

Colorado University: Epic- 4DM

PROJECT OVERVIEW

The Colorado Clinical and Translational Sciences Institute at the University of Colorado collaborated with multiple community partners to address the large health disparity among minority populations with Type 2 diabetes in the Denver, Colorado, metropolitan area. The collaborative created a tailored practice-level implementation of a model of coordinated care for complex diabetes patients; Enhancing Patient, Practice, and Community Capacity for Collaborative Diabetes, Depression, and Diabetes Distress Management (EPiC-4DM). The EPiC-4DM project goals were to improve diabetes self-management, mental and physical health, and the experience of health care for patients with diabetes and depression and/or diabetes distress by providing patient-centered, tailored 5As action planning, linking patients to appropriate community resources, and implement the program in a feasible, scalable, and sustainable manner. The project was implemented in multiple communities and six federally qualified health centers (FQHCs). The intervention was focused on underserved adult patients with Type 2 diabetes cared for by the Metro Community Provider Network (MCPN); a network of FQHCs that spans Denver, Aurora, and Jefferson County.

CONTEXT AND PARTNERS

The project engaged underserved individuals diagnosed with Type 2 diabetes and additional mental and behavioral health needs who receive care from the Metro Community Provider Network (MCPN). In 2011, MCPN provided medical, mental health, and other services to 37,942 patients, of whom 58% were uninsured, and 37% and 4% were beneficiaries of Medicaid and Medicare, respectively. Nearly all (97%) are at or below 200% of the federal poverty level, and 78% are racial or ethnic minorities (51% Hispanic/Latino, 18% African American). In order to meet the needs of the MCPN patients, many community partners were engaged to collaborate on the EPiC-4DM project.

Partners in the EPiC-4DM project include:

- The Colorado Clinical and Translational Sciences Institute within the Family Medicine Department at the University of Colorado
- The Colorado Foundation of Public Health and Environment
- Metro Community Provider Network
- InterVision Communications
- Center for Community Health and Development at the University of Kansas
- Boot Camp Temporary partners
- Representatives from the state health department
- Local community members

ASSESSMENT AND PLANNING

The state of Colorado is experiencing a large health disparity among minorities. Patients served by MCPN are nearly 3 times more likely to have diabetes (14.23%) than in the state overall (5.9%), and twice as likely to have diabetes than in Denver (7.0%). According to data reported by MCPN to the

Health Resources and Services Administration, 14% of MCPN patients have diabetes. While 77% of diabetics at MCPN have HbA1c < 9, only 26% of adults have received weight screening and appropriate follow-up. Approximately 7% of MCPN patients received mental health services in 2011. With a limited number of patients receiving the care needed, this project looked at more efficient ways to provide high quality care to more patients in their community.

The Colorado Clinical and Translational Sciences Institute utilized a “Boot Camp Translation” stakeholder engagement approach to assess and plan the intervention components and elements. Every community has their own history and context, thus using the boot camp method to tailor the implementation to patient, practice, and community capacity was an important asset in this project. The Boot Camp Translation team, or steering committee, consisted of 8-10 current patients with Type 2 diabetes identified by MCPN, a medical provider, a behavioral health provider, a nurse administrator, key community personnel recommended by local practices, and the Colorado University project team. The value of the information provided by the Boot Camp process was useful in understanding what people living with diabetes needed and could use in their local community. Based on the insight gathered over a period of 6 months, important elements were identified; some of which were used in the practice-level intervention, and others were new programs and services in community settings.

INTERVENTION COMPONENTS

The 5A model shown in Table 1 was used to determine action planning steps and related EPiC-4DM activities incorporated into the workflows of this project

The project focused on the following four main intervention components:

1. Diabetes self-management education
2. Modifying access, barriers, and opportunities related to diabetes care
3. Enhancing services and supports related to diabetes care
4. Modifying policies and broader systems for those with diabetes.

The specific elements of each EPiC-4DM intervention components were a result of collaboration among community members, research team members, and health/medical providers in the community. The main components and elements referenced in Table 2 were implemented at the individual, organizational and community levels for 21 months starting in October 2014. Key activities for the implementation phase are to provide patient-centered, tailored 5As action planning for diabetes management, depression, and diabetes distress, and to create a 3-way linkage among patients, practices, and community based programs and resources for diabetes self-management, diabetes distress, and depression. The practice-level intervention consisted of tools, materials, and trainings for improving the delivery of chronic disease self-management support with resource linkage.

