eHealth-Assisted Lay Health Coaching for Diabetes Self Management Support

Patrick Y. Tang1 MPH, Malinda Peeples2 RN, MS, CDE, Janet Duni3 BSN, RN, MPA, CCM, Steven Peskin4 MD, MBA, FACP, Janice MacLeod5 MA, RDN, LDN, CDE, Sarah Kowitt6 MPH, Edwin B. Fisher7 PhD

Background

This project developed and tested the feasibility and reach of integrating a telephone-based lay health coach with an eHealth intervention for diabetes self management support in a Patient-Centered Medical Home practice in New Jersey. Lay health coaching has been shown to improve diabetes self management behaviors, glycemic control, and quality of life for people living with type 2 diabetes (T2D). BlueStar Diabetes® (BSD) is an FDA-cleared mobile prescription therapy that provides real-time patient coaching and support using algorithms driven by clinical/behavioral insights. In two clinical trials, BSD reduced A1c by 2 points. Integrating these two forms of patient support can accentuate the strengths of health coaches while making their work more efficient.

Methods

Two health coaches provided bi-weekly telephone-based coaching for assistance in daily self management, emotional support, and linkage to clinical and community resources. Patients used BSD on their phone or computer for day-to-day diabetes self management support. The health coaches were community-based nonprofessionals that received 16 hours of initial training and periodic follow-up trainings. A nurse care coordinator provided clinical backup to the coaches and collaborated with providers when needed.

Eligibility criteria: T2D, 40-70 years of age, at least one Hba1c value ≥ 7.5 % in prior 12 months, able to read and write in English, regular access to a web-enabled device such as a smartphone or a computer.

Timeframe: Implemented September 2015 to April 2016 (6 months).

Quantitative evaluation: Single group, pre-post, using coach contact notes, post survey, clinical data, and app usage data.

Qualitative evaluation: Structured interviews with 12 patients, 5 program staff, and 2 health coaches.

Key Findings

Integrated health coach and eHealth is feasible and well accepted by patients and clinical team

- 70% patients sustained engagement with program
- 78% patients sent provider BSD SMART Visit report

89 contacted → 43 patients enrolled
Demographics: Age = 57, 53% male
Average 7 coach contacts over 6 months

Engagement with BSD
- 86% enrolled patients used BSD
- Average 6.5 entries / patient / week
- Total of 37 SMART Visit Reports sent to clinic

Preliminary analyses: Average reduction of 1.7 points from baseline A1c of 9.7% among active participants in health coaching

Person, Health Coach, eHealth and Clinical Team Integration

Lessons Learned

Program Acceptability
- Respondents all said the health coaching was useful regardless of how long they had been living with diabetes
- Most respondents would highly recommend this program to a family member or a friend
- Middle-aged and rising risk populations appeared to be the ideal demographic for this program

Enhancing Patient-Centered Self Management
- Patient-centered – BSD always available, patient-driven
- Healthcoach is particularly good at helping individuals overcome barriers, the app provides guidance and feedback
- Most respondents could articulate at least one behavioral change they made as a result of being in the program
- All respondents said the support provided by health coaches was very different from support received from medical professionals

How this Model Enhances Lay Health Coaching
- More efficient and higher quality DSMS informed by BSD data
- BSD data prompted more focused conversations between coach and patient
- Extends support to the right people at the right time with the right method (teachable moments)
- Facilitates outreach to greater number of patients than coaching alone
- Half-time lay health coaches comfortably managed 15-20 patients each with assistance from BSD and indicated capacity to manage double that caseload
- Scalable to reach populations
- Disseminable through enhanced primary care practices

How this Model Enhances Quality of Care
- Care coordinators successfully used health coach insights to deliver timely, appropriate follow up and diabetes education
- Rich data from coaches and BSD improved quality of care from the clinic
- Patient-generated data (SMART VisitReport) facilitated patient-provider communication
- BSD data prompted development of diabetes care protocol for hypoglycemia management

Four Key Functions of Lay Health Coaching and BlueStar

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<thead>
<tr>
<th>Key Functions</th>
<th>Lay Health Coaching</th>
<th>BlueStar Diabetes</th>
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<tbody>
<tr>
<td>Assistance in Daily Management</td>
<td>Defined problem-solving model of adherence management</td>
<td>Make entries for BG, medications, carbs, meals and exercise tracking, goal settings, readiness to use mobile phone technology for communication</td>
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<td>Social &amp; Emotional Support</td>
<td>Building a relationship with the lay health coach, emotional feedback, stress management</td>
<td>Helping with diabetes – “a luxury back”, stress, emotional and spiritual support</td>
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<td>Linkage to Clinical Care &amp; Community Resources</td>
<td>Referral to healthcare providers, care coordination,, medication adherence</td>
<td>Health coaching provides automated, specific reminders for necessary care to share analysis data with health providers as needed</td>
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<td>Ongoing Support</td>
<td>Regular reminders to intensify contact</td>
<td>Supports daily adherence decision making through text messaging, support is contingent on patient's needs</td>
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References


Information Flow

WellDoc

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