Selecting and developing promising very brief interventions to promote physical activity in primary care

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BACKGROUND AND AIM:
- Only 5% of men and 4% of women meet current physical activity recommendations (according to objective accelerometer data)\(^1\).
- NHS Health Checks offer an ideal opportunity to deliver very brief physical activity advice of approximately five minutes to a large proportion of the population.
- Very brief physical activity advice could be relatively easy and inexpensive to implement on a large scale, and a small effect could translate into a significant public health benefit.
- We aimed to select and develop very brief interventions (VBIs) for promoting physical activity that could be delivered by a health practitioner in an NHS Health Check or other primary care consultation.

METHODS

Stage 1: Generation and development of a shortlist of promising VBIs
- We identified a short-list of promising VBIs using an iterative approach that combined evidence and expertise from multiple sources (see figure ⇒).
- VBI selection was guided by four criteria: effectiveness, feasibility, acceptability, and cost.

Stage 2: Feasibility study
- Short-listed VBIs were tested in a small sample of participants to determine their feasibility (fidelity and duration of delivery) and acceptability and to decide which VBIs to evaluate further in a pilot trial.

RESULTS

Stage 1: Four VBIs were short-listed and developed: Motivational VBI, Action Planning VBI, Pedometer VBI, and Physical Activity Diary VBI.

Stage 2:
- Feasibility: All VBIs were deliverable in around 5 minutes and were delivered with moderate to good fidelity (see table ⇒).
- Acceptability: All VBIs were acceptable to practitioners and participants.

VBIs selected for further evaluation: We selected three VBIs for further evaluation:
1. Motivational VBI (with the addition of action planning and a physical activity diary);
2. Pedometer VBI (with the addition of tips and ideas for increasing daily steps, plus a step chart);
3. Combined Motivational & Pedometer VBI.

<table>
<thead>
<tr>
<th>VBI</th>
<th>Motivational VBI</th>
<th>Action Planning VBI</th>
<th>Pedometer VBI</th>
<th>Physical Activity Diary VBI</th>
</tr>
</thead>
<tbody>
<tr>
<td>N (participants)</td>
<td>11</td>
<td>16</td>
<td>17</td>
<td>14</td>
</tr>
<tr>
<td>VBI Fidelity (mean)</td>
<td>66%</td>
<td>68%</td>
<td>77%</td>
<td>66%</td>
</tr>
<tr>
<td>VBI Duration (mean)</td>
<td>5m 10s</td>
<td>4m 52s</td>
<td>5m 28s</td>
<td>4m 07s</td>
</tr>
</tbody>
</table>

CONCLUSIONS

- A two-stage method using multiple selection criteria and sources of evidence was found to be a pragmatic approach to selecting and developing very brief behaviour change interventions.
- All four VBIs were deliverable in 5 minutes, feasible and acceptable to patients and practitioners.
- Three VBIs were selected for further evaluation in a randomized controlled pilot trial.


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This presentation presents independent research funded by the National Institute for Health Research (NHS) under its Programme Grants for Applied Research Programme (Grant Reference Number RP-PG-0607-0079). The views expressed are those of the author(s) and not necessarily those of the NHS, the NIHR or the Department of Health.