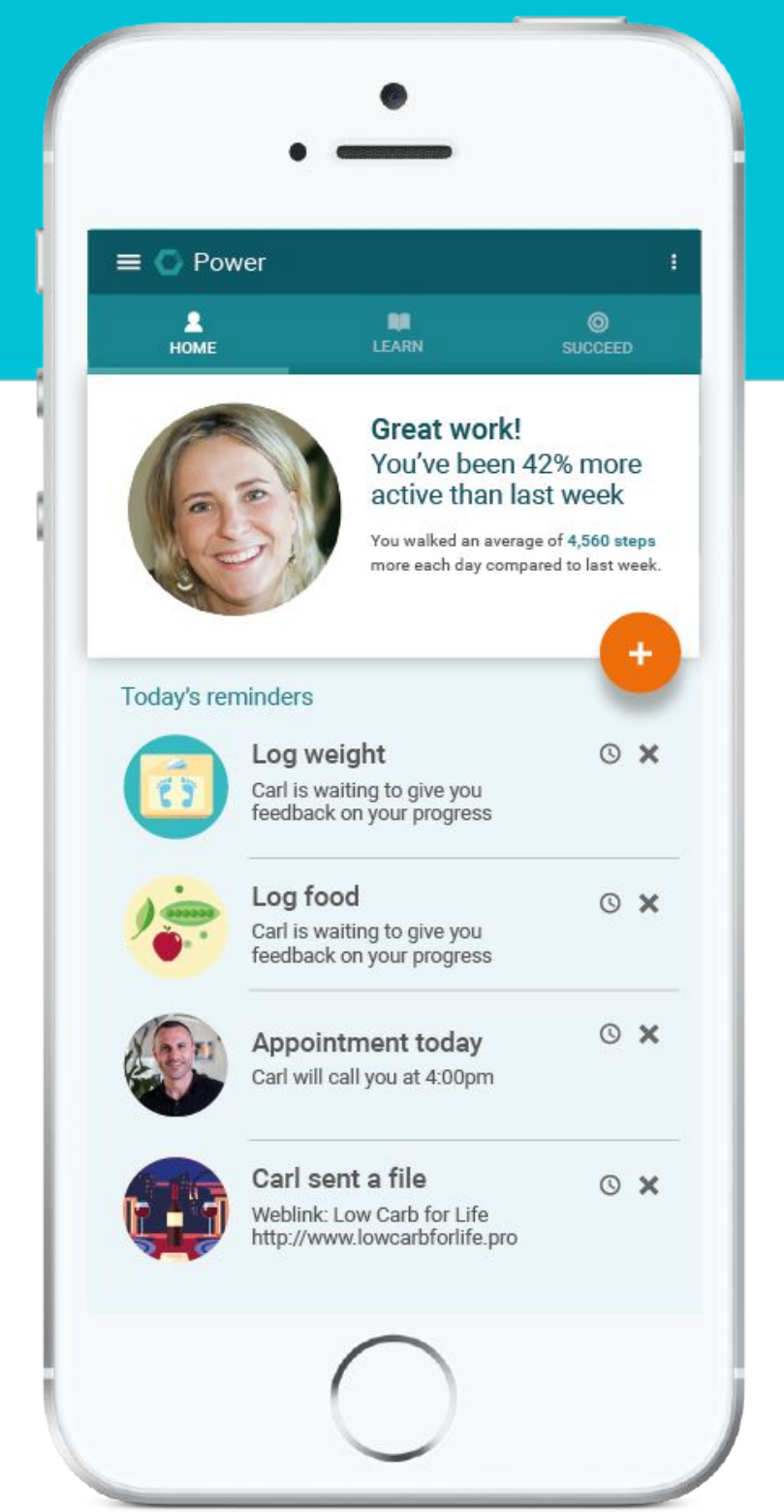


Assessing acceptability and feasibility of a theory-based digital lifestyle intervention for adults with prediabetes

