Intervention in brief

High and rising risk:

Peer mentoring is a non-clinical support mechanism through which patients receive health education and/or coaching from someone with similar life experiences. Peer mentoring is often used in chronic disease management and behavioral health. The goal is to help patients learn to manage their conditions by driving relationships with relatable role models and sources of knowledgeable support.

Strength of evidence



Extensive research supports the impact of peer mentoring, although there is mixed evidence on acute utilization and symptom management improvement for patients with severe mental illness.

Impact

- Decreased cost: Not demonstrated
- Decreased utilization: Insignificant to 66% decrease in ED visits at 18 months; 45-61% decreased acute care visits and 68-74% decreased hospitalizations for patients with comorbid diabetes and depression; 7% increased to 50% lowered risk of hospitalization among SMI¹ population; reduced length of stay for SMI population (SMD -0.22)
- Improved quality, clinical outcomes:
 - Physical health: 0.4-1.7 percentage point decrease in HbA1c compared to control from 3-10 months; lower total cholesterol (7.2 mg/dL), LDL cholesterol (8.1 mg/dL) at 10 months as compared to control; higher HDL cholesterol at 4 months (1.4 mg/dL) and 10 months (1.6 mg/dL) compared to control; 15-32% increased blood sugar checks at six months
 - Behavioral health: Decreased depressive symptoms (SMD -0.59 to -0.10); mixed impact on depression and anxiety symptoms for SMI population (insignificant to SMD -0.42); reduced overall psychiatric symptoms for SMI population (pooled SMD -0.07)
- · Increased access: Not demonstrated
- Improved stakeholder satisfaction: 6.1 mean improvement on the Patient Activation Measurement (PAM) scale for patient activation; 11-13% improvement in self-efficacy at 6 and 18 months
 - *SMI population*: Improved empowerment (SMD -1.44 to -2.67); mixed impact on quality of life (insignificant to SMD -1.42); mixed impact on recovery for (insignificant to SMD 0.11); mixed impact on empowerment (insignificant to SMD -1.44); mixed impact on and satisfaction (insignificant to SMD 0.48); insignificant impact on hope

How to succeed

Peer mentors are sustainable assets to use in care management as they can provide ongoing patient monitoring and support without the expenditure required of hiring an FTE or relegating staff time to these tasks. To execute an effective peer mentoring program:

- Employ individuals who overcame or are effectively managing the same challenges with which patients are struggling
- · Use mentors to:
 - Provide education on lifestyle changes and ongoing preventive care practices
 - Promote patient adherence to care practices (e.g., taking and refilling medications on time, maintaining an exercise regimen)
 - · Monitor any changes in patient condition, adherence, or care practices
- Provide supervisory services to mentors, including relevant, condition-specific knowledge as well as mentorship training

To see examples of peer mentor programs, check out pages 26 and 31 of Auditing Your Diabetes Program brief here.

Demonstrated impact

Literature review summary

Title: A Systematic Review And Meta-analysis of Randomised Controlled Trials of Peer Support for People with

Severe Mental Illness

Publication: BMC Psychiatry

Date: 2014

Type: Systematic review and meta-analysis

Study population: 5,597 patients with severe mental illness across eighteen randomized controlled trials Major findings: Many of the analyses related to the SMI population show an insignificant impact on symptom management. Studies included three types of interventions:

- Mutual support: Relationships are considered reciprocal
- Peer-support services: Support provided uni-directionally
- Peer-delivered services: People who have used mental health services provide the mental health services Patients receiving mutual support experienced:
- Reduced hospitalization (50% lower risk)
- Reduced depression and anxiety (pooled SMD -0.42)
- Improved recovery (pooled SMD -0.11)
- Increased empowerment (pooled SMD -1.44)
- Reduced quality of life (pooled SMD -1.42)

Patients receiving peer-supported services experienced:

- Increased hospitalization (7% higher risk)
- Reduced length of stay (pooled SMD -0.22)
- Reduced overall psychiatric symptoms (pooled SMD -0.07)
- Improved empowerment (pooled SMD -2.67)
- Insignificant impact on depression and anxiety symptoms, quality of life, hope, recovery, and satisfaction Patients receiving peer-delivered services experienced:
- Reduced hospitalization (33% lower risk)
- Improved satisfaction (pooled SMD 0.48)

Source: Full article here.

Title: Impact of Peer Support on Acute Care Visits and Hospitalizations for Individuals With Diabetes and Depressive

Symptoms: A Cluster-Randomized Controlled Trial

Publication: Diabetes Care

Date: 2018

Type: Randomized controlled trial

Study population: 360 mostly African American adults with type 2 diabetes without depression (PHQ-8 <5), mild depression (PHQ-8 ≥5), or severe depression (PHQ-8 ≥10) living in a rural low-income setting

Major findings: Compared with a control group, the intervention group experienced:

- Reduced hospitalizations (74% for patents with mild depression, 68% for patients with severe depression)
- Reduced acute care visits (45% for patients with mild depression, 61% for patients with severe depression)
- Insignificant impact on utilization for patients without depression (PHQ-8 <5)
- · Insignificant impact on diabetes-specific clinic visits or other visits for patents with mild or severe depression

Title: Spanish Diabetes Self-Management with and without Automated Telephone Reinforcement

Publication: Diabetes Care

Date: 2008

Type: Randomized controlled trial

Study population: 567 Spanish-speaking adults with type II diabetes living in the San Francisco Bay Area.

