Project Methods

The purpose of this project is to implement a CHW led intervention program within a CHC targeting uncontrolled adult T2DM patients to reduce their HbA1c levels. Reducing the proportion of patients with uncontrolled T2DM is a strategic quality goal for the CHC, engaging leadership to seek sustainable and effective solutions. A comprehensive literature review identified the common barriers that limit T2DM patients to achieve glycemic control demonstrating how vulnerable populations are disproportionately affected and identifying opportunities to improve outcomes. The CHC where this project will be implemented consists of services for underserved populations across three counties. Evidence showed CHW led interventions effectively improved patient outcomes in minority, underinsured, and low socioeconomic populations. Furthermore, the literature review showed consistent results of CHW programs in CHCs reducing HbA1c levels and overall healthcare costs. Aligning the evidence with the CHC strategic goal and current staffing structure helped to ensure buy-in and project approval from leadership. This project will gain IRB approval prior to implementation.

Setting and Stakeholders

The CHC where this project will be implemented currently employs two trained CHW on staff: however, additional structure will be provided to focus and expand their efforts on diabetes management. In their current capacity, the CHW's primary role is to connect patients with community resources and does not include engaging patients in health education and self-management. The job function change and structure will include standardized educational topics and materials, as well as internal processes to empower the CHW to collaborate with Care Coordinator Nurses and Medical Providers to improve patient health outcomes. Their supervisor and the CHC operational, clinical, and executive leadership are in support and there are no

additional financial costs that will be associated with implementation. This is a slight culture change with the CHW being a part of the care team, however the CHC already has a team-based and collaborative approach to care. Prior to implementation, all clinical staff will review the change in role of the CHW with their supervisor to ensure awareness and knowledge of the CHW abilities and function. The CHW are well known to the clinical staff, the patients, and community resources and partners, setting the stage for their successful integration.

Implementation

There will be two methods to enroll patients into the program over the first month of the project implementation. First, primary care providers will be able to make direct internal referrals through the EHR, including listing any needs, goals, and barriers identified in the visit within the referral. Secondly, the CHW will do patient outreach for those with HbA1c over 9 from lists provided by the Population Health Director. After making patient contact, the CHW will explain what is available to the patient over the three-month program and curtail the intervention to meet the needs and engage the patient. The CHW will ensure all patients have had an HbA1c within four weeks of program initiation or will coordinate an HbA1c to be done prior to the patient starting the program. Standing orders for point of care HbA1c are currently approved in the CHC and can be easily obtained. The number of participants will be dependent on the number of adult T2DM patients with a HbA1c over 9 identified by either the provider or CHW and accepts the intervention.

CHW interventions can include education on T2DM disease, lifestyle, and medications. In addition, CHW can assist patients in developing self-management goals, encouraging medication adherence and blood glucose monitoring, and providing case-management. CHW play a critical role in connecting patients with transportation, housing, food, and financial

resources. The CHW can refer to the Care Coordinator nurses for any reasons outside of their scope or contact the clinical team directly. Preference will be to have in-person visits with patients; however, telephone visits are permitted based on patient requests during the pandemic or due to hardships. Frequency of visits will be at least monthly and there will be no cost to the patient to limit barriers in this vulnerable population. Standardized printed educational material by the American Diabetes Association and the National Diabetes Education Program will be given to the patient in their preferred language with interpreters available on site. The CHW has access to the patient's medical records and can review notes from the provider visit as well as the patient's medication list. During the program, CHW's will document progress within the EHR, which can also be seen by the clinical team.

Sustainability and Measuring Outcomes

The project can be implemented without additional staffing or resources except for minimal costs associated with printing educational materials. Sustainability will be limited by the number of patients with uncontrolled diabetes that request intervention and the number of available CHWs. This project should highlight if additional CHW will need to be hired to continue the program long-term. There are models for reimbursement for CHW that will have to be examined to make the expanded program viable. Other than financial sustainability, close communication and feedback from the clinical teams will be vital for program sustainability. Transparency of outcomes will also be key.

The patients' HbA1c will be taken again at the end of the program and documented in the EHR. An electronic review of enrolled patients' HbA1c at the onset and conclusion of the project will be completed to compute the average change. There may be limitations with follow up over the three-month period, those that had at least two interventions during the program will be

included in the final results. Patient interventions may vary due to the pandemic, which may impact outcomes.