ISRCTN34249419 https://doi.org/10.1186/ISRCTN34249419

The effect of text reminders on the uptake of type 2 diabetes screening test after gestational diabetes

Submission date
03/11/2025

Recruitment status
No longer recruiting

Registration date
11/11/2025

Overall study status
Ongoing

Last Edited
19/03/2026

Condition category
Nutritional, Metabolic, Endocrine

[X] Prospectively registered
[_] Protocol
[_] Statistical analysis plan
[_] Results
[_] Individual participant data
[X] Record updated in last year

Plain English summary of protocol

Background and study aims
Gestational diabetes mellitus (GDM) is defined as high blood glucose levels first identified during pregnancy, in the absence of pre-pregnancy diabetes. GDM causes problems during pregnancy and delivery. But research also shows that, although GDM usually resolves after giving birth, it can cause health problems for women later in life too. Women who get GDM are at increased risk of developing type 2 diabetes (T2DM) compared to women who do not get GDM. It is therefore recommended that all women who get GDM have an annual diabetes test after giving birth. This is because catching and treating T2DM early can help reduce the risk of diabetes-related complications later in life. However, most women with GDM do not book or attend the recommended annual diabetes test after birth. We aim to test if sending women with previous GDM an informational SMS text message to encourage them to book an annual diabetes test, can increase the number of women who attend this test after GDM.

Who can participate?
GP practices:
1. Based in England
2. Established for at least a year
3. With at least 5000 registered patients
4. Using the emis web clinical information system
5. Not using any type of reminder to women with a history of GDM to attend annual diabetes screening postpartum
6. Not taking part in any other research study or service evaluation exploring the use of reminders to increase the uptake of annual diabetes screening in women with a history of GDM
7. Not receiving palliative care
8. With no other reason that the GP practice judges they are not appropriate to be targeted

What does the study involve?
All participating practices will be asked to run two electronic searches of their patient records when they are enrolled into the trial. Search 1 will identify eligible patients to be targeted as part of the trial (patients with a recorded history of GDM, with no recorded history of any other

diabetes, at least 13 months postpartum, with no recorded HbA1c result within the previous 10 months). Search 2 will identify women with a recorded history of GDM, with no recorded history of any other diabetes, at least 13 months postpartum, who had a recorded HbA1c result within the previous 12 months. Eligible practices will then be randomly assigned to either the intervention or control group in a 1:1 ratio using a computer-generated allocated sequence. Practices randomised to the intervention group will be asked to send targeted patients an informational SMS aimed to encourage patients to book an annual diabetes test. The practices will send the same SMS again after two weeks as a reminder. Practices allocated to the control group will be asked to continue current standard practice. The outcome of interest in this study is the uptake of annual diabetes screening test (HbA1c) in women with a history of GDM. We will obtain follow-up outcome data by asking all practices to conduct a follow-up search of their records (Search 3), 3 months after enrolment for the control practices, and 3 months after the second SMS reminder was sent for intervention practices, to identify patients targeted at baseline and who have an HbA1c test result.

What are the possible benefits and risks of participating?
We do not anticipate risks or burdens for participating GP practices. The search strategies will be generated by the central research team. The participating practices will be supplied with the searches in a format compliant with their patient record management software and the research team will provide training to practice staff on how to run the searches and supply outputs to the research team in a secure and confidential manner. In addition, for intervention practices, the SMS will be sent through the usual practice SMS system or a mail service (e.g. Docmail), as well as using the usual practice format, such as using a letterhead. GP practices send SMS text messages regularly for other purposes and conditions, therefore, incorporating our intervention into the practice system and/or providing instructions on how to use a mail service (e.g. Docmail) is expected to be straightforward.
We also do not anticipate risks or burdens for targeted patients. The SMS intervention poses no more than minimal risk to patient health, safety, or care. Specifically, the intervention is receiving a short SMS which poses minimal risk, no more than the risk encountered in everyday life. In addition, if patients targeted by the SMS intervention choose to ignore the SMS, there is the risk of not having the test. However, the GP practices who will be recruited for this trial are the ones who already do not have systems in place to follow-up women who need to have an annual diabetes test after GDM, since the eligible practices are the ones who do not send any notices/reminders of any form to women after GDM to book the annual diabetes test. This means that the everyday practice in the participating practices is currently no invitation to the annual follow-up diabetes blood test at all. This is riskier than our SMS intervention, because the SMS intervention aims to address exactly this issue of no follow-up being currently implemented in everyday practice. If patients do not choose to act on the SMS reminder, it is their choice, like with every other GP appointment. Furthermore, all patient data collected will be anonymised and are data already collected as part of routine care, posing no more than minimal risk.
Practices will not gain any direct benefit from participating in this trial. They will be financially compensated for undertaking activities that are not currently part of their standard work.