Metro community Provider Network recruited and randomized six practice sites into comparison and intervention groups. Randomization of the sites allowed testing of the effects of a three-way linkage mechanism on documentation of action plans, referrals, use and experience of practice and community-based resources for patients with diabetes and additional mental and behavioral health concerns. Each of the intervention sites received a different dose of the intervention components and elements in order to determine which were important for behavior change. Two clinics made up Group 1 and received a low dose of the intervention, which consisted of self-management support education based on the 5A

model. Two other clinics made up Group 2 and received a medium dose of the intervention, which consisted of self-management support education based on the 5A model and resource linkage. Lastly, the remaining two clinics made up Group 3 and received a high intervention dose, which consisted of self-management support education based on the 5A model, resource linkage, and coaching.

Table 1 below shows the 5A action planning steps, related EPiC-4DM activities, and roles of the care team members.

Table 1: 5A Action Steps and EPiC-4DM Activities			
Action Planning Steps	EPiC-4DM Activity	Care Team Member/Role	Supporting HIT Tools
1. Assess patient beliefs, behavior and knowledge	Screening for depression, diabetes distress, DSM behaviors; ask about needs, preferences	Automated + Medical Provider + BHP	CTH
2. Advise on health risks and benefits of change	Tailored messaging on risk and benefits, treatment options	Automated + Medical Provider	CTH
3. Agree with patients on setting personalized goals	Identify patient areas for concern; Set self-management goals, document in EHR	Medical Provider + warm handoff to BHP	EHR
4. Assist in strategizing action plans and problem solving	Tailored action plan, document in EHR	BHP	EHR
5. Arrange for follow-up and resources to support patient goals	Incorporate practice and/or community resources and follow-up into action plan	BHP	CTH and/or Diabeteslocal.org

*Diabetes Self-Management (DSM); Behavioral Health Provider (BHP); Connection to Health (CTH); Electronic health records (EHR)

Table 2 below summarizes the program components, specific elements, and the mode of delivery:

Table 2: Components and Elements of the EPiC-4DM Program		
INTERVENTION COMPONENTS	SPECIFIC ELEMENTS	MODES OF DELIVERY
Diabetes Self-Management Education	<ul style="list-style-type: none"> ◆ Patient-centered, tailored 5As action planning ◆ Linking patients to appropriate resources in the community ◆ Practices received Self-Management Strategy trainings and tools to then provide to their patients 	<ul style="list-style-type: none"> ◆ Connection to Health web-based assessment and action planning tool ◆ Resource Link Worksheet ◆ Enhanced in-person trainings
Modifying access, barriers, and opportunities related to diabetes care	<ul style="list-style-type: none"> ◆ Modified CTH Action Plan template to include internal and external resources for patients with diabetes ◆ Modified Share Care Plan to capture SMS activities in a consistent manner 	<ul style="list-style-type: none"> ◆ Printable resource directory on CTH ◆ GE Centricity, MCPN's electronic health records

Enhancing services and supports related to diabetes care	<ul style="list-style-type: none"> ◆ Pre-diabetes group visits for at-risk patients ◆ Development of Fitness, Food, and Type 2 Diabetes class ◆ Behavioral health team support in primary care ◆ Coaching practices on how to navigate CTH 	<ul style="list-style-type: none"> ◆ MCPN clinics ◆ Community recreation center ◆ Enhanced in-person trainings ◆ Depression and distress training
Modifying policies and broader systems for those with diabetes	<ul style="list-style-type: none"> ◆ Technical Assistance for practice change modification 	<ul style="list-style-type: none"> ◆ Technical assistance consultants

**Self-Management Strategies (SMS); Connection to Health (CTH); Metro Community Provider Network (MCPN)*

STORY OF COMMUNITY TRANSFORMATION

This initiative offered the community various avenues of internal and external resources to increase the quality of care for patients with diabetes and distress and/or patients with diabetes along with other behavioral and mental health needs. Along with creating the tools and trainings for intervention practice sites, the Boot Camp Translation process sparked additional conversation to promote community change relating to diabetes throughout the community. One of the Parks and Recreation Center directors decided to create a class on Fitness, food, and Type II Diabetes in order to reach more community members. The MCPN intervention sites were able to provide their patients with extra support and resources to help manage their diabetes. MCPN took this as an opportunity to further promote diabetes resource awareness by advocating the use of CTH Resource Directory, which was created during the Boot camp translation community engagement process, and also began a pre-diabetes group visit for patients and their families.

