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Prohealth@home: A feasibility study exploring the use of dietitians communicating with individuals at high risk of diabetes via a web based app to reduce the risk of developing diabetes.

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Introduction: Worldwide Type 2 diabetes is increasing at an alarming rate. Lifestyle interventions successfully reduce the risk of Type 2 diabetes, however in practice high levels of professional support are not sustainable. The internet has the potential to provide an alternative means of supporting large numbers of individuals to make lifestyle changes. It is hypothesised that dietitians communicating with individuals at risk of Type 2 diabetes via a web-based lifestyle app will lead to changes in lifestyle behaviours resulting in an improved glycaemic control and reduction in diabetes risk. The purpose of this study was to determine the feasibility of using a web based lifestyle app with dietetic support in individuals at risk of developing diabetes.

Methods: Ten patients registered with General Practices in Plymouth were recruited. Contact between the dietitian and patients consisted of weekly messaging via the app to facilitate changes in diet and activity behaviour through motivational and cognitive behavioural strategies. Anthropometric, dietary, activity, blood biochemistry and well-being data were collected at baseline, 3 and 6 months. At 6 months patients were invited to participate in a focus group, to assess ease of use and barriers to using the technology and perceived benefits.

Preliminary results: All patients have engaged with the app, lost weight and improvements have been seen in fasting blood glucose values. Early qualitative data has highlighted the following; patients perceived understanding of their condition improved, as did understanding of blood biochemistry, tools to help cope with relapse were seen as important factors to help with behavioural change. In addition interaction with the dietitian was rated as an essential component of this web based care package.

Conclusion: Dietetic support via a web based lifestyle app provides an alternative feasible method of care delivery and should be considered for patients at risk of developing diabetes.

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