Where is the study run from?
University of Oxford (UK)

When is the study starting and how long is it expected to run for?
March 2026 to December 2026

Who is funding the study?
National Institute for Health and Care Research (NIHR) School for Primary Care Research (SPCR) and NIHR Applied Research Collaboration (ARC) Oxford and Thames Valley (UK)

Who is the main contact?
Dr Moscho Michalopoulou, remindstudy@phc.ox.ac.uk

Contact information

Type(s)
Public, Principal investigator, Scientific

Contact name
Dr Moscho Michalopoulou

ORCID ID
https://orcid.org/0000-0002-6063-3307

Contact details
Nuffield Department of Primary Care Health Sciences
Radcliffe Primary Care Building
Woodstock Road
Oxford
United Kingdom
OX2 6GG
+44 (0)1865 617857
remindstudy@phc.ox.ac.uk

Additional identifiers

Integrated Research Application System (IRAS)
349947

Central Portfolio Management System (CPMS)
64986

Study information

Scientific Title
Reinforcing annual postpartum diabetes screening in women with previous gestational diabetes (REMIND)

Acronym
REMIND

Study objectives
To assess the effectiveness of SMS text reminders to enhance the uptake of annual postpartum diabetes screening in women with a history of gestational diabetes compared to usual care

Ethics approval required
Ethics approval required

Ethics approval(s)

Approved 26/08/2025, Medical Sciences Interdivisional Research Ethics Committee (MS IDREC) (University of Oxford, Boundary Brook House, Churchill Drive, Headington, Oxford, OX3 7GB, United Kingdom; +44 (0)1865 (6)16577; ethics@medsci.ox.ac.uk), ref: MS IDREC 2135613

Primary study design
Interventional

Study design
Randomized; Interventional; Design type: Process of Care, Psychological & Behavioural, Management of Care, Other

Study type(s)
Screening

Health condition(s) or problem(s) studied
Type 2 diabetes

Interventions
This will be a cluster randomised two-arm parallel-group trial to test the effectiveness of an informational SMS in increasing annual diabetes screening uptake post-partum in women with previous GDM. Participants in this study will be GP practices.

Recruitment:
Practices will be recruited with support from the Research Delivery Network. At baseline, all practices will be asked to run two electronic searches of their patient records. Search 1 will identify eligible patients to be targeted as part of the trial. Once Search 1 has been run, the practices will be asked to add a code to records of each patient identified in Search 1. After Search 1, all practices will also be asked to provide individual-level anonymised data on patients' age and ethnic group, as well as index of multiple deprivation (IMD) quintile.

Baseline:
Search 2 will identify patients who fulfilled the above eligibility criteria in the year prior to the trial, i.e. on the date which is one year before the date of Search 1. Search 2 will be run in order for practices to provide the historic/background uptake of the diabetes test in each practice for the year prior to the trial. We will use this background uptake to adjust our analyses.
The search strategies will be generated by the central research team in collaboration with PRIMIS, a team of primary care health informatics specialists, who are a co-investigator in this trial. The participating practices will be supplied with the searches in a format compliant with their patient record management software and the research team will provide training to practice staff on how to run the searches and supply outputs to the research team in a secure and confidential manner.

Intervention/Comparator:
Practices will then be randomised to intervention or control group at 1:1 ratio, using a computer-generated allocated sequence. Practices randomised to the intervention group will be asked to send targeted patients an informational SMS aimed to encourage patients to book an annual diabetes test. The practices will send the same SMS again after 2 weeks as a reminder. Practices allocated to the control group will be asked to continue current standard practice.

Follow-up:
At follow-up (3 months after enrolment and Search 1 for control practices, and 3 months after

the second SMS was sent for intervention practices), practices will run another search (Search 3) to identify patients with the trial target code added to their record following Search 1.

Data:
After Search 1, participating practices will report anonymised patient-level data on demographic characteristics of targeted patients (age, ethnicity, and index of multiple deprivation). After Search 2, practices will report aggregate practice-level data on diabetes test (HbA1c) uptake a year prior. At follow-up, after Search 3, practices will report anonymised patient-level data on targeted patients who had a diabetes test.