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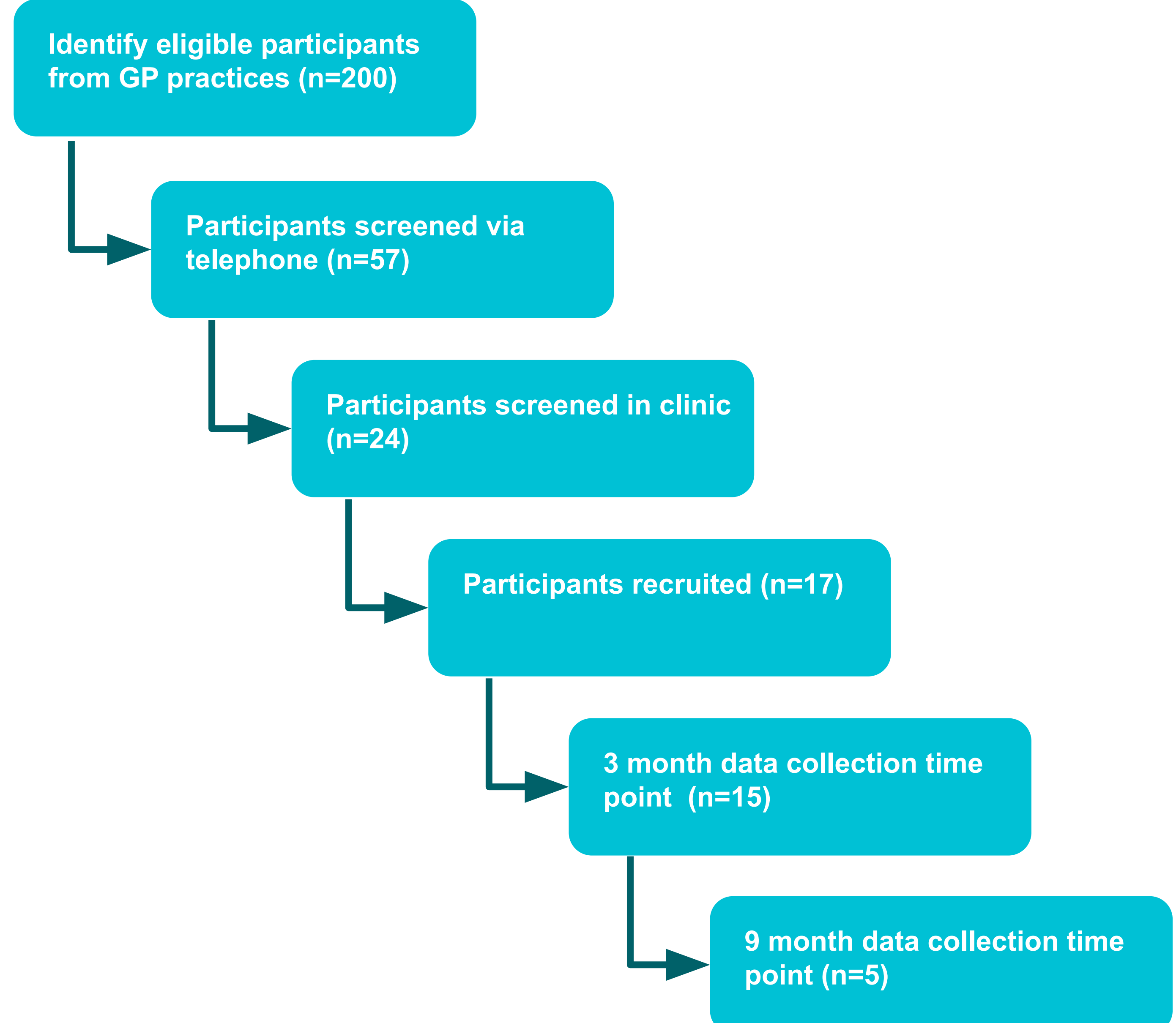


Background

- The prevalence of prediabetes is rapidly rising⁽¹⁾. This is largely associated with an increase in obesity⁽²⁾.
- Obese individuals have a 7-fold increased risk of developing Type 2 diabetes, compared to individuals of a healthy weight⁽²⁾.
- Current evidence demonstrates that effectively targeting diet and physical activity to initiate weight loss and weight loss maintenance reduces the incidence of diabetes⁽³⁾.
- Adults at risk of diabetes have previously been offered face-to-face lifestyle programmes that provide support to make and sustain dietary and physical activity behaviour changes. Face-to-face programmes are often time consuming and offered at inconvenient times. Consequently, there is a clear need for scalable behaviour change interventions.

Research aim

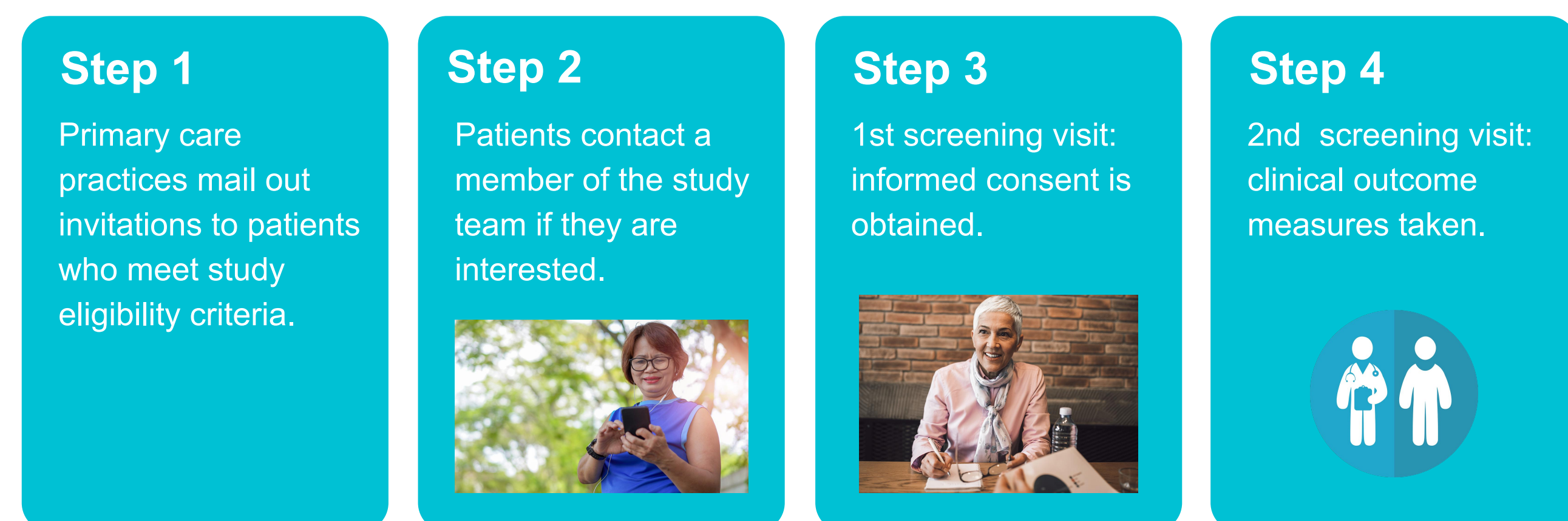
Assess the acceptability and feasibility of a digital theory-based behavioural intervention, 'Changing Health' for adults with prediabetes.



