

Telephonic self-management support

► Intervention in brief

<p>Rising risk:</p>	<p>Telephonic self-management support programs provide support and advice to patients using goal setting and motivational interviewing tactics. The goal is to provide personalized care that promotes healthy behaviors and improves self-management of conditions using a cost-effective, scalable approach. Programs often focus on select chronic conditions, such as diabetes, coronary artery disease, and congestive heart failure.</p>
<p>Strength of evidence</p>	 <p>Intervention has not been frequently studied within the past ten years, despite previous popularity. Evidence was inconsistent across systematic reviews.</p> <p>Medium</p>
<p>Impact</p>	<ul style="list-style-type: none"> • Decreased cost: Insignificant change to 4% decrease in cost • Decreased utilization: Insignificant change to 10% reduction in hospital admissions; insignificant change to 8% decrease in ED use • Improved quality, clinical outcomes: Insignificant change to 0.8 percentage point decrease in HbA1c levels; significant improvement in patient self-management capacity and knowledge; significant reduction in anxiety; insignificant change in BMI, LDL cholesterol, triglycerides, and blood pressure • Increased access: Not demonstrated • Improved stakeholder satisfaction: Insignificant change to 4% increase in mental health-related quality of life; 24% received support who would not have otherwise
<p>How to succeed</p>	<p>To build an effective telephonic self-management support program:</p> <ul style="list-style-type: none"> • Determine the strategic goal of the program (e.g., prevent social isolation, target disease-specific support) to inform staffing and operations • Kick off telephonic self-management support with an in-person introduction to establish a relationship and promote adherence • Engage a patient's support system when targeting hereditary diseases like diabetes and hypertension to reduce risk of future diagnosis <p>To learn more about equipping patients with the skills necessary to self-manage chronic conditions, check out our 11 Insights on Engaging Patients in Ongoing Management brief here.</p>

► Demonstrated impact

Literature review summary

Title: A Randomized Trial of a Telephone Care Management Strategy

Publication: The New England Journal of Medicine

Date: 2010

Type: Randomized controlled trial

Study population: Commercially insured patients with heart failure, chronic obstructive pulmonary disease, coronary artery disease, diabetes, and asthma and/or at risk for the following surgeries: cardiac revascularization, lumbar surgery, hip surgery, knee surgery hysterectomy, and prostatectomy

Major findings:

- Reduced average monthly medical and pharmacy costs: 3.6% lower than the usual-support program
- Reduced annual hospital admissions (accounted for the majority of savings): 10.1% lower
- Reduced ED costs: Decreased but not significantly

Source: Full article [here](#).

Telephonic self-management support

Title: The Effect of a Telephone-based Health Coaching Disease Management Program on Medicaid Members with Chronic Conditions

Publication: Medical Care

Date: 2012

Type: Cohort study

Study population: Medicaid patients with one or more chronic conditions and at least two acute hospitalizations or ED visits in the previous year

Major findings: Telephone health coaching services did not lead to significant reductions in acute hospitalizations, ambulatory care visits, or Medicaid expenditures during the two-year follow-up period. However, participants used the ED significantly less in the second year after enrollment (8% decrease from baseline).

Source: Full article [here](#).

Title: Health and Psychosocial Outcomes of a Telephonic Couples Behavior Change Intervention in Patients with Poorly Controlled Type 2 Diabetes: A Randomized Clinical Trial

Publication: Diabetes Care

Date: 2016

Type: Randomized controlled trial

Study population: Patients were, on average, 57 years old, male (62%) with a mean HbA1c level of 9.1%. Eligibility criteria included: a diagnosis of type 2 diabetes for at least one year, in a self-defined committed relationship for at least one year, no severe medical or psychiatric conditions, and telephone access.

