Philadelphia Freedom from High Blood Pressure: An Integrated MultiDisciplinary Approach to Support Hypertension Control (DASH-C) in Primary Care

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Background/Objective

- Philadelphia has the highest prevalence of hypertension (33%) out of the six largest cities in the United States.[1]
- Hypertension is a strong risk factor for cardiovascular disease, the leading cause of morbidity and mortality in patients with diabetes.
- The American Diabetes Association recommends blood pressure be measured at each office visit.[2]
- For most patients with diabetes and hypertension, the goal blood pressure is ≤ 140/90 mmHg.[2]
- The following describes a multidisciplinary quality improvement program to engage physicians and non-physician team members in the management of hypertension using an integrated, patient-centered, team-based approach.

Population

- Individuals 18-75 years of age with type 2 diabetes who have uncontrolled hypertension (BP ≥ 140/90 mmHg).
- Participants received primary care at one of three CPC+ track 2 practices of Jefferson Health in Philadelphia.
- The program began enrolling patients on March 1, 2020.

Methods/Study Design

- Quasi-experimental, pre-post evaluation.
- Electronic health record (EHR) reports used to collect baseline data, social determinants of health, medication adherence, self-management knowledge and skills, PHQ9, and stress.
- Medication adherence was estimated using the patient reported scale, Adherence to Refills and Medication Scale-7*, and EHR generated refill data.[3]
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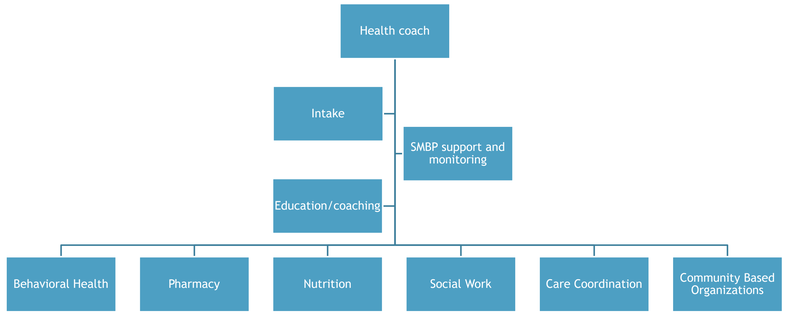
Methods/Study Design

- An intake form and scoring tool was adapted from validated tools and used to design a patient-centered intervention. Tool measures patient self-knowledge of diagnosis, social determinants of health and pharmacy support needs.

Intake Form: See separate handout

- Sample Chart Review (n=250)
    - 58% patients had BMI > 30 kg/m^2
    - 39% patients with a mental health disorder
- Patients followed for ≥ 6 months or until two BP readings are < 140/90 mmHg.
- Primary outcome: % of patients with controlled BP < 140/90 mmHg after 5 years (enrollment goal of 750 patients).

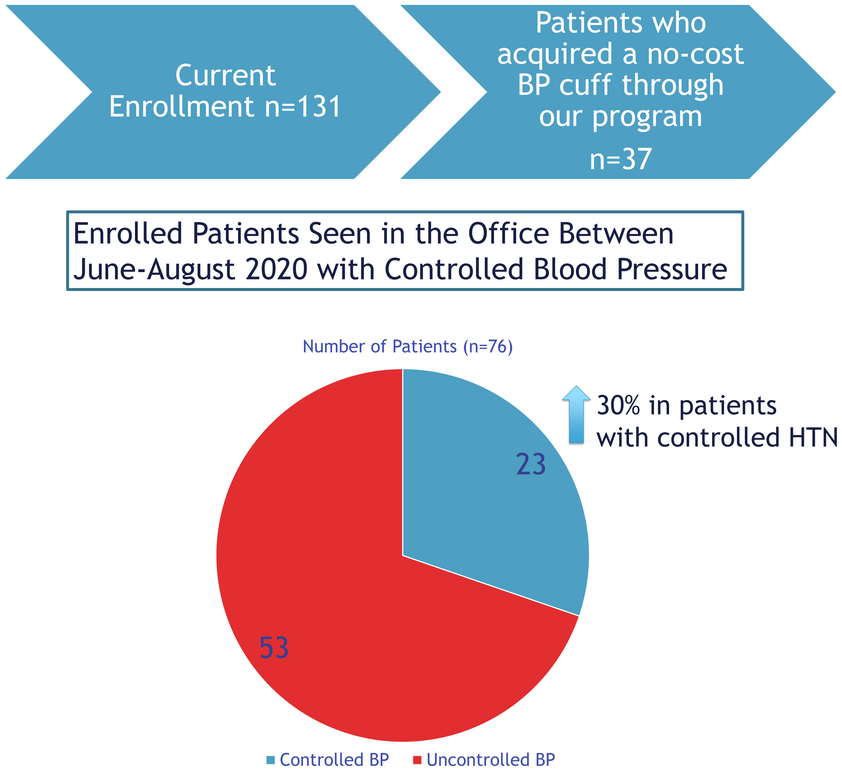
Program Flow Diagram



Principal Findings

- Preliminary results of 131 enrolled patients with uncontrolled hypertension are presented.
- Total number of referrals (n=16)
    - Pharmacy: 11
    - Care Coordination: 4
    - Behavioral Health: 1
- Home BP readings unable to be captured.
- From June-August 2020, 76 patients (58%) were seen in the office.

Principal Findings



Enrolled Patients Seen in the Office Between June-August 2020 with Controlled Blood Pressure

Conclusion

Preliminary findings of a multidisciplinary program shows that an integrated, patient-centered, team-based approach improves hypertension control in patients with diabetes and uncontrolled hypertension. The use of health coaching, self-monitoring blood pressure monitoring and leveraging resources are important tools in supporting patients to control hypertension.

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References

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