‘Making a Move in UK Exercise Referral’

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“4 out of 10 adults aged 40 to 60 in England walk less than 10 minutes continuously each month at a brisk pace.”

PHE, 2017
Nothing to Something

Ekelund, Lancet, 2016
UK Exercise Referral
“A public health panacea for PA promotion”?

(Pavey et al., 2011; Dugdill et al., 2005)
Misleading evidence

Poor assessment of ER potential

(Beck et al., 2016)

ER schemes only recommended as part of a “properly designed research study”
“Before undertaking a substantial evaluation you should first develop the intervention to the point where it can reasonably be expected to have a worthwhile effect.”

Medical Research Council Complex Intervention Guidance (2008), p.9
Phase 1: Co-development

1. Needs Analysis
2. Eligibility & Referral
3. Intervention Framework (Phase 1)
4. Intervention Framework (Phase 2) & Evaluation
5. Follow-Up

Local Stakeholders

- Evaluation
  Watson et al., In Prep

- Stakeholder knowledge
- Scientific evidence
- Behaviour change theory

Intervention Framework
Participatory Research:
Co-Developed Intervention

58% ER participants recalled seeing instructor at induction only
Watson et al. in prep

Referral from Health Professional

Week 0 Induction

Week 4 Consultation

Week 8 Consultation

Week 12 Consultation

Week 18 Follow-Up

Behaviour Change Techniques

Week 8 Consultation

Additional Support (optional)

12-Week tailored PA support

Health Trainer Service

Watson et al. in prep

58% ER participants recalled seeing instructor at induction only
Phase 2: Pilot

- Referral from Health Professional
  - Week 0 Induction
  - Week 12 Consultation
  - Week 18 Follow-Up

Feasibility and Piloting
- Testing procedures
- Inform evaluation phase

- Process evaluation
  - IPAQ
  - WEMWBS
  - Body Mass
  - Fidelity/Adherence
- Lab-based testing
  - Vascular ultrasound
  - Blood biomarkers
  - VO₂max
  - MVPA: Accelerometry
- Lifestyle & Psychosocial Qs
  - Semi-structured interviews
    - Patients (week 12)
    - Staff (week 6 & 12)
Estimated CRF (ml.kg.min\(^{-2}\))

Minutes per day in MVPA
Cardiometabolic Health
Carotid Reactivity

Change in Artery Diameter (%)

Baseline
-10
-8
-6
-4
-2
0
2
4
6
8
10
12

Week 12

*
Process Data

- 14 completed pre-post data sets

Embedded Evaluation

Staff Capacity

Poor Measurement
Patient Interviews

Health Benefits:

“Well since January I’ve been off my anti-depressants…. I was on them for about eleven years and I tried a number of times to come off them” P 25

Support:

“I felt that it [the induction] focussed on my needs and I think it was a good programme to get me started. It was good having access to the practitioners throughout the scheme, having that review every four weeks” (P25)

“The people I have seen in the gym have been very helpful but they’ve been very few and far between… I don’t think for me personally there were enough staff... I was under the radar…” (P8)
Phase 3: Evaluation

- Co-developed ERS
- Standard care ERS
- No treatment control

- Baseline
- Week 12
- 6 Months
Conclusions & Moving Forward

- Participatory research = ↑ intervention context-sensitivity
- MRC guidance = ↑ implementation success & effectiveness

↑ Clinical & Cost Effectiveness?

Phase 1: Co-Development
Jan - Oct 2016

Phase 2: Pilot
Nov 2016 – Jul 2017

Phase 3: Evaluation
Nov 2017 – Oct 2018

PhD: 3 Years
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