Enhanced Invitations and Uptake of Health Checks in Primary Care. Randomised Controlled Trial

Lisa McDermott¹, Alice Forster¹, Caroline Burgess¹, Victoria Cornelius¹, Alison Wright¹, Mark Ashworth¹, Hiten Dodhia², Mark Conner³, Frances Fuller⁴, Caroline Rudisill⁵, Jane Miller⁴, Martin C Gulliford¹.

Background

NHS Health Checks

• National programme started in 2011

• Healthy adults aged 40 to 74 years - Invited for NHS Health Check.

• Invitation every 5 years
Health Check Assessment

- Heart disease
- Stroke
- Kidney disease
- Diabetes
  - Involves evaluation of blood pressure, cholesterol, smoking, BMI, physical activity, and alcohol intake.
NHS Health Check uptake

• Programme could prevent **2000 deaths and 9500 non-fatal myocardial infarctions and strokes** each year

• However…..Uptake **considerably lower than expected**
  
  • Department of Health **economic model assumes 75% uptake**
  
  • Nationally uptake: 52% (invitation and opportunistic checks)
  
  • 80% of all CCG’s uptake rates below target.

• **Uptake in South London low: 20-40%**
Using the question behaviour effect to increase uptake

• **Question behaviour effect** (Sherman 1980): Asking individuals about their intention to conduct a behaviour increases their chances of doing it.

• **Questionnaire**: a series of questions about an individual’s intention to conduct a behaviour (e.g. attend screening).

• **Mechanism**: Number proposed- ‘attitude accessibility’/ ‘cognitive dissonance’/ ‘simulation of behaviour’ (Wilding et al, 2016)

• **Previous evidence**: Use has **resulted in increased attendance of health services** including: Health Checks, cervical screening, blood donation, influenza vaccination (Conner et al., 2011; Godin et al., 2010; Godin et al., 2008).
Study aims

To determine whether enhanced invitation methods, using the 'question-behaviour effect', lead to increased uptake of NHS Health Checks.
Methods

Design
• Randomised control trial which will compared the effects of:
  
• **Group A)** *Standard invitation* only. (Control group)
  
• **Group B)** *Question-Behaviour Effect Questionnaire* followed by *standard invitation* one week later;
  
• **Group C)** *Question-Behaviour Effect Questionnaire*, with offer of *retail voucher as incentive* for questionnaire completion, followed by *standard invitation* one week later.
## Intervention

<table>
<thead>
<tr>
<th>Construct</th>
<th>Item</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intentions</td>
<td>I intend to go for a Health Check in the next few weeks ... strongly disagree/ strongly agree</td>
</tr>
<tr>
<td>Attitudes</td>
<td>For me, going for a Health Check in the next few weeks would be... very bad/ very good</td>
</tr>
<tr>
<td>Anticipated regret</td>
<td>If I did not go for a Health Check in the next few weeks, I would feel regret... strongly disagree/ strongly agree</td>
</tr>
<tr>
<td>Intentions</td>
<td>Will I go for a Health Check in the next few weeks? Definitely no/ definitely yes</td>
</tr>
<tr>
<td>Anticipated regret</td>
<td>If I did not go for a Health Check in the next few weeks, I would later wish I had ... strongly disagree/ strongly agree</td>
</tr>
<tr>
<td>Attitudes</td>
<td>For me, going for a Health Check in the next few weeks would be... very worrying/ very reassuring</td>
</tr>
<tr>
<td>PBC (Self-efficacy)</td>
<td>I’m confident I can go for a Health Check in the next few weeks... strongly disagree/ strongly agree</td>
</tr>
<tr>
<td>Subjective norms</td>
<td>People who are important to me would... completely disapprove/ completely approve ... of me going for a Health Check in the next few weeks</td>
</tr>
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Participants

- Patients due to receive an invite to an NHS Health Check at in South East London.
- 18 GP practices in Lambeth and Lewisham
- 12,052 participants
Procedure

1. **Monthly** - Each surgery receives list of patients eligible for Health Check invitations

2. **List randomised** into the 3 trial groups

3. **Groups B and C sent postal QBE questionnaire** ONE week before Health Check invitation *(group C offered incentive to return)*

4. **ALL groups sent invitation for Health Check** as is standard procedure

*Used two methods to conduct procedure (automated and in-practice....)*
Outcomes

• Primary outcome: whether each individual completed their NHS Health Check within 182 days (6 months) of the standard invitation.
Results

• Health Check Uptake:
  – Standard invitation, 14.4% (590 / 4,095)
  – QBE questionnaire, 15.8% (630 / 3,988)
  – QBE questionnaire and financial incentive, 15.9% (629 / 3,969)

• The increase in uptake associated with-
  – QBE questionnaire 1.43% (95% confidence interval -0.12 to 2.97%, P=0.070)
  – QBE questionnaire and offer of financial incentive was 1.52% (-0.03 to 3.07%, P=0.054).

• Questionnaire return rate-
  • QBE: 23% (917/3988)
  • QBE + Financial incentive 24.5% (974/3969)
Results- cohort

• During the study period-

• 58% of health checks did not follow a standard invitation letter.

• **Opportunistic**: Offered by practice/ during visit/ community event…(*attended >6 months after invitation letter/ never received formal invite)

• Opportunistic health checks associated with greater odds of ≥10% cardiovascular disease (CVD) risk (adjusted odds ratio 1.70, 95% confidence interval 1.45 to 1.99, P<0.001) compared with invited health checks).
Discussion

• Uptake of health checks following a standard invitation letter is low.

• Uptake of health checks is **not increased** through an enhanced invitation method using a QBE questionnaire.

• Financial incentive had **no significant effect** on QBE return rate.

• Opportunistic checks attended by patients at **higher risk of CVD** compared to those who attend following standard invitation letters.
Conclusions

• Strategies to increase health check uptake should focus on **increasing the accessibility and ease of participation** as this may enable uptake by those at greater risk.

• (*Further supported by recent Qualitative analysis of questionnaire free text responses).*
Acknowledgements

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