

TRANSLATION OF AN INTENSIVE LIFESTYLE INTERVENTION TO AN ONLINE SETTING (9-month data)

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Authors: Kathleen M. McTigue, MD,¹ Molly Conroy, MD,¹ Rachel Hess, MD,¹ Cindy Bryce, PhD,¹ Tony Fiorillo, MD,¹ Gary Fischer, MD,¹ Cindy Murphy, RN,¹ Karen Kelly, RN¹ and Laurey Simkin-Silverman, PhD²

1 Medicine, University of Pittsburgh, Pittsburgh PA, PA and

2 Epidemiology, University of Pittsburgh, Pittsburgh, PA.

Background: Despite guidelines recommending that primary care clinicians screen for obesity and offer intensive counseling interventions to obese adults, few evidence-based programs are accessible. Translation of a validated program to an online format may facilitate lifestyle intervention in a primary care setting.

Methods: We adapted a well-validated lifestyle curriculum (the Diabetes Prevention Program Lifestyle Balance Curriculum) for online delivery. We evaluated the feasibility of implementation in coordination with primary care, and the potential for weight loss promotion in a pilot study of 50 patients from an urban academic internal medicine practice, enrolled between 11/16/2006 and 2/11/2007. The Virtual Lifestyle Management (VLM) program includes 16 weekly and 8 monthly lessons. It incorporates behavioral tools such as email prompts for online self-monitoring of eating pattern, physical activity and weight, and automated weekly progress reports. Participants are supported via electronic counseling. Patients with a BMI ≥ 25 kg/m², at least one weight-related cardiovascular risk factor, and Internet access were eligible if the referring physician felt that the lifestyle goals were safe and medically appropriate. Here, we report process measures and weight outcomes over 9 months of enrollment. Body weight was assessed every 3 months using calibrated scales. Weight change was analyzed by (a) using a last-observation-carried-forward (LOCF) approach, and (b) determining weight change among those with data available at 9 months +/- 2 weeks from their enrollment date.

Results: Participants were primarily female (76%), with an average age of 51.94 (SD 10.82), and BMI of 36.8 (SD 6.8). At an average of 273.42 (SD 24.95) days following enrollment, 50% of participants had logged into VLM within the last 30 days; 60% had completed at least 10 lessons and 38% had completed the 16 core lessons. The LOCF approach to 9-month weight data showed an average weight change of -5.53 (SD 7.63) kg. Among the 34 participants with weight data in the 9-month window, average change was -7.13 (SD 8.73) kg, and 38% had lost $\geq 7\%$ of their body weight.

Conclusions: An Internet-based lifestyle intervention can be incorporated into primary care practice, and may facilitate the integration of evidence-based lifestyle advice with clinical care. Among primary care patients with weight-related co-morbidities, prolonged participation was common, and at least a quarter of the original sample showed clinically significant weight loss at 9 months of follow-up.