

# Increasing the uptake of cervical and lung cancer screening with targeting

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<b>Registration date</b> 24/03/2026	<b>Overall study status</b> Ongoing	<input type="checkbox"/> Statistical analysis plan <input type="checkbox"/> Results
<b>Last Edited</b> 01/05/2026	<b>Condition category</b> Cancer	<input type="checkbox"/> Individual participant data <input checked="" type="checkbox"/> Record updated in last year

## Plain English summary of protocol

### Background and study aims

Cancer screening saves lives by enabling early detection and timely treatment. Despite its benefits, participation in some cancer screening programmes in the UK, such as cervical and lung cancer screening, remains lower than desired.

Well-documented disparities also exist in screening uptake across different population groups. Although reminder messages have been used to improve screening uptake, these approaches have not been sufficient to reduce inequities or meet national targets. Therefore, more tailored communication strategies are needed to increase screening uptake and improve equity.

This study aims to improve cervical and lung cancer screening uptake using targeted invitation strategies delivered by a health start-up company, Appt Health.

### Who can participate?

This study focuses on people who are eligible for lung or cervical cancer screening but are less likely to participate and have reduced access to screening services.

### What does the study involve?

This study is an implementation trial with three arms, allocated at GP practice level:

#### Arm 1: Usual Care

Participants will receive NHS screening invitations through usual GP or national processes, which may vary between practices and over time.

#### Arm 2: Appt Standard

Participants will receive Appt Standard invitation strategies. Specifically, they will receive standardised and structured invitations via NHS App notifications, emails, SMS, or letters, including a direct booking link and a reply-to-book SMS option. Letter invitations will ask participants to call their GP practice to book an appointment.

#### Arm 3: Appt Targeted

Participants in underserved groups (e.g. based on deprivation, preferred language, or ethnicity) will receive Appt Targeted invitation strategies. These strategies will be co-designed with public and patient involvement members from these groups and will include personalised messages designed to address specific barriers, in addition to the Appt Standard booking structure.

What are the possible benefits and risks of participating?

The main benefit of taking part in this study is receiving helpful messages and attending screening on time, which can help identify any signs of illness early. This study presents minimal risk, as it evaluates different formats of communication (e.g. SMS, letters) used to invite patients to existing NHS cervical and lung cancer screening programmes.

Where is the study run from?

Imperial College London (UK).

When is the study starting and how long is it expected to run?

April 2026 to February 2028.

Who is funding the study?

SBRI Healthcare (UK).

Who is the main contact for this study?

Gaby Judah

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## Contact information

### Type(s)

Principal investigator, Scientific, Public

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## **Additional identifiers**

**Integrated Research Application System (IRAS)**  
364387

**Central Portfolio Management System (CPMS)**  
72535

**Protocol serial number**  
NCPC03040

## **Study information**

### **Scientific Title**

INSIGHT – Increasing Screening In Groups Hard to Reach with Targeting: Increasing the uptake of national screening programmes with smart targeting of low-uptake subgroups

### **Acronym**

INSIGHT

### **Study objectives**

1. To evaluate whether Appt Targeted invitation strategies (for underserved subgroups) significantly increase screening attendance compared with both usual GP care and Appt Standard invitation strategies.
2. To evaluate whether Appt Standard invitation strategies significantly increase screening attendance compared with usual care.

### **Ethics approval required**

Ethics approval required

### **Ethics approval(s)**

1. approved 26/02/2026, Research governance and integrity (RGIT) team (Imperial College London White City Campus Level 1, The Media Works 191 Wood Lane, London, W12 7FP, United Kingdom; +44 (0)20 7594 9459; becky.ward@imperial.ac.uk), ref: Edge 200045
2. submitted 02/03/2026, South West – Frenchay Research Ethics Committee (Equinox House, City Link, Nottingham, NG1 4LA, United Kingdom; +44 (0)207 1048106; frenchay.rec@hra.nhs.uk), ref: -

### **Study design**

Multi-site, three-arm implementation trial

### **Primary study design**

Interventional

### **Study type(s)**

## Screening

### Health condition(s) or problem(s) studied

Uptake of cervical and lung cancer screening

### Interventions

This is a three-arm implementation trial with a quantitative evaluation using a randomised, parallel-arm design. Participants across the three arms will receive different invitation strategies. In Arm 1 (Usual Care), participants will receive NHS screening invitations through standard GP or national processes.

In Arm 2 (Appt Standard), participants will receive standardised and structured invitations via NHS App notifications, emails, SMS, or letters, including a direct booking link and reply-to-book SMS options. Letter invitations will ask participants to call their GP practice to book an appointment.

