Bowdoin Street Health Center

Integrating a Community Health Worker into an Advanced Medical Home: A Pilot Study

THE KRAFT CENTER *for* Community Health

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Background

- Dorchester residents suffer a disproportionate burden of chronic disease and the social determinants of poor health.
- Many BSHC patients struggle to manage chronic disease, despite access to an advanced Patient-Centered Medical Home (PCMH).
- Community Health Workers (CHWs) are increasingly used to improve health in underserved communities and to serve as a bridge between the clinic and the community.
- Few examples of robust CHW integration into PCMHs exist.

What is a CHW?

"A public health outreach professional who applies his or her unique understanding of the experience, language and/or culture of the populations he or she serves in order to carry out one or more of the following roles: "

✓Health education in community based settings
✓Client advocacy and mediation
✓Health system navigation
✓Outreach, support, and resource identification

Pilot Project

- **Aims**: Feasibility and efficacy study of a CHW integration into a PCMH
- **Design**: One year team-based CHW intervention for high risk diabetics (HbA1c≥8.0% plus PCP referral)
  - Customized care plans focusing on social, physical, emotional health needs
  - Targeted diabetes education using curriculum designed for CHWs; medical visit accompaniment; home visits; social resource referral
- **Data**: Pre- and post-intervention analysis of changes in clinical, behavioral, and utilization variables.
- Qualitative interviews of staff and patient experiences.

Qualitative Results

Picture taken on an a CHW-accompanied visit to SSA with a patient.

"The frequent contact with patients is a unique aspect of this role, it is something that providers currently cannot provide, and is key to the success that we've seen." (BSHC Provider)

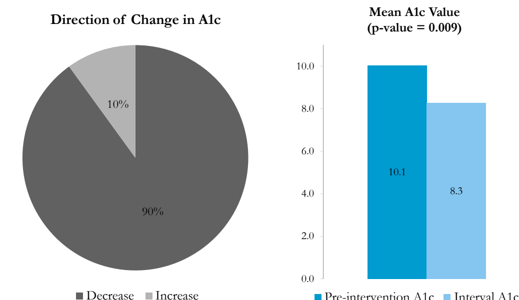
"Relationships, coaching, and trust between the CHW and her patients are what seem to make the difference in outcomes." (BSHC Provider)

"[The CHW] made a home visit to assess issues with medications and insulin. She uncovered critical information that helped me reorder medication and figure out a problem with her insulin that she was storing improperly. This intervention of being in the home to really figure out what was happening was invaluable. " (BSHC Provider)

"[A patient's] A1c was 16.4% at the time of his diagnosis. [The CHW] has met with him on several occasions and made sure that he was able to get his medications from the free care pharmacy (he was paying out of pocket at a local pharmacy). His A1c is now down to 8.9% after less than 2 months. Much of this is because [the CHW] has been checking in with him regularly by phone and in clinic and has been in close contact with me and [the diabetes nurse]." (BSHC Provider)

A patient's healthier food choices on a CHW-accompanied grocery store visit

Preliminary Data



- 20 patients enrolled from 8/13-1/14 (3 ineligible, 1 LTFU)
- 90% (9/10) of patients receiving the CHW intervention for at least 3 months showed a decrease in HbA1c.
  - Mean A1c decrease was 1.97% ($p = 0.007$)
  - Mean A1c net change was -1.76% ($p = 0.009$)
- Outside the pilot study the CHW has had more than 150 extended interactions or interventions with 52 patients including:
  - accompanied MD/RN visits: 45
  - home visits: 22
  - face-to-face teaching: 23
  - other accompaniment: 7
  - social resource assistance: 41

Lessons from Implementation

- CHW role dilution is a reality in the community health center setting
  - Setting boundaries is important, but equally so is ensuring staff appreciation and goodwill in the introduction of a new staff role.
- To build capacity and self-confidence the CHW needs ongoing training and networking, which can also be time-consuming.
- As a cultural liaison and member of the medical team, the CHW can find it challenging to integrate into the "medical" culture of the clinic while also remaining embedded in the community.
  - Staff must continue to be educated on the complementary and unique aspects of the role and how to support the CHW's autonomy and community involvement.

Conclusions/Future Directions

- A community health worker intervention for high risk diabetes patients has concrete health benefits.
- The CHW is an evolving role but one that is much needed and appreciated by staff and patients at the health center.
- As the pilot study continues, planning is ongoing to expand the scope and availability of the CHW role, and to show its cost-effectiveness.