

## Practice-Based Evidence of Lifestyle Redesign<sup>®</sup> for Hypertension and Diabetes in a Safety-Net Primary Care Setting

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**PURPOSE:** Patients of safety-net health care systems are at elevated risk for chronic health conditions (Babey et al., 2021), largely due to pervasive socioeconomic disadvantages. Occupational therapy (OT) has been moving to the forefront in primary care to bring necessary services to under-resourced patients, addressing issues such as chronic disease management and treatment adherence (Halle et al., 2018). Studies have demonstrated efficacy of lifestyle-centric OT, including those using an intervention framework of Lifestyle Redesign<sup>®</sup> OT (LR-OT) (Pyatak et al., 2019; Schepens Niemiec et al., 2021). The goals of LR-OT are to incorporate health behavior changes into daily routines and develop strategies to address symptoms and disease management tasks while engaging in meaningful occupations. The purpose of this study was to evaluate ongoing LR-OT services for hypertension (HTN) and diabetes (DM) to improve health and well-being in a safety-net primary care setting.

**DESIGN:** This study used a retrospective, pre-post design, involving medical chart review of patients who received LR-OT services between August 2018 and March 2021.

**METHOD:** Patients with uncontrolled DM and/or HTN were referred to LR-OT. Background information and clinical data including blood pressure (BP) and HbA1c values closest to the OT evaluation and discharge dates were extracted from medical records. Occupational performance and satisfaction as well as patient activation were assessed at baseline and discharge using the Canadian Occupational Performance Measure (COPM) and Patient Activation Measure (PAM), respectively. Pre-post changes were analyzed with paired-samples Wilcoxon Signed Rank tests. Associations between variables were conducted using Spearman correlation tests.

**RESULTS:** Among 96 patients initially evaluated for LR-OT, 21 declined OT or were lost to follow-up after evaluation. The remaining 75 received, on average,  $7.5 \pm 6.0$  visits over  $201 \pm 156$  days. Patients were  $53.7 \pm 11.1$  years old, 83% Latino, and 59% female. Patients with HTN ( $n = 17$ ) showed significant improvement in systolic ( $p = .047$ ) and diastolic ( $p = .023$ ) BP. Patients with DM ( $n = 63$ ) showed significant improvement in HbA1c ( $-1.4 \pm 2.4\%$ ;  $p < .001$ ). Improvement in patient activation ( $p = .002$ ) was noted for those with pre/post PAM data ( $n = 10$ ), and for occupational performance ( $p < .001$ ) and satisfaction ( $p = .002$ ) for patients with pre/post COPM values ( $n = 31$ ). Greater improvement in occupational performance was associated with more OT visits ( $r = .39$ ,  $p = .03$ ). PAM scores and number and duration of OT visits had correlations in a similar range ( $r = .34-.40$ ) but were not statistically significant.

**CONCLUSION:** LR-OT offered as a part of routine clinical care in a safety-net primary care clinic shows promise in improving health and behavioral outcomes in patients with chronic disease. Notably, improvements in behavioral variables thought to contribute to improved clinical outcomes were associated with the number of OT visits. Results must be interpreted with caution given limited sample sizes and lack of a comparison group.

**IMPACT STATEMENT:** Current findings align with the OT profession's burgeoning role in primary care and long-standing vision to promote health through occupation.

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