In Arm 3 (Appt Targeted), participants will receive personalised messages designed to address specific barriers, in addition to the Appt Standard booking structure. Participants eligible to receive targeted interventions in Arm 3 will be selected according to additional criteria, such as preferred language, ethnicity, age, and Index of Multiple Deprivation (IMD). Remaining participants in Arm 3 (i.e. those not belonging to any pre-defined underserved, low-uptake subgroups) will receive the Appt Standard invitation strategies.

The Appt Standard invitation process for cervical screening includes four sequential contact rounds:

1. NHS App Notification – A personalised invitation is sent via the NHS App with a booking link (URL), enabling patients to book their own appointments directly.
2. NHS Email Invitation – Patients who have not yet responded receive a “NHS NoReply” email invitation, again including a booking link allowing self-selection of available appointments.
3. Accessible SMS invitation – Patients who do not respond to the first two rounds are sent an accessible SMS message from Appt Health offering three well-spaced appointment options, with an ABC reply system (Patients can respond “A”, “B”, or “C” to book the corresponding slot). Or respond with the keyword “MORE” to request more options.
4. SMS Booking link – A final SMS invitation is sent to patients who have not booked after rounds 1-3 and provides a link to a secure booking URL where patients can view available times and book via their browser.

For lung screening, the same process is followed but with the final SMS message in step 4 replaced by a letter. This structured and automated approach contrasts with usual care, in which invitation and booking processes vary substantially between practices and can also vary within the same practice (e.g. reminder SMS messages being sent out when an administrator has time, but not in a consistent way).

For the Appt standard intervention, participants will receive four rounds of invitations over a period of approximately 1 month. The follow-up period will be three months from the date of the first invitation.

Randomisation (between two intervention arms) will be implemented using a secure computer-generated sequence. The analysis team will not be blinded to arm allocation as this is not practically possible, but data will be sent in a pseudo anonymised format to the research team. GP Practices will not be blinded to allocation.

### Intervention Type

Behavioural

## **Primary outcome(s)**

1. Lung and cervical cancer screening uptake measured using screening attendance record at GP practice system at 1 month after the final invitation cycle

## **Key secondary outcome(s)**

1. Lung and cervical cancer screening uptake measured using screening attendance record at GP practice system at 3-month after the final invitation cycle

2. Message delivery rates measured using digital tracking system, Messaging service delivery reports (number of successfully delivered messages ÷ total messages sent × 100) at immediately after message dissemination

3. Message click rates (percentage of recipients who clicked the booking link) measured using digital tracking system (clicks ÷ total invitations sent × 100) at the end of each invitation round. The interval between invitation rounds will be at least 1 week, depending on slot capacity

4. Appointment booking behaviour (Number of recipients who booked/declined/did not respond to an appointment) measured using digital tracking system at measured at the end of each invitation round. The interval between invitation rounds will be at least 1 week, depending on slot capacity

## **Completion date**

01/02/2028

## **Eligibility**

### **Key inclusion criteria**

1. Registered with a participating GP practice.
2. Eligible for one of the NHS cancer screening programmes:

For cervical cancer screening:

1. Aged 25–64 years
2. Have a cervix
3. Only individuals who have not responded to their initial national cervical screening invitation will be included

For lung cancer screening:

1. Aged 55–74 years
2. Current or former smokers
3. All eligible individuals invited through the NHS lung cancer screening programme

### **Targeted subgroups**

The targeted subgroups have been selected following a literature review and analysis of Fingertips data (<https://fingertips.phe.org.uk/>).

The targeted subgroups for cervical screening include:

1. Women/People with a cervix with learning disabilities
2. Women/People with a cervix aged 25–34 years
3. Women/People with a cervix whose preferred language is not English
4. Women/People with a cervix aged 45–64 years living in more deprived areas

For lung screening, the targeted subgroups are current smokers and former smokers living in more deprived areas.

**Participant type(s)**

Patient

**Healthy volunteers allowed**

Yes

**Age group**

Mixed

**Lower age limit**

25 years

**Upper age limit**

74 years

**Sex**

All

**Total final enrolment**

0

**Key exclusion criteria**

1. Not eligible for cervical or lung cancer screening based on NHS programme criteria
2. Not registered with a participating GP practice

**Date of first enrolment**

01/06/2026

**Date of final enrolment**

01/02/2028

## **Locations**

**Countries of recruitment**

United Kingdom

England

**Study participating centre**

**Appt Health**

8 New Colliers Row, Colliers Row road

Bolton

England

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# Sponsor information

## Organisation

Imperial College London

## ROR

<https://ror.org/041kmwe10>

# Funder(s)

## Funder type

Industry

## Funder Name

SBRI healthcare

# Results and Publications

## Individual participant data (IPD) sharing plan

### IPD sharing plan summary

Data sharing statement to be made available at a later date