Statistics/Analysis:
The null hypothesis of the study is that uptake of annual diabetes test after GDM does not differ significantly between intervention and control practices. The alternative hypothesis is that in intervention practices who send the SMS reminders, there will be significantly more women attending an annual diabetes test compared to control practices. The target sample size for this study is 60 practices in total, assuming that each practice will have at least 6 target patients, and that the difference in uptake of annual diabetes test at follow-up between intervention and control practices will be at least 20%.

PPI:
This study has been planned with the help of five patient and public involvement (PPI) contributors. One-to-one interviews with these contributors provided insight on the perceived need for the study, the suitability of the content of the SMS, and the appropriateness of the frequency of the SMS. As a result of these PPI discussions, the SMS was edited to reflect a more positive, empowering, and inviting message.

Intervention Type
Other

Primary outcome(s)
Uptake is defined as completion of a diabetes test (HbA1c); Timepoint(s): Control practices: 3 months after randomisation; Intervention practices: 3 months after the second time the SMS has been sent

Key secondary outcome(s)
There are no secondary outcome measures

Completion date
31/12/2026

Eligibility

Key inclusion criteria
GP practices:
1. Based in England
2. Established for at least a year
3. With at least 5000 registered patients
4. Using the emis web clinical information system

Participant type(s)
Other

Healthy volunteers allowed
No

Age group
Adult

Sex
Female

Total final enrolment
0

Key exclusion criteria
Practices may not enter the study if any of the following apply:
1. Currently using any type of reminder to women with previous GDM to attend annual diabetes screening postpartum
2. Taking part in any other research study or service evaluation exploring the use of reminders to increase the uptake of annual diabetes screening in women with previous GDM

Date of first enrolment
02/03/2026

Date of final enrolment
04/08/2026

Locations

Countries of recruitment
United Kingdom

England

Study participating centre
North East and North Cumbria RRDN
Freeman Hospital
Freeman Road
High Heaton
Newcastle upon Tyne
England
NE7 7DN

Study participating centre
Yorkshire and Humber RRDN
St. James's University Hospital
Beckett Street
Leeds

England
LS9 7TF

Study participating centre
North West RRDN
Cobbett House
Oxford Road
Manchester
England
M13 9WL

Study participating centre
East Midlands RRDN
Leicester Royal Infirmary
Infirmary Square
Leicester
England
LE1 5WW

Study participating centre
West Midlands RRDN
New Cross Hospital
Wolverhampton Road
Heath Town
Wolverhampton
England
WV10 0QP

Study participating centre
East of England RRDN
Colney Lane
Colney
Norwich
England
NR4 7UY

Study participating centre
North London RRDN
The Royal London Hospital
80 Newark Street
London

England
E1 2ES

Study participating centre
South London RRDN
St Thomas' Hospital
Westminster Bridge Road
London
England
SE1 7EH

Study participating centre
South Central RRDN
Southampton General Hospital
Tremona Road
Southampton
England
SO16 6YD

Study participating centre
South East RRDN
Egerton Road
Guildford
England
GU2 7XX

Study participating centre
South West Central RRDN
Trust Headquarters
Marlborough Street
Bristol
England
BS1 3NU

Study participating centre
South West Peninsula RRDN
Royal Devon University Nhs Ft
Barrack Road
Exeter
England
EX2 5DW

Sponsor information

Organisation
University of Oxford

ROR
https://ror.org/052gg0110

Funder(s)

Funder type
Government

Funder Name
NIHR School for Primary Care Research

Alternative Name(s)
School for Primary Care Research, NIHR SPCR

Funding Body Type
Private sector organisation

Funding Body Subtype
Universities (academic only)

Location
United Kingdom

Funder Name
National Institute for Health and Care Research Applied Research Collaboration Oxford and Thames Valley

Alternative Name(s)
NIHR ARC Oxford and Thames Valley, NIHR Applied Research Collaboration Oxford and Thames Valley, Oxford and Thames Valley NIHR Applied Research Collaboration, NIHR Oxford and Thames Valley Applied Research Collaborative, National Institute for Health and Care Research (NIHR) Oxford and Thames Valley Applied Research Collaboration, NIHR Applied Research. Collaboration (ARC) for Oxford and the Thames Valley, ARC OTV, OTV ARC, NIHR ARC OTV, NIHR ARC-OxTV, ARC OxTV

Funding Body Type

Government organisation

Funding Body Subtype
National government

Location
United Kingdom

Results and Publications

Individual participant data (IPD) sharing plan

IPD sharing plan summary
Data sharing statement to be made available at a later date