

# Using text messages to boost COVID-19 vaccine booking rate

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<b>Registration date</b> 03/06/2021	<b>Overall study status</b> Completed	<input type="checkbox"/> Statistical analysis plan <input type="checkbox"/> Results
<b>Last Edited</b> 31/01/2023	<b>Condition category</b> Other	<input type="checkbox"/> Individual participant data <input type="checkbox"/> Record updated in last year

## Plain English Summary

### Background and study aims

Evidence suggests that whilst willingness to get vaccinated against COVID-19 is generally high in the UK, it may be lower among certain age and ethnicity groups. Additionally, high willingness to get vaccinated may not translate into high uptake, particularly as the vaccine rollout extends to younger cohorts. Currently, adults in England receive a text message when they are eligible for a COVID-19 vaccination with instructions on how to book an appointment. The aim of this study is to test whether behaviourally-informed (BI) text messages can increase the likelihood of booking and receiving a COVID-19 vaccination among the cohort aged 18 to 29 years (particularly those aged 24 - 29 years) in England. It is an extension to a previous study conducted among the cohort aged 40 - 49 years.

### Who can participate?

Participants will be adults aged between 18 and 29 years residing in England who are eligible to get an NHS COVID-19 vaccine and who haven't been invited by the National Immunisation Management Service (NIMS) system.

### What does the study involve?

The study is a 7-arm field randomised controlled trial with randomisation at individual level. The control group will receive the control SMS invitation. Each of 6 treatment groups will receive a behaviourally-informed (BI) SMS vaccination invitation, and the content of the messages will cover several evidence-based BI concepts. Data will be collected on vaccine booking rate within 72 hours and 14 days of being sent the text message invitation and vaccination status within 14 days of being sent the text message.

### What are the possible benefits and risks of participating?

One risk of SMS interventions is that the BI messages might not work equally well for everyone. This may result in some groups of participants being encouraged to book a vaccine, but might inadvertently discourage some other groups from booking it. This risk has been minimised by developing the messages based on evidence available in the literature, as well as input from experts at BIT, NHS and PHE. For participants less motivated to get a COVID-19 vaccine, the

messages might motivate or simply prompt them to get one, lowering their risk of severe outcomes from COVID-19 infection. Therefore we believe this will have health benefits for participants.

Where is the study run from?

NHS England and NHS Improvement will fund the study, implement the interventions and collect the data. The Behavioural Insights Team will plan and analyse the study.

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

March 2021 to July 2021

Who is funding the study?

NHS England and NHS Improvement

Who is the main contact?

Dr Helen Brown, [helen.brown@bi.team](mailto:helen.brown@bi.team)

## Contact information

### Type(s)

Public

### Contact name

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# Additional identifiers

## EudraCT/CTIS number

Nil known

## IRAS number

298649

## ClinicalTrials.gov number

Nil known

## Secondary identifying numbers

IRAS 298649

# Study information

## Scientific Title

Using text messages to boost COVID-19 vaccination appointment booking and vaccination rates: A randomised controlled field trial.

## Study hypothesis

Behaviourally-informed (BI) text messages can increase the likelihood of booking and receiving a COVID-19 vaccination among the cohort aged 18 to 29 in England, compared to a control message.

## Ethics approval required

Old ethics approval format

## Ethics approval(s)

Approved 20/4/2021, South West - Cornwall & Plymouth Research Ethics Committee (Level 3, Block B, Whitefriars, Lewins Mead, Bristol, BS1 2NT, UK; +44 (0)207 104 8019; cornwallandplymouth.rec@hra.nhs.uk), ref: 21/SW/0055

## Study design

Interventional randomized controlled trial

## Primary study design

Interventional

## Secondary study design

Randomised controlled trial

## Study setting(s)

Home

## Study type(s)

Other

## Participant information sheet

No participant information sheet available

## **Condition**

Increasing uptake of COVID-19 vaccination among eligible adults aged 18 - 29 years in England

## **Interventions**

This is a 7-arm field RCT with randomisation at individual level. The control group will receive a control SMS invitation (identical to a control SMS invitation used in a previous trial among the cohort aged 40-49). Each of 6 treatment groups will receive a behaviourally-informed (BI) SMS vaccination invitation, and the content of the messages will cover several evidence-based BI concepts:

**Control:** You are now eligible for your free NHS COVID-19 vaccine. Please book yours now at [LINK] or by calling 119.

**Top of queue:** You have reached the top of the queue and are a priority for getting a free NHS COVID-19 vaccine. Please book yours now at [LINK] or by calling 119.

