

Uptake and retention in a digital low-calorie diet programme delivered to a geographically remote population living with type 2 diabetes.

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Introduction

Research shows that low calorie diets, delivered through face-to-face appointments, can achieve significant weight loss and 46% remission rates at one year (1).

Aims

The aim of this evaluation is to assess the retention and clinical effectiveness of a digital low-calorie diet programme for adults living with type 2 diabetes requiring no face-to-face appointments.

Methods

Preliminary data from adults with type 2 diabetes, following a digitally-enabled low-calorie diet programme (12-week total diet replacement (TDR) approx. 800 calories; 4 weeks food reintroduction; 8 months behaviour change support; supported by a Diabetes Specialist Dietitian) were collected and analysed to determine initial retention and engagement for the first six months of the programme. Patients had access to a smartphone app for self-monitoring and dietitian support.

12 week
total diet
replacement

4 week
food
reintroduction

8 months
behaviour
change

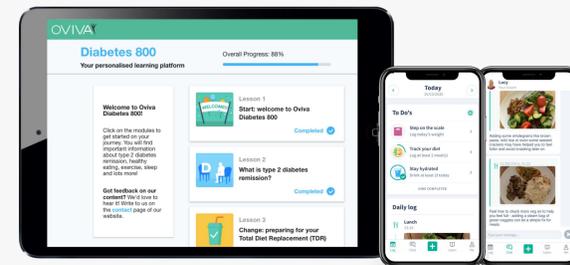


Figure 1: Oviva's app supports behaviour changes, and the online Learn portal can be accessed via smartphone, tablet, or desktop.

Results

29 patients started the programme; 26 (90%) completed the 12-week TDR phase and 24 (83%) completed 6 months.

Average week 12 weight loss is 13.8kg (n=26) and 14.2kg (n=24) at 6 months.

The programme is still live but for those who have reached 12 months, average weight loss is 12.4kg (n=7). 39 prescriptions were stopped with an average of 3.5 prescriptions stopped per patient. The average reduction in HbA1c at 6 months is 15.8 mmol/mol (14.8% reduction)(n=13).

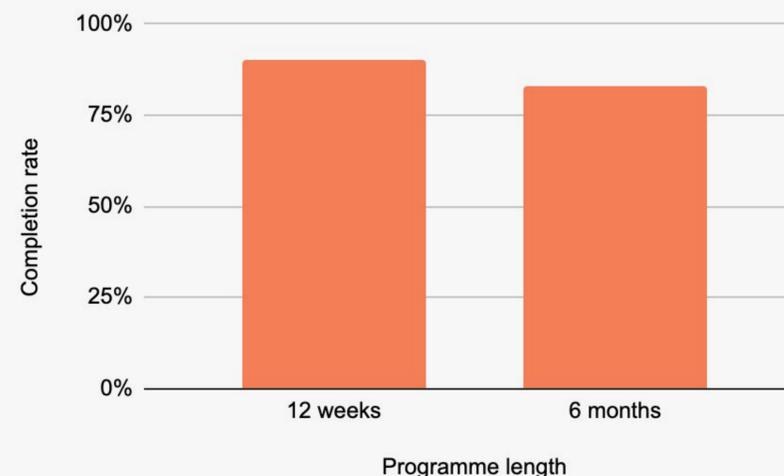


Figure 2: Bar chart showing the percentage of patients who completed the 12 week and the 6 month programme



Figure 3: Bar chart capturing the average weight loss at the 12 weeks mark and the 6 months mark.

Conclusions

Preliminary data demonstrates that a digital low-calorie diet programme results in significant weight loss, glycaemic improvement and medication reductions at 6 months in adults living with type 2 diabetes.

Engagement levels and retention rates remain high.

References:

Lean, M.E., Leslie, W.S., Barnes, A.C., Brosnahan, N., Thom, G., McCombie, L., Peters, C., Zhyzhneuskaya, S., Al-Mrabeh, A., Hollingsworth, K.G., et al. (2017).

Primary care-led weight management for remission of type 2 diabetes (DiRECT): an open-label, cluster-randomised trial. *Lancet* 391, 541–551.