Hypertension and Health Equity: Putting the Power in the Patient’s Hands Through Self-Measured Blood Pressure (SMBP)

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BACKGROUND

Hypertension or high blood pressure is more common in non-Hispanic Black adults (56%) than in non-Hispanic white adults (48%). Black men have higher rates of hypertension complications including hypertension-associated death compared with other populations and are less likely to follow up with primary care physicians or to continue with medical adherence. Hypertension-associated death rates in non-Hispanic Black men are more than 2.5-fold higher than in non-Hispanic White men and almost 1.5-fold higher than in non-Hispanic White women.

GOALS OF THE DEMONSTRATION PROJECTS

1. Increase screening and testing of Black males at high-risk for hypertension.
2. Refer, enroll and engage these men into evidence-based Self-Measured Blood Pressure (SMBP) monitoring programs with clinical support and lifestyle change programs.
3. Address a social determinant of health (SDOH) identified as a barrier to patient screening, care management, enrollment and/or retention.
4. Collect and report data (process and outcome measures) that reflect enrolled patient experiences and assess the impact of SMBP and interventions taken during project period.

Inclusion Criteria: Black men ages 35-64 identified as having stage 1 hypertension and above, per the 2017 American College of Cardiology/American Heart Association guidelines for hypertension management.

METHODOLOGY/TIMELINE

Request For Proposals Submission (Feb-April 2019)
Grantees Selected and Start-up Phase (May-July 2019)
Demonstration Projects Launched (August 2019)

Demonstration Projects End (August 2023)

Four grantees continue project implementation; All grantees adapted approaches in response to the COVID-19 pandemic and are planning for sustainability and system-based changes beyond the current funding period.

PROMISING PRACTICES TO IMPROVE HYPERTENSION

Provide cuffs (appropriate size) and supporting materials (logs, checklist).
Engage graduate/medical students/residents for continuous clinical support.
Develop Quality Improvement (QI) processes and educate care team members (e.g., Medical Assistant (MA), Registered Nurse (RN)) on accurate blood pressure (BP) measurement; create patient & provider checklists.
Utilize population health tools to identify eligible and lost-to-follow-up patients.
Utilize warm hand-off/engagement through Licensed Practiced Nurses (LPN)/social workers/community health workers (CHW).
Screen/address social needs after establishing rapport with patients.
Conduct in-person lifestyle management classes to improve understanding of the impact of diet and exercise on hypertension control.

APPROACHES & INITIAL FINDINGS

HEALTH

Cook County Health (Chicago, IL)
- RN conducts intake, screen for social needs; MA/RNs use Target BP 7 Tips
- Refer patients for transportation and food vouchers, MAT, substance abuse treatment, utility assistance etc.
- Offer hypertension and lifestyle management classes; recognize champions
- Teach health literacy related to hypertension
- Enrolled 119 patients as of Sept 2022

HENRY FORD HEALTH

Henry Ford Health (Detroit, MI)
- Increase synergy between RN BP Practitioners (medication titration) and embedded pharmacists (medication optimization) for identified patients
- Engage CHW to follow-up with lost-to-follow-up patients and screens for social needs
- Refer patients with food insecurity to Henry’s Groceries/ Food Prescriptions
- Patients more confident in managing BP
- Enrolled 348 patients as of Sept 2022, 181 (52%) are currently at goal

Lincoln Community Health Center (Durham, NC)
- Engage graduate and nursing students from Duke and North Carolina Central Universities; conduct outreach among 250+ eligible men identified each year through HRS database
- Offer hypertension classes include healthy food tasting, videos posted on YouTube
- Screen for social/health harming needs during 3rd call, identified policy and legal remedies for patients
- Black men who attended more than one in-person class saw reduction in BP

ABOUT THE PROJECT

With funding from the Centers for Disease Control and Prevention’s (CDC) Division for Heart Disease and Stroke Prevention (DHDSP), The American College of Preventive Medicine (ACPM) awarded grants to six health care organizations to develop innovative models within clinical practices to address hypertension in Black men ages 35-64 years.

“I was amazed when swapping a salty breakfast for a vegetable and a fruit smoothie every morning got me at target without adding a third medication.”
- Patient from Cook County Health

“I has increased my patient teaching skills and helped me realize the effect of patient’s participation in his care.”
- Nurse at Cook County Health

“We included pill boxes, as a tool to remind patients to take their meds, based on our CHW’s suggestion. Patients have found it very useful.”
- Henry Ford Team

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REFERENCES

1. A closer look at African American Men and High Blood Pressure www.cdc.gov/bloodpressure/aa_sourcebook.htm

Grady Health System (Atlanta, GA) - participated until July 2021
- Built hypertension resource bank to incorporate in EMR and a database of Black men with hypertension to be seen in clinics
- Peer educators offered classes in SMBP
- Developed nurse-driven protocol to manage enrollment
- Screened all men using multi-fronged Food As Medicine (FAM); 29% screened positive
- Piloted in three primary clinics and 272 patients were referred; 90 completed at least one visit