 Suppl):2593-606.
5. Crocker JC, et al. Impact of patient and public involvement on enrolment and retention in clinical trials: systematic review and meta-analysis. *BMJ* 2018;363:k4738.
6. Hoddinott P, et al. How to incorporate patient and public perspectives into the design and conduct of research. *F1000Research* 2018;7:752.
7. Price A, et al. Patient and public involvement in the design of clinical trials: An overview of systematic reviews. *Journal of Evaluation in Clinical Practice* 2018;24(1):240-53.
8. Kearney A, et al. Priorities for methodological research on patient and public involvement in clinical trials: A modified Delphi process. *Health expectations: an international journal of public participation in health care and health policy* 2017;20(6):1401-10.
9. Brett J, et al. Mapping the impact of patient and public involvement on health and social care research: a systematic review. *Health Expectations* 2014;17(5):637-50.
10. Parker A. et al. The effect of optimised patient information materials on recruitment in a lung cancer screening trial: an embedded randomised recruitment trial. *Trials* 2018;19(1):503.
11. Cox AC, et al. Communication and informed consent in phase 1 trials: a review of the literature. *Supportive Care in Cancer* 2006;14(4):303-9.
12. O'Neill LM, et al. The RESTORE randomized controlled trial: impact of a multidisciplinary rehabilitative program on cardiorespiratory fitness in esophagogastric cancer survivorship. *Annals of Surgery* 2018;268(5):747-55.
13. Bennett AE, et al. Patient experiences of a physiotherapy-led multidisciplinary rehabilitative intervention after successful treatment for oesophago-gastric cancer. *Supportive Care in Cancer*, 2018;26(8):2615-23
14. Adams RN, et al. Cancer survivors' uptake and adherence in diet and exercise intervention trials: An integrative data analysis. *Cancer* 2015;121(1):77-83.

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

Kensing F, Blomberg J. Participatory design: issues and concerns. Computer Supported Cooperative Work (CSCW) 1998;7(3):167-85.

Martin-Kerry JM, et al. Supporting children and young people when making decisions about joining clinical trials: qualitative study to inform multimedia website development. BMJ Open 2019;9(1):e023984.

Martin-Kerry J, et al. Developing and evaluating multimedia information resources to improve engagement of children, adolescents, and their parents with trials (TRECA study): Study protocol for a series of linked randomised controlled trials. Trials 2017;18(1):265.

Crocker JC, et al. Impact of patient and public involvement on enrolment and retention in clinical trials: systematic review and meta-analysis. BMJ 2018.363:k4738.

Parker A., et al. The effect of optimised patient information materials on recruitment in a lung cancer screening trial: an embedded randomised recruitment trial. Trials, 2018;19(1):503.

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

People to show as the source of this idea: Linda O'Neill, Peter Knapp, Suzanne Doyle, Emer Guinan, Juliette Hussey et al

Contact email address: oneilll8@tcd.ie

Date of idea: 1/MAY/2018

Revisions made by: Linda O'Neill

Date of revisions: 29/JUL/2019