High blood pressure is one of the leading causes of cardiovascular disease. However, individuals are often unaware they have it and many people who have been diagnosed with hypertension do not regularly monitor their blood pressure. Self-measured blood pressure (SMBP) monitoring programs are an effective way to manage hypertension, decreasing risk for heart attack and stroke. The SMBP program at Falls Community Health (FCH) addresses blood pressure control and provides access to cuffs for ambulatory monitoring so patients who have barriers getting to the clinic can still be monitored remotely and address blood pressure control, improving their overall outcomes.

Summary

High blood pressure is one of the leading causes of cardiovascular disease. However, individuals are often unaware they have it and many people who have been diagnosed with hypertension do not regularly monitor their blood pressure. Self-measured blood pressure (SMBP) monitoring programs are an effective way to manage hypertension, decreasing risk for heart attack and stroke. The SMBP program at Falls Community Health (FCH) addresses blood pressure control and provides access to cuffs for ambulatory monitoring so patients who have barriers getting to the clinic can still be monitored remotely and address blood pressure control, improving their overall outcomes.

Challenges/Barriers

The program encountered several challenges including language barriers (Nepali and Spanish as primary language), low health literacy, patient adherence to program structure, and data transfer from the blood pressure cuffs to the clinic’s electronic medical record (EMR).

One way FCH overcame these obstacles was by selecting Welch Allyn blood pressure cuffs that automatically upload to the EMR through the patient’s Bluetooth device. This allowed the healthcare team to monitor blood pressure readings without the patient having to physically go to the clinic. Medication changes could then be made via phone call or through the EMR portal. This was able to save participating patients time and money. When technology was not always working, the clinic’s data support person would reach out to the patients and troubleshoot the problem.

To combat language barriers, the clinic had materials translated into the most commonly needed languages. Additionally, they utilized in-person and phone interpreters to interact with patients whose primary language was not English.
Results

FCH started enrolling patients in November 2021. Between then and the end of the project period (June 30, 2022), the clinic was able to enroll 20 participants. Two participants were considered controlled throughout the program, meaning their blood pressures were less than 140/90 mm Hg and no medication changes or additional interventions were needed. Of the remaining participants, 14 required a medication change to get their blood pressure under control.

FCH noted that since starting the program, a few of the participants have had great success in getting their blood pressure to goal. The program gave them an awareness of how high their blood pressure was and how that correlated with the way they were feeling. One participant’s systolic (top) blood pressure went from consistently in the 170s-180s to consistently controlled in the 120s-130s. He reported feeling so much better.

Next Steps

Through CDC’s 1815 cooperative agreement, FCH will receive continued funding from the South Dakota Department of Health Heart Disease and Stroke Prevention Program (HDSPP) in 2022-2023. During the project period, FCH plans to expand their program from the initial one provider pilot to make it available clinic wide. This will allow for greater availability to blood pressure cuff access, providing patients additional opportunities to take control of their hypertension and be involved in their own health success. As the clinic strives to improve hypertension control in the vulnerable population of Sioux Falls, they hope to reduced overall atherosclerotic cardiovascular disease risk, emergency department visits, hospital admissions, and financial burden of the disease throughout the community.

Get Involved

For additional information on this project or to learn more about HDSPP funding opportunities, contact Rachel Sehr, Heart Disease and Stroke Prevention Coordinator at Rachel.Sehr@state.sd.us or 605-367-5356.

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