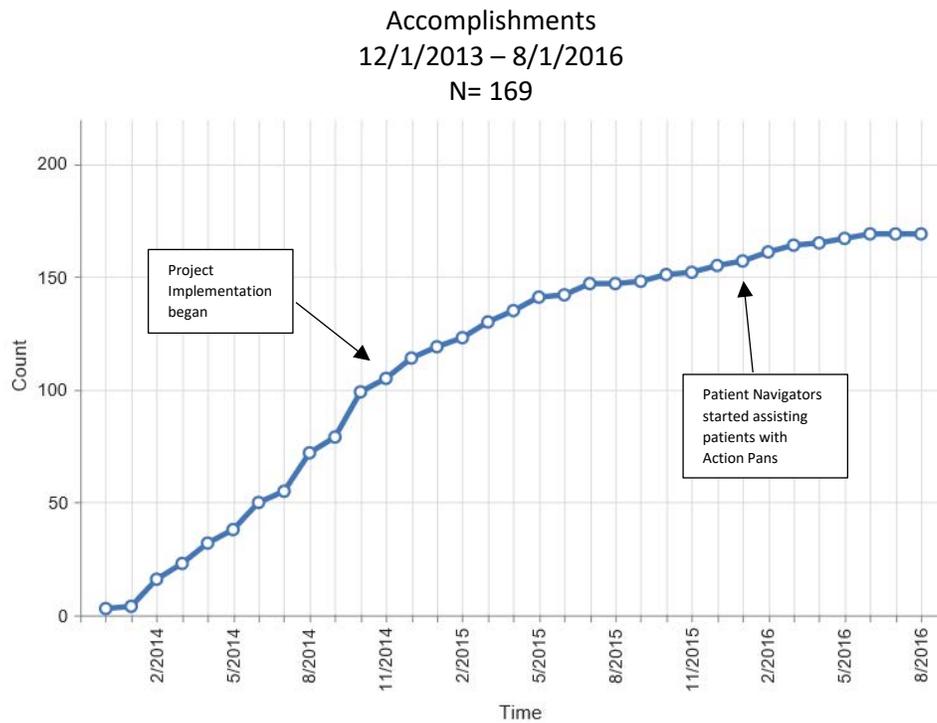
The participating intervention practices have also expanded their diabetes clinic model, in which patients see the primary care physician, the behavioral health physician, the patient navigator, and the health educator in succession during a single clinic visit. This new process links patients to the resources needed, and incorporates all information into a shared care plan to improve the quality of care. The community has invested in the continuation of improving the health of Denver residents because of the efforts put in by this initiative.

EVALUATION RESULTS AND FINDINGS

To gain an understanding of the process and outcomes of the intervention, practice staff, clinicians, and diabetes patients were asked to complete surveys. Practice staff and clinician surveys were conducted at baseline, 9 months, and 18 months to gain knowledge of what diabetes care looks like at each site, to assess each practice’s capacity, existing services, and culture and to best understand the implementation of the project. A total of 84 surveys were collected from practice staff and clinicians over a period of 18 months. Interviews were also conducted with practice staff and clinicians throughout the implementation of the project to have ongoing feedback about the intervention.

Figure 1 displays the cumulative number of accomplishments throughout the intervention. This includes developmental activities, services provided, systems changes, community advocacy, dissemination efforts, and resources generated.

Figure 1: Project accomplishments over time



Patient surveys included questions relevant to experience with their medical care, diabetes self-management behaviors, use of practice and community resources, and demographics. A total of 84 patient surveys were collected over a period of 18 months. Results of the patient survey showed that all MCPN practices improved over time for Self-Management Strategies and Population Health Management to improve diabetes care, and the changes may not be related to the interventions.