Major findings:

- Patients receiving peer-led self-management support utilized the ED 66% less often at 18 months as compared to a control group.
- Patients had decreased HbA1c at six months compared to a control group: -0.4 percentage points.
- Patients had improved self-efficacy at six months (11% on the Spanish diabetes self-efficacy scale) and 18 months (13% on the Spanish diabetes self-efficacy scale) compared to a control group.

Source: Full article here.

Title: Peer Support of Complex Health Behaviors in Prevention and Disease Management with Special Reference to

Diabetes: Systematic Review

Publication: Clinical Diabetes and Endocrinology

Date: 2017

Type: Systematic review

Study population: Patients who received peer support to help them manage a chronic disease or navigate pregnancy and early motherhood (i.e., breastfeeding). Studies were not limited to the United States.

Major findings:

- Patients receiving a peer support intervention saw significant improvements in health outcomes and behaviors as compared to patients receiving usual care: 54/65, or 83%, of studies found significant impact.
- This was especially true among diabetic (26/30 studies found significant impacts in favor of peer support, with an
 average HbA1c reduction of 0.76 percentage points) and cardiovascular patients (9/10 studies found significant
 impacts in favor of peer support).

Source: Full article here.

Title: Efficacy of Peer Support Interventions for Depression: A Meta-Analysis

Publication: General Hospital Psychiatry

Date: 2011

Type: Meta-analysis

Study population: 849 patients with depression across seven randomized controlled trials. Four studies focused on women, two of which focused exclusively on post-partum women; two studies focused on HIV-positive men; one study focused on patients with stage II cancer; one study focused on elderly patients.

Major findings: Patients receiving peer support experienced a significant reduction in depressive symptoms (pooled SMD -0.59).

Title: Peer Support and the HIV Continuum of Care: Results from a Multi-Site Randomized Clinical Trial in Three

Urban Clinics in the United States Publication: AIDS and Behavior

Date: 2018

Type: Randomized controlled trial

Study population: Patients with HIV treated at three clinical sites in Miami, FL, Brooklyn, NY, and San Juan, Puerto Rico receiving either standard care or enhanced peer intervention

Major findings:

- · Mixed impact on retention in care
 - Fewer four month gaps in HIV primary care (0.14 vs. 0.84 four month gaps after 12 months)
 - Reduced risk of four month gap per face-to-face encounter (11%)
 - Insignificant impact on time-to-first gap of 4 months or longer of treatment
- Insignificant impact on HIV knowledge, viral suppression, self-efficacy using the Stanford Patient Education Research Center's Chronic Disease Self-Efficacy Scales, mental related quality of life (measured using Mental Composite Score)

Source: Full article here.

Title: Impact of Peer Health Coaching on Glycemic Control in Low-Income Patients With Diabetes: A Randomized Controlled Trial

Publication: Annals of Family Medicine

Date: 2013

Type: Randomized controlled trial

Study population: 299 Diabetes patients who attended any of six health clinics in San Francisco. Participants were all low-income, spoke English or Spanish, and had HbA1c levels greater than or equal to 8%.

Major findings:

- Patients receiving peer health coaching saw a greater reduction in HbA1c levels after 6 months than the control group: 0.77 percentage points.
- Patients in the intervention group were significantly more likely to experience a drop in HbA1c level of 1% or more and were significantly more likely to achieve an HbA1c of less than 7.5%.

Source: Full article here.

Title: Peer Mentoring and Financial Incentives to Improve Glucose Control in African-American Veterans: A Randomized Trial

Publication: Annals of Family Medicine

Date: 2012

Type: Randomized controlled trial

Study population: 118 Black/African-American veterans ages 50-70. Patients attended the Philadelphia VA Medical Center and had uncontrolled diabetes with at least one comorbidity.

Major findings: The patients receiving peer mentorship experienced a greater mean decrease in HbA1c levels as compared to the control group: 1.07 percentage points.

Title: Peer-Led Diabetes Education Programs in High-Risk Mexican-Americans Improve Glycemic Control

Compared With Standard Approaches

Publication: Diabetes Care **Date**: 2011

Type: Randomized controlled trial

Study population: 207 diabetic Mexican-American patients at a federally-funded community health center with a baseline HbA1c level greater than 8%. A majority of participants were female, middle-aged, obese, low-income, uninsured, and had less than an eighth grade education.

Major findings:

- Patients receiving culturally-competent diabetes education from a peer educator saw a significantly greater mean decrease in HbA1c levels at four months (1.71 percentage points) and 10 months (1.5 percentage points) than the control group.
- Patients in the intervention group saw significant improvements in total cholesterol, HDL cholesterol, and LDL cholesterol levels compared to the control group.

Source: Full article here.

Title: The Effect of a Brief Educational Programme Added to Mental Health Treatment to Improve Patient Activation:

A Randomized Controlled Trial in Community Mental Health Centres

Publication: Patient Education and Counseling

Date: 2016

Type: Randomized controlled trial

Study population: Adult outpatients at one of two specific community mental health centers in Norway where the

most common disorders treated were mood, anxiety, behavioral, emotional, and personality disorders.

Major findings: Patients receiving peer education services experienced significant improvements in patient activation: 6.09 change in Norwegian PAM-13 score after 4 months.

Source: Full article here.

Title: Patients Guide Each Other to Better Diabetes Control

Publication: Family Practice News

Date: 2011
Type: Case study

Study population: Patients were diabetics that attended WellMed Medical Group in San Antonio, Texas.

Participants interacted at least four hours per month with mentors in group and one-on-one settings to discuss health and receive practical advice related to managing their condition.

Major findings: Patients on both the mentor and mentee side of the peer support program demonstrated an increased likelihood of performing regular blood sugar checks after participating in the program: 15% and 32%, respectively.

Appendix

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