CAG briefing on sending specific letters to sub groups

Introduction

One of the key benefits of using the NHS Digitrials service is the ability to test different letter content and to identify whether, and which formats deliver the best outcomes.

Our Future Health has taken a deliberately phased approach to utilising this capability.

This paper sets out the approach to testing, the results of key test phases, and the plans for further segmented analysis.

Phase 1

Initial invitation issue via NHS Digitrials started in July 2022 and ran for circa 3 months.

The Digitrials pipeline enabled 12 variations to be tested, across 3 different variables:

a) 3 versions of the letter
b) 3 types of insert (Full PIS, A5 leaflet and no insert)
c) QR code or Web link as the route for accessing the on line portal

For every batch issued to a geographic area, one third received each of 3 types of letter. Within that the variants for QR Code/Web Link and Insert type were split equally.

This Phase concluded that:

- inserts did not radically increase uptake – there was no significant benefit for the additional cost. In fact, the best performing condition was the letter with no insert, presumably as this drove people to the web portal to find more information.
- QR codes performed much better than web links for access to the portal.

Phase 2

In December 2022/January 2023, a more detailed testing framework for letter content was implemented, covering 6 specific variants (and 2 versions of the control) (see appendix for letter variation):

- Control (altruism)
- Control with minor edits
- Anticipated regret
- Disease risk feedback
- Enhanced health and disease risk feedback
- Enhanced health and measurement feedback
- Low cognitive load
Results

a) High level metrics:
- 70,708 people registered during the testing period in response to one of the 6 invites
- 46,675* of those went on to consent
- 24,230* booked an appointment
- 24,384* completed the questionnaire
(*) Others may have completed these steps outside of the analytic freeze

Note that the role of the letter issued via Digitrials is to encourage individuals to open the web portal and register. Completion of additional stages is a function of the materials provided on the website and the overall participant experience as they navigate the journey, post consent.

Our Future Health has a dedicated team reviewing all metrics and learning from use of the system and the supporting information to ensure the highest rates of conversion at each stage of the participant journey. For example, in March, reporting was completed on a series of one hour interviews with 21 members of the public, completed by a 3rd party agency. The interviews sought feedback on a prototype new version of the web portal, offering enhancements to the way the participant navigates the wealth of information available to inform their consent. This work is a key part of optimising the overall consent rate.
b) **Detailed letter performance:**

The high performance of the letter option covering Enhanced Health and Disease risk in all sectors is clear. While the letter's primary role is to drive individuals to log on and register, it is clear that the Enhanced Health and Disease Risk letter provided a greater impetus at all stages of the journey and this has been the preferred letter template for most (but not all) cohorts since.

**Phase 3**

As of February, based on these previous phases, the programme has focused on issue of letters across a range of regions. Testing at sub level began in March, with the introduction of a specific pilot in Greater Manchester, which includes a range of deprivation areas, using a letter which offered reimbursement of costs incurred. While this was impacted by a serious postal delay in letter delivery, and other varying confounding factors (e.g. Ramadan, school strikes) the initial conclusion seems to indicate a positive impact on rates of individuals consenting into the study and booking an appointment – both globally and in our subgroups of interest.

The confounding factors make it difficult to determine the exact percentage increase with confidence compared to:

- preceding weeks in Greater Manchester where no reimbursement was offered,
- regions where no reimbursement was offered,

However, the overall impact was positive in terms of booking rates and further exploration of this is now under design.

**Phase 4**

Our Future Health has always had the capability to analyse the sign-up rates of participants based on the invite code they use to register. It has also been possible to use output data from NHS
Digitrials to identify the numbers we have invited by specific characteristics (age/sex). In parallel we have been able to segment invitation cohorts by inferring ethnicity and IMD using population data. Phase 1 (a little) and Phase 2 (much more) demonstrated high level variation in the response rates from different groups by key characteristics. For example, when compared to the census data for a particular area, our response rate typically shows increases in response rates from certain groups, compared to others. We don’t know how much of this variation is down to the letter and how much is down to the sub-group being interested/not, and how much is down to other variables yet to be accounted for.

To examine this, Our Future Health has developed the capability to analyse the sign-up rate segmented by specific characteristics and linked to the invite code showing which letter version they received.

This means it is now possible to commence detailed analysis of the invitation letter performance by the more detailed characteristics. This work is underway and will inform future plans for targeted letters to specific groups to maximise uptake from, particularly, the traditionally underrepresented groups and those that are harder to reach. This work will include PPIE work with groups to develop materials that may be more effective for particular sub groups, and which can be issued to people in those specific sub groups via NHS Digitrials.
Appendix A - Letter Templates

Control (altruism)

“An invitation to help future generations live healthier lives for longer”

Dear [first name],

We are inviting you to participate in a health research programme aimed at improving our future health. This initiative is part of a larger research programme, with the ultimate goal of helping future generations prevent, detect, and treat diseases earlier. By participating, you will contribute to the development of new treatments and therapies that could save lives.

The programme involves:

1. Answering some online questions about yourself.
2. Giving our future health permission to securely link to your health records.
3. Providing a blood sample for research.

Your participation is voluntary, and all information will be anonymised. We will adhere to strict ethical standards and will never share your details without your consent. You will receive a copy of your responses, and we will keep your information secure.

If you have any questions, please call [contact number] or email us at [email].

Best regards,

[Your Name]
[Role/Position]
[Institution]

Control (minor edits)

“An opportunity to take part in research to help people live healthier lives for longer”

1. Answering some online questions about yourself
2. Giving our future health permission to securely link to your health records
3. Providing a blood sample... etc
Anticipated regret

“Taking part is an opportunity to one day look back and see how you had a role in beating diseases like cancer and heart disease.

The local clinics will only be in your area for a limited period of time, so be sure to sign up so you don’t miss out”

Disease risk feedback

“An opportunity to take part in research and learn new information about your health and future risk of disease.

In the future you will have the option to receive information on your risk of some diseases including diabetes, heart disease and some cancers. This will be calculated using the information you provide and analysis of the DNA in your blood sample.”
Enhanced health measurement & disease risk feedback

“An opportunity to take part in research and learn new information about your blood pressure, cholesterol and future risk of disease.”

Enhanced health measurement feedback

“An opportunity to take part in research and learn new information about your blood pressure, cholesterol.”