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Title

Mentored implementation to initiate a diabetes program in an underserved community: a pilot study

Priority 1 (Research Category)

Health Care Disparities

Presenters

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Abstract

Context. Community clinics often face pragmatic barriers hindering program initiation and replication of results of controlled research trials. Mentoring is a potential strategy to overcome these barriers. Objective. We piloted an in-person and telehealth mentoring strategy to implement the TIME program (Telehealth-supported, Integrated Community Health Workers (CHWs), Medication-access, group visit Education). Setting. Community clinic in Houston, Texas. Population Studied. Participants (N=55) were low-income Latino(a)s with type 2 diabetes. Intervention/Instrument. The study occurred in two, six month phases for training and observation (Phase 1) and mentoring (Phase 2). During Phase 1, the research team conducted TIME while the clinic team observed; in this phase, participants were randomized to the intervention (TIME) or usual care (control). During Phase 2, the research team mentored the clinic team to conduct TIME for a new cohort of participants not previously exposed to the intervention. Study Design and Analyses. Phase 1 was a randomized clinical trial. Phase 2 was a prospective clinical trial. Outcome Measures. Outcomes included baseline to six month changes in diabetes markers including HbA1c (primary) and CHW knowledge. We evaluated: (1) Phase 1 intervention vs. control outcomes to establish proof of concept for TIME, (2) Phase 2 outcomes to assess a clinic run arm, and (3) Phase 1 intervention vs. Phase 2 to compare the research team-led vs. clinic team-led arms. Results. During Phase 1, compared to the control arm, intervention participants had superior baseline to 6-month changes for HbA1c (mean change: intervention -1.03 vs. control: 0.04, p=0.011), weight (p=0.044), target HbA1c (p=0.035), hypoglycemic events (p=0.021), medication nonadherence (p=0.001), and five of six ADA measures (p<0.001-0.002). During Phase 2, participants had significant reductions in HbA1c (mean change: -1.34, p=0.001), diastolic blood pressure (p=0.004), BMI (0.012), weight (p=0.010), medication non-adherence (p<0.001), and all six ADA measures (p=0.07-0.0005). There were no significant Phase 1 intervention vs. Phase 2 differences. CHWs improved knowledge as measured by comparing pre-test to post-test scores (p<0.001). Conclusions. A novel mentored approach to implement TIME into community clinics resulted in improved diabetes outcomes.

Larger studies of longer duration are needed to fully evaluate the potential of mentoring community clinics.