Methods

- A single group pilot study.
- 40 participants with prediabetes, aged 18-75 years with BMI ≥ 25.
- A mixed methods approach will assess acceptability (e.g., adherence, completion, patient views) and feasibility (e.g., recruitment, retention) as primary outcomes.
- Secondary outcome measure data will be collected for diet, physical activity, sleep, metabolic control, body composition, cardiorespiratory fitness & cardiac function at baseline, 3 and 9 months.
- An embedded qualitative study will be conducted to obtain data on feasibility and acceptability.

Recruitment procedure



The participant journey



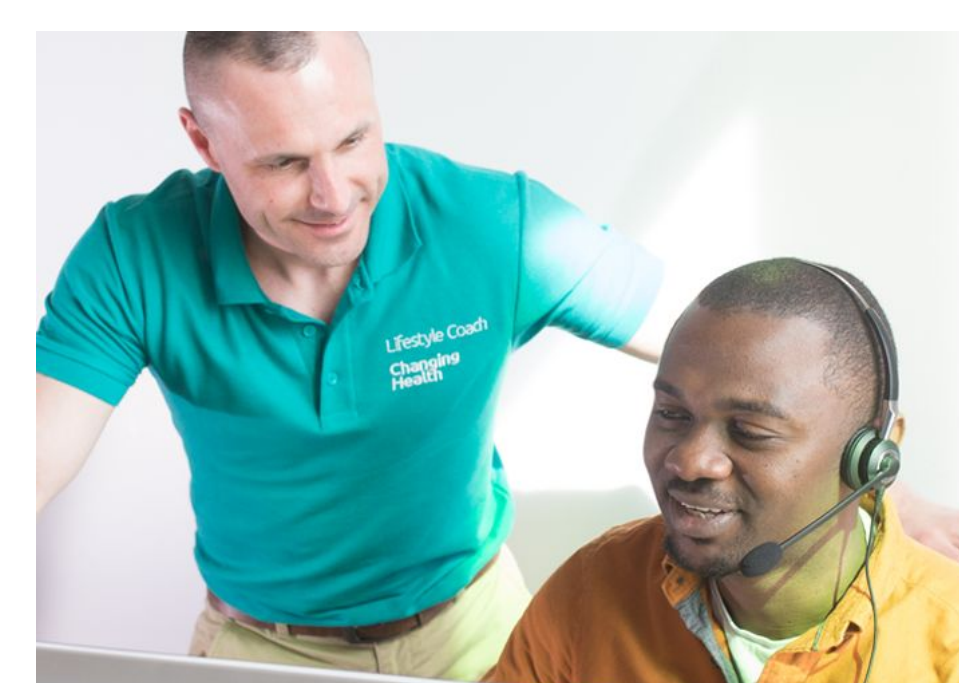
Results

Table 1. Outcome measures at 3 months (n=15)

Outcome measures	Baseline visit	3 month time point	Average absolute change	% change
Weight (kg)	99.8	94.7	-5.1	-4.9
Waist (cm)	147	135	-12	-6.9
Body fat (%)	40.4	39.4	-0.8	-2.5
VO2 Peak (ml/kg/min)	16.8	17.1	0.2	3.3
HbA1c (mmol/mol)	43.2	41.1	-1.5	-3.2
Max WR (watts)	107	129	22	23

Discussions

- Preliminary findings suggest that the digital intervention 'Changing Health' is acceptable and feasible for adults with prediabetes.
- Secondary outcome data collected (n=15) has shown positive changes for individuals with prediabetes.
- Qualitative investigation will add important context to barriers and facilitators to acceptability and feasibility.



This pilot study will inform a larger scale evaluation of Changing Health should the digital intervention demonstrate to be both acceptable and feasible.

References

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