

Hypertension Management Program Implemented at Brothers Pharmacy

Challenge

Cardiovascular disease is the number one cause of death in South Dakota, a chronic illness usually associated with elevated or uncontrolled blood pressure (hypertension). Healthcare systems are continually searching for new and innovative ways to treat their patients in a manner most beneficial and effective for them. This often times requires looking to healthcare providers and team members based in the community, who are typically more accessible to the patient.

Solution

The Community Pharmacy Enhanced Services Network of South Dakota (CPESN SD) partnered with the Heart Disease and Stroke Prevention Program (HDSPP) to offer an eight-month community-based hypertension management program through six community-based pharmacies.

Results

CPESN SD's stores (community-based pharmacies) have been quick to implement this program. Community-based pharmacists are often looking for ways to play a larger role in the healthcare team and this provides an excellent opportunity to ensure consistent education, awareness and follow-up related to hypertension and healthy lifestyle choices.

Timeline

HDSPP first partnered with CPESN SD in July 2019. At that time, CPESN SD developed and implemented a new protocol to identify patients with uncontrolled hypertension and developed a new non-physician enhanced team-based hypertension management program for the pharmacy setting. Participating pharmacies received education on the program objectives and requirements and participant recruitment and enrollment began in November/December 2019. The program closed patient enrollment at the end of February 2020 to allow for alignment with the project period.

Key Components

Each participant enrolled in the HDSPP/CPESN SD hypertension management program received one-on-one education and lifestyle counseling, including an ongoing series of services designed to teach and counsel participants on how to make healthy lifestyle choices, such as exercise, diet, and tobacco cessation. An automated blood pressure cuff was supplied so participants could regularly check their blood pressure at home as part of the program. Upon enrollment, each participant worked with their hypertension management coach to establish a baseline blood pressure, develop a care plan and course of treatment, establish blood pressure goals, receive blood pressure goal counseling and lifestyle and behavioral modification recommendations, and reconcile all medications. Participants also received a written summary of the initial education session. In addition to their initial education session, participants received training on home blood pressure readings and ways to document, weekly care calls from a pharmacy care team member with pharmacist intervention if required, monthly meetings to discuss medication compliance, treatment progress, and update goals, and electronic documentation and health record exchange with the appropriate healthcare team members. Each participant completes eight months of hypertension management services as part of this program.

Summary

This program engaged Brothers' patients, which led to many changes in their blood pressure medications to achieve blood pressure goals sooner. Many medication changes occurred without direct pharmacist intervention while others required pharmacist intervention. Often, after trying the maximum dose of one therapeutic class, other types of medications were added to lower blood pressure. Additionally, education for more complex situations such as heart failure potentially led to keeping one patient out of the hospital longer.

Evidence-Based Interventions

HDSPP partnered with the CPESN SD to implement two evidence-based interventions: Support engagement of non-physician team members in hypertension management and Facilitate use of self-measured blood pressure monitoring with clinical support among adults with hypertension.

System/Policy Change

Initially, Brothers had trouble engaging pharmacy staff to help collect blood pressure readings and speak with the patient when they were at the pharmacy. To help with this, the pharmacy included notes in all of the patient profiles to help remind the technicians to ask for readings when the patient was coming in to pick up their medication.

Some of the lesser expensive blood pressure monitors were not showing accurate readings. These monitors were replaced with a more expensive monitor which then worked very well. Supplying "brand name" monitors up front is important to have accurate results. Some frustration occurred until this was resolved.

Successes

One patient enrolled in the program has moderate heart failure with fluid retention and occasional shortness of breath depending on his fluid status. He also experienced dizziness, fatigue, and near fainting if he was too dehydrated. The pharmacist reviewed his medications with him and his blood pressure readings. He started to monitor his blood pressure more often so he knew when he was too dehydrated. He had readings as low as 70/34 and had some higher readings, too. Since the patient and the pharmacist have been monitoring this better, he has decreased the amount of dramatic fluctuations that could lead to fainting or a heart failure exacerbation.

Another patient participating in the program had a history of poor medication adherence and uncontrolled blood pressure. This program helped her gain better adherence and also added two more medications to her regimen leading to better readings. One of these medications was an ACE inhibitor, which ended up making her cough. The ACE was then switched to an ARB. Her cough resolved after a few weeks allowing her to continue taking her medication and still keep the same quality of life.

Next Steps/Other Info.

CPESN SD will receive funding again in fiscal year 2021 as part of the HDSPP 1815 Year 3 cooperative agreement with Centers for Disease Control and Prevention. During Year 3, CPESN SD will enroll an additional 60 participants in their hypertension management program and will develop and implement a provider referral system to assist with participant recruitment.

