

Encouraging compliance with bowel and cervical cancer screening using behavioural nudges

Submission date 23/10/2018	Recruitment status No longer recruiting	<input type="checkbox"/> Prospectively registered <input type="checkbox"/> Protocol
Registration date 20/12/2018	Overall study status Completed	<input type="checkbox"/> Statistical analysis plan <input type="checkbox"/> Results
Last Edited 04/04/2023	Condition category Other	<input type="checkbox"/> Individual participant data <input type="checkbox"/> Record updated in last year

Plain English summary of protocol

Background and study aims

Screening programmes have become widespread in developed countries, but how to improve uptake is an understudied area especially in deprived regions. This study aims to test whether it is possible to increase attendance rates for cervical and bowel screening in the deprived area of East and West Marsh, Grimsby, North East Lincolnshire by sending a behaviourally-informed reminder letter from GP practices to non-attenders and by entering people into a lottery, if they get screened.

Who can participate?

All patients of the recruited GP patients can participate if they are eligible for the relevant screening programmes (cervical or bowel cancer). Participants must have not booked and attended a previous screening appointment in the previous twelve months after being sent a letter.

What does the study involve?

Participants will be randomly assigned to one of three groups - either the control group, the letter group and the lottery and letter group. The control group will not receive any intervention. The letter group will receive a behaviourally informed letter. The lottery and letter group will receive the same letter, and will be offered the chance to win a lottery if they get screened. GP practices will then report back about who attended screenings following the study.

What are the possible benefits and risks of participating?

The benefits and risks are the same for the screening programmes themselves, and are discussed in more detail here: <https://www.nhs.uk/conditions/bowel-cancer-screening/> and here: <https://www.nhs.uk/conditions/cervical-screening/>. There are no new benefits or risks to participants taking part in this study

Where is the study run from?

The study is run from the Behavioural Insights Team in London and will take place in 8 GP practices in North East Lincolnshire (UK)

When is the study starting and how long is it expected to run for? (what is the anticipated start date and the approximate duration of the trial?)

February 2018 to August 2019

Who is funding the study?

North East Lincolnshire (UK)

Who is the main contact?

Helen Brown (an advisor at the Behavioural Insights Team)

helen.brown@bi.team.

Contact information

Type(s)

Scientific

Contact name

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Additional identifiers

Protocol serial number

2018123

Study information

Scientific Title

Encouraging compliance with bowel and cervical cancer screening in previously non-compliant adults in the North Lincolnshire Area using a Behavioural Letter and a Letter and Lottery Combination

Study objectives

We want to test the two following hypotheses:

1. In the context of deprived communities, a behaviourally-informed self-referral letter incorporating anticipated regret messaging is effective at promoting previous non-attenders to complete screening

2. In the context of deprived communities, incentivisation using a regret lottery with a behaviourally-informed self-referral letter incorporating anticipated regret messaging is effective at encouraging the uptake of screening

We will analyse these separately for bowel and cervical cancer, for a total of four primary study hypotheses.

We will also test the treatment arms against each other, which constitute 2 secondary hypotheses:

1. In the context of deprived communities, incentivisation using a regret lottery with a behaviourally-informed self-referral letter incorporating anticipated regret messaging is more effective at encouraging the uptake of cervical cancer screening than just a behaviourally-informed self-referral letter

2. In the context of deprived communities, incentivisation using a regret lottery with a behaviourally-informed self-referral letter incorporating anticipated regret messaging is more effective at encouraging the uptake of bowel cancer screening than just a behaviourally-informed self-referral letter

Ethics approval required

Old ethics approval format

Ethics approval(s)

The following ethics committees have been submitted to:

1. NHS Research Ethics Committee
2. Health Research Authority
3. PHE Screening Programmes Bowel Research Advisory Committee
4. PHE Cervical Research Advisory Committee
5. PHE Office for Data Release

Study design

Interventional three-armed randomised controlled trial

Primary study design

Interventional

Study type(s)

Screening

Health condition(s) or problem(s) studied

Compliance with mass cancer screening programmes

Interventions

All participants will have either not attended a cervical cancer screening appointment, or not sent a bowel screening test back in the previous 12 months. Participants will be randomly allocated to one of three groups: the control arm which will receive no additional intervention, a letter-only arm who will receive a behavioural science informed letter and a lottery arm who will receive the same basic letter and be entered into a regret lottery.

