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Title

Improvements in social, behavioral, psychological, and clinical outcomes in patients with type 2 diabetes: A report from the

Priority 1 (Research Category)

Diabetes and endocrine disease

Presenters

L. Miriam Dickinson, PhD, Danielle Hessler Jones, PhD, Michael Potter, MD, Perry Dickinson, MD, José Parra, BS, Lawrence Fisher, PhD

Abstract

Context: Type 2 diabetes (T2DM) self-management support (SMS) programs can yield improved clinical outcomes but may be limited in application or impact without considering individuals' unique social and personal challenges that may impede successful diabetes outcomes.

Objective: To 1) determine whether adding a patient engagement protocol to an evidence-based SMS program to address unique patient challenges further improves behavioral, social, psychological and diabetes outcomes, and 2) explore whether improvement in behavioral, social, and psychological measures is associated with improvement in diabetes outcomes.

Study Design and Analysis: Cluster randomized trial. Primary analyses used generalized linear mixed effects models to examine change in social, behavioral, psychological, and clinical outcomes by study arm and as potential mediators of change in clinical outcomes

Setting or Dataset: 12 Community Health Center (CHC) sites affiliated with the San Francisco Bay Collaborative Research Network in California.

Population Studied: 734 CHC patients with type 2 diabetes

Intervention/Instrument: Clinics randomized to 1) Connection to Health (CTH; 6 sites), including a health survey and collaborative action planning, or 2) Enhanced Engagement CTH (EE-CTH; 6 sites), including all features of CTH plus additional relationship building training/support.

Outcome Measures: Selected behavioral self-management (medication taking), psychological (health distress), modifiable social risks (food security, utilities), and clinical outcomes (HbA1c) from baseline to one year post-enrollment.

Results: At 6-12 months post-enrollment, individuals in both programs reported significant improvements missed medications, health-related distress, social risks ($p < .05$), and HbA1c ($p<.01$).

Compared to CTH, individuals in EE-CTH reported greater decreases in health-related distress ($p < .05$). Improvement in behavioral, social, and clinical outcomes did not differ by study arm ($p>.05$). Overall, reductions in missed medications and health distress (but not social risks) were independently associated with reductions in HgA1c (both $p<.01$).

Conclusions: CTH and EE-CTH demonstrated positive behavioral, psychological and social risk impacts for T2DM in CHCs when delivered within existing clinical workflows. Improvements in SMS and psychological outcomes may mediate reductions in HbA1c, emphasizing the importance of addressing patient context and challenges within SMS programs.