Problem

High blood pressure (HBP) is a major modifiable risk factor for cardiovascular disease affecting over 1 in 3, or 4.8 million, adults in New York State. HBP is more common among low income and older adults, adults who identify as non-Hispanic Black, and adults with a disability. For patients with HBP, keeping their blood pressure in control (<140/90 mmHg) can help prevent HBP from leading to a heart attack or stroke. However, only 68.3% of patients in Federally Qualified Health Centers (FQHCs), which serve low income and high need populations, had their blood pressure in control. Self-measured blood pressure monitoring (SMBP) involves the routine use of home blood pressure monitoring devices to assess and record blood pressure (BP) readings. When combined with clinical support, such as provider counseling or education, SMBP can help improve BP control. Unfortunately, home blood pressure monitors can be costly, especially for low income patients, and many insurance plans do not cover the cost of the devices.

Intervention

The New York State Department of Health (NYSDOH) partnered with HealthEfficient, a Health-Center Controlled Network, to establish a BP monitor loaner program across their 72 member FQHCs, and promote SMBP. In 2017, NYSDOH used Centers for Disease Control and Prevention grant funds to purchase validated BP monitors and distribute them to FQHCs as part of a BP loaner program. Each FQHC was required to view a webinar delivered by the American Medical Association, develop and adopt a protocol for distributing and managing home BP monitors, and agree to share data on utilization and outcomes. In tandem, HealthEfficient developed an electronic health record template for capturing SMBP program referrals and tracking of monitor distribution. NYSDOH also developed online training opportunities and disseminated them broadly to FQHCs and other health systems to ensure clinicians had the knowledge and skills to effectively manage BP and educate their patients with HBP on the importance of SMBP.

Health Impact

Program Reach

NYSDOH successfully launched a BP monitor loaner program across 72 of HealthEfficient’s member FQHC sites, increasing access to SMBP to low income patients. Over 90% (65) of the FQHCs agreed to participate. As of June 15, 2018, a total of 545 monitors have been loaned to patients across all sites.

Training Participation

Between October 2015 and March 2018, a total of 1,230 unique health care practitioners registered for the online BP training program. Of those, 495 (40%) participated in the SMBP module that specifically addressed how to implement a loaner program in the clinical practice setting.

Health Outcomes

During the implementation period, BP control improved across all FQHCs by 4%, from 62.7% to 65.3%. One participating FQHC, Hometown Health, conducted an evaluation of its SMBP loaner program. Over a 10 month period, 168 patients completed the program. Among those who participated:

- 77% saw improvements in BP control
- Adherence to regular follow-up visits increased by 45%
- 50% of patients were given new or adjusted anti-hypertensive medications; 91% of those patients have been compliant with refills
- Inpatient hospital stays decreased by 12%; the number of patients with ≥ 1 emergency room visit decreased by 63%

NYSDOH successfully improved access to SMBP among low-income patients with HBP across FQHCs. At the state level, NYSDOH will continue to provide technical assistance on the BP monitor loaner model; promote health insurance coverage of monitors; and explore the feasibility of collecting SMBP readings within Health Information Exchanges.