

An Evaluation of the UNHS Diabetes Program & Needs Assessment of East Nashville
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Background:

Domestically, chronic conditions such as hypertension and diabetes, pose a substantial health challenge. Hypertension, a disease characterized by atherosclerotic vascular damage, affects approximately 30% of adults in the United States (cdc.gov). Moreover, hypertension directly contributes to the development of heart disease and stroke, the first and third leading causes of death, respectively. Diabetes affects roughly 8.3% of all Americans (cdc.gov). The rates of newly diagnosed cases have experienced a drastic climb over the last decade.

Hypertension and diabetes (type II) are often associated with genetic and environmental causes. A family history of hyperlipidemia and long-standing high cholesterol have been linked to development of hypertension; likewise, a generational pattern of diabetes is considered a strong predicting factor in the development of diabetes. However, substantial emphasis is placed on environmental or modifiable causes of chronic conditions – namely lifestyle changes. The U.S. Surgeon general has indicated that smoking cigarettes increases the risk for developing hypertension. Obesity, as a result of poor diet and/or inactivity, has also been identified as major contributor to diabetes.

Researchers have presented evidence of pervasive underlying causes, or social determinants of health, that disproportionately affect certain individuals and groups. Some of the social determinants include lack of access to adequate health care services, food or shelter, or financial resources overall. Specifically in the cases of hypertension and diabetes, individuals who are minorities tend to have an increased risk of developing these conditions. Evidence also

suggests that persons with limited access to care -- either due to financial burdens, geographic burdens, or lack of education – have a greater likelihood of being affected by chronic conditions.

Federally Qualified Health Centers make a concerted effort to address this health challenge. Many FQHCs extend health care access to the underserved and underinsured; often, this extended access leads to earlier diagnosis, better management of existing chronic conditions, and/or prevention of chronic illnesses altogether. In addition, FQHCs institute programs that aim to provide supportive care & services for persons struggling with chronic conditions.

At United Neighborhood Health Services (UNHS), an FQHC, there has been a continual push to provide patients with top-tier programming to address chronic conditions. The Diabetes program at UNHS is multi-pronged, with an exercise component, a health education & nutrition component, and a well-being component. The overarching goal of the program is to enroll participants, sustain their participation, and to reduce negative health outcomes of diabetes. UNHS does not have a program that specifically targets hypertension; however, many of the patients who do have hypertension are encouraged to get involved with the components of the Diabetes program to better educate themselves and to assist in lifestyle changes.

Methods:

During the externship at UNHS under the General Electric –National Medical Fellowships, Primary Care Leadership Program, I executed a standard evaluation of services, and an off-shot needs assessment of both the UNHS resources and surrounding (target) community. Throughout the two-month course, a series of observations were made. Evaluation and needs assessment efforts were concentrated on the UNHS Diabetes program, and related components (i.e. Mobile Health Unit). I assessed a number of programmatic factors including: 1) mechanisms of recruitment and enrollment, 2) participation and engagement, and 3) retention.

Evaluation

Clinic sites were assessed for eligibility based on specific inclusion criteria. Selected sites had to maintain a high proportion of adult patients in their regular patient pools. In addition, the eligible clinic sites had to be in close proximity (within 8 miles) to the Main St. Clinic site (the headquarters for the Diabetes program). Finally, eligible clinic sites had to have patients currently enrolled in the Diabetes program. Based upon these criteria, 9 of the 16 UNHS sites, primarily the Family Clinics, were included in this evaluation and assessment exercise.

The personnel at each clinic site were engaged in discussion regarding their contribution to or involvement with Diabetes Program. Areas of interest included referral of participants, tracking of outcome/performance measures, scheduling of maintenance visits, patient education and reinforcement, and overall support.

Needs Assessment

The needs assessment branch of this independent project was a derivative of the original evaluation. It was determined that a full assessment of resources available within the UNHS facility, and, an assessment of the surrounding community resources, was necessary to capture the demands of the Diabetes Program participants.

A review of the nine selected UNHS sites was performed. Special attention was placed on the informational environment, that is, on-site/in-facility real estate devoted to Diabetes Program promotion (which includes brochures, pamphlets, flyers, and cards related to the program, or diabetes as a chronic condition).

