Potential efficacy, feasibility, acceptability and cost of very brief interventions for promoting physical activity in NHS Health Checks

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Background and Aim:
- Only 6% of men and 4% of women meet current physical activity recommendations (according to objective accelerometer data).
- Very brief interventions can be relatively inexpensive and feasible to implement on a large scale.
- There is uncertainty about the potential effectiveness, feasibility, acceptability and cost of very brief interventions (VBI).
- We assessed the potential of very brief interventions, feasibility, acceptability and cost of three promising VBIs (identified as promising from development work and feasibility testing) as part of NHS health checks and selected the most promising VBI for evaluation in a full-scale RCT.

Methods:
- 394 participants in 8 primary care practices in England.
- Allocation ratio 1:1:1:2
- Sample size calculation: powered to give an estimate of potential effectiveness.

Results:
- Potential Effectiveness:
  - Objective PA: Counts per minute
  - Self-report PA
  - Total PAEE

Conclusions:
- Very brief interventions for physical activity in primary care are inexpensive and acceptable, and can potentially increase physical activity.
- The Pedometer VBI was most promising in terms of potential effectiveness and feasibility.
- VBI selected for further evaluation: We selected the Pedometer VBI for further evaluation. A large-scale RCT is assessing the effects on objectively measured physical activity, cost-effectiveness and estimated public health impact of the ‘Step it Up’ Pedometer intervention.

Content of the three Very Brief Interventions:

Motivational VBI
- Face-to-Face Discussion
- Benefits of increasing PA
- Importance and confidence
- Making a plan and keeping a diary

Pedometer VBI
- Face-to-Face Discussion
- 10,000 steps recommendation
- How to use the pedometer
- Daily step goal and self-monitoring

Combined VBI
- Face-to-Face Discussion
- Combination of Motivational and Pedometer VBIs

Feasibility:
- All VBIs delivered with moderate to good fidelity.
- Only Pedometer VBI was deliverable within 5 minutes.

Acceptability:
- All VBIs were acceptable to practitioners and participants.
- Practitioners preferred Pedometer VBI: brevity, ease of delivery and perceived participant response.
- Participants mentioned that VBIs for PA fitted well within health checks and reminded them of PA’s importance.

Cost:
- Average cost of the VBIs ranged from £6.83 (Motivational) to £20.98 (Combined) per patient.
- Cost was higher for both the Pedometer and Combined VBIs (added cost of the pedometer).

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