**Convenience:** You are now eligible for your free NHS COVID-19 vaccine. Choose a time and place that suits you. Please book yours now at [LINK] or by calling 119.

**Reserved:** Your free NHS COVID-19 vaccine is waiting for you. Please book yours now at [LINK] or by calling 119.

**Top of queue + convenience:** You have reached the top of the queue and are a priority for getting a free NHS COVID-19 vaccine. Please book yours now - choose a time and a place that suits you at [LINK] or by calling 119.

**Reserved + convenience:** Your free NHS COVID-19 vaccine is waiting for you. Please book yours now - choose a time and a place that suits you at [LINK] or by calling 119.

**Front of queue:** You have reached the front of the queue and are a priority for getting a free NHS COVID-19 vaccine. Please book yours now at [LINK] or by calling 119.

All groups - Treatment and Control - will also receive the business-as-usual letter invitation.

Randomisation will be conducted by NHSE. Their business-as-usual (BAU) process involves sending text messages to all participants to invite them to book a COVID-19 vaccination appointment. Randomisation of message content will be integrated into these BAU processes. Randomisation is done at the individual level and is not stratified by ethnicity group.

The randomisation process is as follows:

1. Records of participants who are eligible for vaccination are selected for inclusion in the invitation run.
2. A random number (from 0 to 6) will be generated and assigned to each participant.
3. Each participant will receive one version of the SMS invitation according to the randomisation allocation outcome.

## **Intervention Type**

Behavioural

## **Primary outcome measure**

Whether participants book a COVID-19 vaccination appointment (either online or by calling 119) within 72 hours of being sent the SMS invitation. This is a binary outcome, i.e. the booking status will be coded as 1 if the participant makes the booking within the time frame, and coded as 0 if they don't, measured using patient records

## Secondary outcome measures

1. Whether participants receive their first-dose vaccination within 14 days of being sent the SMS invitation. This is also a binary outcome, i.e. the vaccination status will be coded as 1 if participants receive a COVID-19 vaccination within the time frame, and coded as 0 if they don't measured using patient records
2. Whether participants book a COVID-19 vaccination appointment (either online or by calling 119) within 14 days of being sent the SMS invitation. This is a binary outcome, i.e. the booking status will be coded as 1 if the participant makes the booking within the time frame, and coded as 0 if they don't measured using patient records

## Overall study start date

15/03/2021

## Overall study end date

01/07/2021

## Eligibility

### Participant inclusion criteria

1. Aged between 18 - 29 years who are eligible for COVID-19 vaccination
2. Registered in the NHSEI system with a mobile phone number
3. Haven't received an NHS COVID-19 SMS invitation via the national immunisation management service system

### Participant type(s)

Healthy volunteer

### Age group

Adult

### Lower age limit

18 Years

### Sex

Both

### Target number of participants

4.27 million participants

### Participant exclusion criteria

1. Adults not in the specified age band or not a resident in England
2. Adults residing in England who have already received or been invited for the NHS COVID-19 vaccine via the national immunisation management service system
3. Adults residing in England who have not registered with the NHS or are not reachable by the NHS via SMS

### Recruitment start date

07/06/2021

### Recruitment end date

13/06/2021

## Locations

### Countries of recruitment

England

United Kingdom

### Study participating centre

#### NHS England and NHS Improvement

Skipton House

80 London Road

London

United Kingdom

SE1 6LH

## Sponsor information

### Organisation

National Health Service

### Sponsor details

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### Sponsor type

Government

### Website

<https://www.england.nhs.uk/>

### ROR

<https://ror.org/02wnqcb97>

## Funder(s)

### Funder type

Government

## Funder Name

NHS England and NHS Improvement

# Results and Publications

## Publication and dissemination plan

1. We intend to disseminate the findings from this study in the following forms:
2. Peer reviewed scientific journals (TBD)
3. Conference presentations (TBD)
4. Internal reports
5. Publication on organisational websites
6. Blog posts
7. Other publications and media

Final decision on publication rests with the study sponsor.

## Intention to publish date

01/07/2022

## Individual participant data (IPD) sharing plan

The datasets generated during and/or analysed during the current study are not expected to be made available. NHSEI remains the data controller of the data. No plans for releasing the data have been discussed with NHSEI, and given the sensitive nature of the topic (COVID-19 vaccination rates), we expect NHSEI not to wish to make the data available.

## IPD sharing plan summary

Not expected to be made available

## Study outputs

Output type	Details	Date created	Date added	Peer reviewed?	Patient-facing?
<a href="#">Protocol file</a>	version v1.0	16/04/2021	08/07/2021	No	No
<a href="#">HRA research summary</a>			28/06/2023	No	No