Randomisation will be individual and will be a simple randomisation. Randomisation will be conducted by GP practices.

For all arms, we will monitor whether they book and attend an appointment (cervical cancer screening patients) or send back the screening kit (bowel cancer screening patients) 12 weeks

after the letter is sent out (both arms receiving letters will be sent on the same day). There will be no follow-up.

GP practices are responsible for informing the investigators which people send their bowel cancer screening kits back, and which individuals attend a cervical cancer screening. Participants will be blind to the condition they are in, though GP practices will maintain a record of who is in what arm as they will be sending the letters to households.

Intervention Type

Behavioural

Primary outcome(s)

1. Attendance at cervical cancer screening appointments within 12 weeks of the letter being sent for the cervical cancer group, measured using the date of booking and attending the appointment and reported by GP practices (if any)
2. Ordering and sending back a bowel cancer screening kit within 12 weeks of the letter being sent for the bowel cancer group and reported by GP practices (measured using the date of sending back the kit (if any)

Key secondary outcome(s))

N/A

Completion date

31/08/2019

Eligibility

Key inclusion criteria

1. Eligible and sent a letter for but not attended a cervical cancer screening appointment OR not sent a bowel cancer screening test back in the previous twelve months.
2. Aged 18 years or older
3. Attending North Lincolnshire practices

Participant type(s)

Patient

Healthy volunteers allowed

No

Age group

Adult

Lower age limit

18 years

Sex

All

Key exclusion criteria

N/A

Date of first enrolment

01/04/2018

Date of final enrolment

30/04/2018

Locations

Countries of recruitment

United Kingdom

England

Study participating centre

DR P SURESH BABU

Ladysmith Road North

Grimsby

United Kingdom

DN32 9EF

Study participating centre

Open Door

Albion Street

Grimsby

United Kingdom

DN32 7DL

Study participating centre

QUAYSIDE MEDICAL CENTRE

Albion St

Grimsby

United Kingdom

DN32 7DY

Study participating centre

STIRLING MEDICAL CENTRE (MATHEWS)

Stirling Street

Grimsby

United Kingdom

DN31 3AE

Study participating centre**HUMBERVIEW SURGERY**

Stirling Medical Centre/Stirling St
Grimsby
United Kingdom
DN31 3AE

Study participating centre**PELHAM MEDICAL GROUP**

Church View Health Centre
Grimsby
United Kingdom
DN31 1QZ

Study participating centre**THE ROXTON PRACTICE**

Pilgrim Primary Care Centre, Pelham Road
Grimsby
United Kingdom
DN40 1JW

Study participating centre**THE CHANTRY HEALTH GROUP**

Church View Medical Centre, Cartergate
Grimsby
United Kingdom
DN31 1QZ

Sponsor information**Organisation**

The Behavioural Insights Team

ROR

<https://ror.org/03mk5b468>

Funder(s)**Funder type**

Government

Funder Name

Local Government Authority

Funder Name

North East Lincolnshire Council

Results and Publications

Individual participant data (IPD) sharing plan

The datasets generated during and/or analysed during the current study are not expected to be made available as this is sensitive, personal data and we would not be able to get relevant permissions from GP clinics

IPD sharing plan summary

Not expected to be made available

Study outputs

Output type	Details	Date created	Date added	Peer reviewed?	Patient-facing?
Participant information sheet	Participant information sheet	11/11/2025	11/11/2025	No	Yes