Results:

The evaluation yielded several high points coupled with areas of concern.

Enrollment/Recruitment

The primary means of identifying program participants is through referral. UNHS care providers (physicians most commonly, followed by case managers) identify candidates for the diabetes program typically during a first or repeat visit. Then, eligible patients are engaged by the program coordinator (Nancy A. Mason) to further elucidate program details. Upon enrollment, patients are connected with fitness personnel and a health educator. The three entities develop a plan with the patient to address diabetes-related health concerns. It should be noted that baseline data (BMI, HbA1C, BP, LDL) are collected at point of enrollment

Participation

Patients are encouraged by UNHS personnel to follow their tailored plans. Plans typically include a combination of physical activity, diet/nutrition modification, wellness activities, and provider visits. Participants are encouraged to attend a physical activity offered through the UNHS site (twine dancing class, Zumba, boot camp). However, attendance is not mandatory; in addition, participants can opt to engage in outside physical activity (which is also supported, the premise being “as long as they are being active”).

Retention

Program personnel contact participants on a bi-monthly schedule; both on-site and off-site participants are contacted equally. Inactive participants are re-engaged at the time of contact to assess barriers to participation, and encouraged to continue with plan readjustment options available. Active participants are scheduled for monthly visits to record performance measures (BMI, HbA1C, BP, LDL); these data are used to chart patient progress.

Needs Assessment

The needs assessment yielded interesting findings. Each site has a plethora of brochures and materials that explain the etiology of diabetes, who it affects, and what individuals can do to

reduce their risk. However, there were no marketing materials available that directly promoted the UNHS Diabetes Program. The program director did have business cards available at most of the clinic sites; these cards, though, were available only upon request. The use of clinic real estate varied from site to site; often, the used space varied by design of the clinic and the sizes of the waiting areas. Inside the patient rooms, the walls contained marketing for most chronic conditions, along with vaccination information, and HEDIS measures. All materials visible had bilingual text.

In the surrounding community, there are approximately 5 churches, 3 grocery stores, one fresh food market, a number of gas stations/convenience stores, and several take-out restaurants. There were no fitness clubs, YMCAs, or public recreation facilities immediately within the Main St. community; however, there were several public parks, paved areas for bike riding and walking, as well as, community centers that could house fitness activities. The built environment changed drastically from one end of Main St. to Gallatin Pike; along with these changes was a shift in residential areas (from project homes, to older single homes, to lofts and midtown apartment spaces).

Conclusion:

The UNHS Diabetes program is run by a highly competent staff, and is implementing a strong model to tackle Diabetes. More importantly, there is a continued effort to revise and improve the current structure of the program, which speaks to an elevated level of commitment to the patients.

At present, the majority of the recruitment efforts are passive. Physicians refer patients that a) meet diagnostic criteria, or b) are at high risk for developing diabetes. While this strategy is most prevalent, it directly positions providers as “gate-keepers” for the program. It would

prove highly beneficial to develop a means of active recruitment. One suggestion is to expand recruitment to health fairs and mobile health activities; prospective patients can be engaged at an entry level, and integrated into the UNHS network, while simultaneously enrolling in the Diabetes Program.

Participation is critical in determining the impact of a given program. Among patients who are engaged, there is a strong appreciation for and positive attitude towards the UNHS Diabetes program components. However, it is difficult to gain an accurate picture of active participants and the varying levels of engagement. Participants are often transient, lacking stable contact information (i.e. mobile phone numbers, email addresses) or a stable residence; this complicates the bi-monthly follow-ups, and as a result, leads to participant disengagement. There are also underlying social issues that create barriers for participants, such as transportation and child-care; although intent may be to remain fully engaged, if a participant is unable to secure either of the aforementioned, it may lead to disengagement. One possible means of addressing the participation issues is through the development of a tracking system, or a feature that communicates with the EMR system used by providers. UNHS personnel should uniformly update patient information, on a continual basis – preferably weekly; moreover, information should be requested at any program-related activities, as well as, verified upon clinic visit.

Retention may be impacted greatly

Needs Assessment