differences in change from baseline step-count and 19 providing mean between-group differences in end-point only step-counts. From the 22 studies, 16 reported the primary outcome at ≤3 months with a mean difference (MD) in step-count of 1255 [95% Confidence Interval 848, 1661]; 8 studies at ≤6 months, MD 1084 steps [647, 1520]; 9 studies at ≤1 year, MD 516 steps [273, 758]; 2 studies at ≤2 years, MD 290 steps [-7, 587]; and 4 studies at >2 years, MD 494 steps [251, 738]. The 19 studies with end-point only step-counts highlighted similar findings, but had fewer participants and reported no outcomes beyond one year.

**Discussion** This review demonstrated that pedometers and other step-count monitoring interventions significantly increase individuals’ step-counts in the short-term, with larger trials also showing small sustained long-term effects. These interventions could therefore provide a means of addressing the public health inactivity challenge. Further work will evaluate which type of interventions are more effective and determine the effect-modifiers of physical activity maintenance.

**OP66 EFFECT OF PEDOMETER-BASED WALKING INTERVENTIONS ON LONG-TERM HEALTH OUTCOMES: PROSPECTIVE 4-YEAR FOLLOW-UP OF 2 RANDOMISED CONTROLLED TRIALS USING ROUTINE PRIMARY CARE DATA**

1DG Cook*, 1T Harris, 2E Limb, 2F Hocking, 1M Carey, 5S DeWilde, 1C Furness, 1C Wahlick, 1S Ahmad, 5S Kenny. 1Population Health Research Institute, St George’s, University of London, London, UK; 2Pragmatic Clinical Trials Unit, QMUL, University of London, London, UK; 3Occupational Health Support Unit, Devon and Cornwall Police, Middlemoor, Exeter, UK; 4Pragmatic Clinical Trials Unit, QMUL, University of London, London, UK; 5Population Health Research Institute, St George’s, University of London, London, UK; 6Sport and Health Sciences, University of Exeter, Exeter, UK; 7Policing is an increasingly sedentary occupation that is associated with high levels of physical and psychological morbidities. Mobile health (mHealth) technology is increasingly popular, low cost and accessible. The study aim was to assess the potential impact, feasibility and acceptability of an mHealth technology intervention (Fitbit® activity monitor and ‘Bupa Boost’ smartphone app) to promote physical activity (PA), reduce sedentary time, and improve health and well-being, perceived stress and perceived productivity in the police force.

**Methods** Single-group, pre-post, mixed methods exploratory trial. Police officers and staff (n=180) were recruited from two sites (Plymouth Basic Command Unit, Devon & Cornwall Police and North Dorset territorial area, Dorset Police). Participants used the technology for 12 weeks (an ‘individual’ then ‘social’ phase) followed by five months of optional use. Data sources included Fitbit®-recorded objective step count, questionnaire surveys and semi-structured interviews (n=32). Outcome assessment points were baseline (week 0), mid-intervention (week 6), post-intervention (week 12) and follow-up (month 8). Quantitative data was analysed using paired t-tests, regression and correlations. Qualitative analysis involved framework and thematic analysis. Findings were integrated during interpretation; qualitative findings confirmed, explained, and expanded on quantitative results.

**Results** While self-reported PA increased overall (e.g. mean increase +421 MET-minutes/week moderate to vigorous PA baseline to month 8, 95% CI 56–785), significant increases in steps were observed only in participants with a baseline mean daily step count less than 10,000 (+1028 steps/day, 95% CI 417–1,639 baseline to week 12; +810 steps/day, 95% CI 115–1,506 baseline to month 8).

Engagement and perceived acceptability were high overall, particularly for the less active participants, but some usability issues were reported with the Bupa Boost app, resulting in lower and declining engagement with this component.