

**CODE: HIPS/17/23** 

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### **RESEARCH PROJECT BRIEFING**

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# Increasing uptake of bowel cancer screening



## AIMS

Evaluate two additions to the Scottish Bowel Screening Programme invitation pack, sent to people aged 50-74 every two years:

1. A planning support tool.

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2. A suggested deadline to return the test (1, 2 or 4 weeks).

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This aims to address the problem that about 1 in 3 bowel screening tests do not get returned despite screening reducing bowel cancer deaths. Many people who intend to complete and return their test need help to do so.



### **KEY FINDINGS**

- The planning tool and suggested deadline increased test return when sent together: 67.3% of tests were returned compared to 66.0% of tests sent with the usual invitation materials.
- But the planning tool without a deadline did not help people to return their tests: only 63.2% did. This means the planning tool was only effective when combined with the deadline.
- A deadline without a planning tool increased test return to 66.9%.
- A 2-week deadline was more effective (68.0%) than 1 week (66.0%) or 4 weeks (66.8%).
- Over 80% of people rated the planning tool and deadline as highly acceptable.
- Some people did not understand how the planning tool was supposed to help people, but they understood well how a deadline can help.
- Before evaluating the two changes, members of the public identified the most common 'concerns' they had about the test, along with 'tips' to help overcome those concerns.
- The planning tool was then created with members of the public in co-design workshops.
- The planning tool is an interactive, illustrated A4 sheet of paper with lists of concerns and tips about doing bowel screening. Lines can be drawn between concerns and tips.
- · A deadline is an effective, low-cost and acceptable change to the invitation materials that can help to reduce bowel cancer deaths, but a planning tool alone does not help.



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### WHAT DID THE STUDY INVOLVE?

The study was a randomised controlled trial embedded within the Scottish Bowel Screening Programme, with case-control and qualitative sub-studies. 40,000 people who were due to receive a bowel screening test were randomised to receive usual materials or a suggested return deadline (1/2/4 weeks) either with or without a planning tool. We assessed how many people in each arm returned a test within 3 months. A sub-group of trial participants (1,855) filled in questionnaires to assess how they responded to the planning tool and deadline. We then interviewed 37 of those people to explore more deeply their experiences of receiving the planning tool and deadline. Members of the public helped to design the planning tool for bowel cancer screening. Two public representatives helped to guide and manage the study.

### WHAT WERE THE RESULTS AND WHAT DO THEY MEAN?

A planning tool had no positive impact on test return within 3 months (AOR 0.98, 95% CI 0.94-1.02). This is evidence that a planning tool does not help people to complete and return a bowel screening test.

A deadline increased test return (1.13, 1.08-1.19). The largest effect (2% absolute increase in FIT return) was seen with a 2-week deadline without the planning tool. The use of deadlines boosted earlier return rates (within 1, 2, and 4 weeks, particularly around the time of the deadline), and reduced the need to issue a reminder letter after 6 weeks.

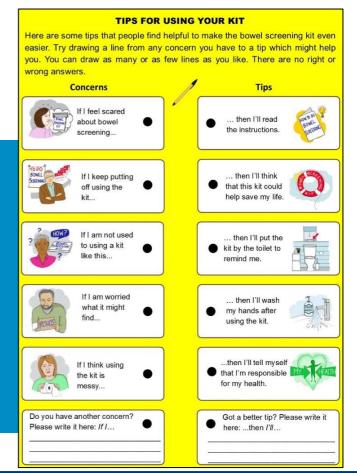
We estimate that a 2% increase in FIT return would mean an additional 39,000 people participating in a two-year Scottish Bowel Screening round, with approximately 23 bowel cancer deaths being avoided as a result.

#### Planning tool for bowel screening

The planning tool has lists of 'concerns' and 'tips'. It suggests to draw a line from a concern you have to a tip which might help you.

The planning tool is theorised to make solutions to problems more cognitively accessible, or automatic. However, we did not find evidence that it had this effect in our study.

Participants rated both the planning tool and deadline as highly acceptable, although they understood better how the deadline could help them than the planning tool.



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## WHAT IMPACT COULD THE FINDINGS HAVE?

- A suggested deadline resulted in more timely FIT return and reduced the need to issue reminder letters.
- With a 2-week deadline, about 39,000 more people in Scotland would take part in each 2year bowel screening round. This increase in screening participation can help detect more early cancers and reduce deaths from bowel cancer.
- Although a planning tool has been found to help people overcome problems with other behaviours, the tool we evaluated would not be impactful in bowel screening.
- A deadline for test return is effective, cheap and can be easily implemented in a bowel screening programme.

### HOW WILL THE OUTCOMES BE DISSEMINATED?

The findings will be disseminated via:

- · Scientific journals and conferences
- · Public health and policy events and groups
- Public engagement events

Recommendations for further research:

- It is feasible to conduct large-scale trials within a national screening programme to optimise screening invitation materials
- Further research can usefully test the impact of sending a suggested deadline and a planning tool in a different way, such as with a reminder letter or via text message



## CONCLUSION

A suggested deadline resulted in more timely FIT return and reduced the need to issue reminder letters. The planning tool on its own had no impact on test return. A suggested deadline for test return can increase uptake and prevent bowel cancer deaths. Although both the deadline and planning tool were acceptable to the public, there was no evidence that the specific planning tool we evaluated helps people to complete and return bowel screening tests.



## **RESEARCH TEAM & CONTACT**

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## Additional Information

Project completed: 31<sup>st</sup> January 2024 Funding received: £355,867