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# Title

Food RX + CHW: Investigating the Role of Community Health Workers to Close the Food Insecurity Gap

# Priority 1 (Research Category)

Diabetes and endocrine disease

# Presenters

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# Abstract

Context Food insecurity increases an individual's risk for some of the most costly and preventable chronic diseases, including diabetes. Poverty, racism, and food insecurity co-mingle to create significant health inequities and make improvement of diet a hurdle among underserved individuals.

Objective To bridge the food insecurity gap for patients while ensuring they are linked to the appropriate resources for sustainable food access to improve diabetes outcomes.

Design This randomized controlled pilot study assigned patients to a control group receiving food or an intervention group receiving food in combination with community health work counseling and resource linkage.

Setting Patients were recruited from an academic medical center. Study visits were conducted virtually by community health workers via partnership with a community-based organization.

Population 31 primary care patients with type 2 diabetes and self-reported food insecurity. Participants were 84% female, 32% Black, 58yrs on average, with an average A1C of 8%.

Intervention Study participants received 12 weekly home-deliveries of locally grown produce and shelfstable food. Sixteen of these patients (intervention group) also received support from community health workers including 9 telehealth visits, nutrition and cooking education, and tailored resource linkage.

Outcome Measures We collected Hemoglobin A1C, blood pressure, and weight for each participant at three time points: baseline, 3 months (immediately after food deliveries and CHW intervention), and six months (3 months post intervention). We also collected data on diet quality and knowledge and utilization of food access resources.

Results For the intervention group, there was a statistically significant reduction in average value of A1C by 0.85 points from baseline to 3 months (p=0.039) and by 1.65 points from baseline to 6 months

(p=0.012). Eighty one percent of participants in the intervention group (13/16) had a reduction in A1C over the course of the intervention. There was no significant change in A1C for the control group in either time point. Diastolic blood pressure increased 6.5 mmHg (p= 0.02) between baseline and 3 months for the control group and remained stable for the intervention group. Systolic blood pressure and weight showed no significant changes for either group.

Expected Outcomes These findings suggest that support from CHWs significantly enhances a patient's ability to reduce A1C and sustain this reduction.