Major findings: Patients enrolled in the diabetes Support Project received one of three interventions: diabetes education (two 75-minute telephone sessions), diabetes education and ten additional behavior change calls (approximately 50 minutes each), or education and ten behavior change calls accompanied by their committed partner. HbA1c levels significantly decreased for all three groups:

- Couples call: 8.9% to 8.5% (0.4 percentage points)
- Independent call: 9.3% to 8.8% (0.5 percentage points)
- Diabetes education group: 9.1% to 8.5% (0.6 percentage points)

Participant satisfaction was significantly higher among the couples call (83.5%) and individual call groups (70.3%) compared to the diabetes education group (41.3%). Also, 24% of participants said it was unlikely they would have participated if the intervention were offered face-to-face instead.

Source: Full article [here](#).

Title: Randomised Controlled Trial of an Automated, Interactive Telephone Intervention (TLC Diabetes) to Improve Type 2 Diabetes Management: Baseline Findings and Six-Month Outcomes

Publication: BioMed Central Public Health

Date: 2012

Type: Randomized controlled trial

Country: Australia

Study population: Adults with type 2 diabetes and HbA1c levels greater than or equal to 7.5%

Major findings: Patients received the Australian TLC (Telephone-Linked Care) every week over a six-month period. The TLC was an automated interactive telephone program designed to improve diabetes management by targeting self-management behaviors, such as blood glucose testing, nutrition, physical activity, and medication-taking. Comparing pre- and post-intervention, participants' experienced:

- Decreased HbA1c levels: 8.7% to 7.9% (0.8 percentage points lower)
- Increased mental health-related quality of life measure: 3.8% increase (49.8 to 51.7) while the control group decreased by 1.6% (49.5 to 48.7)

Source: Full article [here](#).

Telephonic self-management support

Title: Evaluating the Impact of Year-Long, Augmented Diabetes Self-Management Support

Publication: Population Health Management

Date: 2019

Type: Randomized controlled trial

Study population: English or Spanish speaking adults ages 21-85 years old with a diagnosis of type 2 diabetes, an HbA1c level greater than 8 at the time of enrollment, who had not participated in a Diabetes Self-Management Education (DSME) program in the year preceding the study

Major findings: There were no significant differences between the control group (usual care) and the intervention group (telephonic support) in HbA1c level, BMI, LDL cholesterol, triglycerides, or blood pressure.

Source: Full article [here](#).

Telephonic self-management support

Appendix

- Wennberg DE, et al., “A Randomized Trial of a Telephone Care-Management Strategy,” *The New England Journal of Medicine*, 13, no. 363 (2010): 1245-1255, <https://www.nejm.org/doi/full/10.1056/NEJMsa0902321>
- Lin WC, et al., “The Effect of a Telephone-Based Health Coaching Disease Management Program on Medicaid Members with Chronic Conditions,” *Medical Care*, 1, no. 50 (2012): 91-98, <https://www.ncbi.nlm.nih.gov/pubmed/21993059>.
- Tried PM, et al., “Health and Psychosocial Outcomes of a Telephonic Couples Behavior Change Intervention in Patients with Poorly Controlled Type 2 Diabetes: A Randomized Clinical Trial,” *Diabetes Care*, 39, no. 12 (2012): 2165-2173, <https://www.ncbi.nlm.nih.gov/pubmed/27456837>.
- Williams ED, et al., “Randomised Controlled Trial of an Automated, Interactive Telephone Intervention (TLC Diabetes) to Improve Type 2 Diabetes Management: Baseline Findings and Six-Month Outcomes,” *BMC Public Health*, 12, no. 602 (2012): 1471-2458, <https://bmcpublichealth.biomedcentral.com/articles/10.1186/1471-2458-12-602>.
- Walters J, et al., “Effects of Telephone Health Mentoring in Community-Recruited Chronic Obstructive Pulmonary Disease on Self-Management Capacity, Quality of Life and Psychological Morbidity: A Randomised Controlled Trial,” *Respiratory Medicine*, 3, no. 9 (2013), <https://bmjopen.bmj.com/content/3/9/e003097>
- Bluml BM, et al., “Evaluating the Impact of Year-Long, Augmented Diabetes Self-Management Support” *Population Health Management*, (2019), <https://www.ncbi.nlm.nih.gov/pubmed/30668228>.