There were 114 completed action plans at the end of intervention for both groups 2 and 3, of which 103 or 90% were completed by patients with diabetes at practice sites in group 3. This suggests that group 3 created an environment that encouraged patients with diabetes to complete their action plans. Of the total number of completed action plans (114), 71, or 62%, had selected a community resource to help achieve their self-management goals. This shows an improvement in goal setting and self-management behaviors of participants, but it is not clear if this affected clinical outcomes.

In response to low numbers of completed action plans in the first year of the intervention and busy schedules among practitioners at the clinic sites, Patient Navigators were added to four of the intervention sites, groups 2 and 3, to assist patients in the completion of action plans. The completion of action plans were most prevalent in January of 2015, which was slightly after the addition of Patient Navigators and again in April and May of 2016. The clinic sites that received coaching sessions, Group 3, appeared to implement the SMS and resources linkages more readily than clinic sites without coaching. This shows that coaching was an important aspect to the intervention that built practice capacity and encouraged ongoing attention, planning, and problem solving.

WHAT WE ARE LEARNING

Several of the factors that effected the success of this intervention were:

- Engaging patients, practices, and community resources in the Boot Camp process was helpful in determining what was needed in the community to support diabetes self-management and built upon the capacity and resources that were already available.
- Partnerships with local organizations were a huge asset to the project and affected implementation and engagement in a positive way. The FQHC population, FQHC leadership and their practice culture worked well with the intervention. Coordinating with Connection to Health and having open communication with CTH personnel was essential to success. The training and coaching of the Action Plan's resource selection and resource linkage worksheet on CTH were key elements of the intervention.
- Having an appropriate amount of time and funding to support diabetes self- management was a key aspect that led to project success.
- Engaging behavioral health leadership and patient navigators led to improved implementation across the medium and high intervention sites, groups 2 and 3, because it distributed the workflow among staff at practices. The patient navigators and behavioral health providers collaborated with patients on their CTH assessments and actions plans, which gave patients extra support navigating the system.

Challenges to the project:

- Scheduling availability of such a large group and having a variety of different perspectives at the table was sometimes challenging.
- Many clinic providers stated there was lack of time to ensure accountability for SMS and incorporating CTH tool into clinical workflow. Health educators also stated they had an existing paper goal setting form they use in practice, thus there was resistance to change practice culture and a preference of paper-based tools.
- Providers stated they did not know if they had authority to assign SMS roles to staff they did not supervise, thus there may have been limited staff driving the intervention.
- Lack of practice capacity for administrating assessments, doing action plans, identifying resources, and doing follow up.

Lessons Learned:

- The initiative was designed to be implemented at practice level, but there were organizational level systems and processes that needed to be modified first. More centralized decision-making structure among the organizational leadership and project team was needed regarding the implementation of intervention at the clinics.
- Need for consistent & dedicated clinic staff to implement intervention to optimize success.

MOVING FORWARD AND PLANS FOR SUSTAINABILITY

In order to continue improving the health of Denver residents, it is important to sustain the efforts put in place by the collaborative. Providers are often very busy completing day-to-day office tasks, so in order to lower the amount of time spent walking patients through assessments and action plans, the initiative recruited Americorps volunteers to aid in the training of new staff in order to complete the additional paperwork and sustain the practice change.

PROJECT PUBLICATIONS AND MATERIALS

A number of dissemination efforts were associated with this project including:

- Brown, S., Alires, S., Draayer, A., Kwan, B. (2016, September 20). *Addressing Depression and Disease Distress in Patients with Diabetes in FQHCs: The EpiC-4DM Project*. Webinar retrieved from <http://diabeteshealthequity.org/92016-addressing-depression-and-disease-distress-in-patients-with-diabetes-in-fqhcs-the-epic-4dm-project/>
- Kwan, B. *Practice Staff and Clinical Perception of Roles, Training, and On-Site Presence of Integrated Behavioral Health Care Team Members*. Poster presentation to the Collaborative Family Healthcare Association's 2016 Annual Meeting
- Kwan, B. *Addressing Depression and Distress in Patients with Diabetes: The EpiC-4DM Project*. Poster presentation at the Engaging Communities in Education and Research meeting in Breckenridge, CO.
- Kwan, B. *Addressing Depression and Disease Distress among Primary Care Patients Receiving Self-Management Support*. Poster presentation at the North American Primary Care Research Group's 2015 Annual Meeting in Colorado Springs, CO.

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EVALUATION CONTACT INFORMATION

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