ISRCTN15317247 https://doi.org/10.1186/ISRCTN15317247

Using text messages to boost COVID-19 vaccine booking rate

Submission date 03/06/2021	**Recruitment status** No longer recruiting	[X] Prospectively registered [X] Protocol [ ] Statistical analysis plan [ ] Results [ ] Individual participant data [ ] Record updated in last year
Registration date 03/06/2021	**Overall study status** Completed	
Last Edited 31/01/2023	**Condition category** Other	

Plain English summary of protocol

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

Contact information

Type(s)
Public

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Scientific

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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 objectives
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

Health condition(s) or problem(s) studied
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

Completion date
01/07/2021

Eligibility

Key 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

Key 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

Date of first enrolment
07/06/2021

Date of final enrolment

13/06/2021

Locations

Countries of recruitment
England

United Kingdom

Study participating centre
NHS England and NHS Improvement
Skipton House
80 London Road
London
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SE1 6LH

Sponsor information

Organisation
National Health Service

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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?
Protocol file	version v1.0	16/04/2021	08/07/2021	No	No
HRA research summary			28/06/2023	No	No