Abstract

**Background and Purpose:** This quality improvement project sought to evaluate the effectiveness of a 12-week virtual evidence-based prediabetes education program in an outpatient setting for adults greater than 65 years old with prediabetes to address pre-diabetes knowledge and health indicators (weight, body mass index, and exercise logs).

**Methods:** This project utilized a 1-group pretest-posttest design comparing prediabetes knowledge and health indicators at baseline and after the intervention. The intervention was attending six virtual sessions using a modified Center for Disease Control National Diabetes Prevention Program to accommodate for the length of the improvement project.

**Results:** At total of 23 participants who met inclusion criteria were recruited from four senior focused clinics in the same zip code. Fifteen participants were lost during subsequent sessions, and 8 attended all six sessions virtually. Statistically significant improvement was demonstrated among the final sample (n=8) in median weight (167 pounds vs 147 pounds, \( p < 0.028 \)), median BMI (28.5 kg/m\(^2\) vs 26.6 kg/m\(^2\), \( p < 0.028 \)), and median SDKS scores (12 vs 16, \( P < 0.001 \)). Changes in mean activity minutes (281 vs 225, \( p < 0.237 \)) and mean steps (42,065 vs 33,850, \( P < 0.345 \)) did not demonstrate statistical significance.

**Conclusion:** This pilot study found that a virtual lifestyle education program can improve health indicators (weight/BMI) and pre-diabetes knowledge to address the needs of patients over the age of 65 with prediabetes.

**Implications:** A virtual lifestyle education program should be considered a standard of practice in primary care to address prediabetes for patients over the age of 65.

**Keywords:** Prediabetes, virtual, geriatric, lifestyle intervention, knowledge