

### BACKGROUND

- Hypertension is one of the most common underlying causes of cardiovascular diseases, stroke, and kidney failure.
- Minorities tend to be disproportionately affected by hypertension compared to white patients even though there is awareness of this disparity.
- Chelsea and other health centers alike have strategies in place to address the hypertension disparity by focusing on education, screening, and patient self-management protocols.

### OBJECTIVES

- Evaluate the barriers patients have for using the at home blood pressure cuff.
- Identify possible solutions to the barriers expressed by patients to increase compliance in at-home blood pressure screening and reporting.
- Develop a culturally sensitive protocol based on proposed solutions to increase patient compliance.

### METHODOLOGY

- Epic chart review of all BIPOC, English-speaking patients (31) who received a blood pressure cuff as part of the MGH United Against Racism blood pressure cuff distribution
- Over-the phone motivational interview to identify barriers to blood pressure tracking and recording and patients' proposed solutions
- Qualitative data analysis to identify key themes for culturally sensitive protocol

### RESULTS

- 66% of patients who responded to the phone interview did not read the informational handout about hypertension.
- Only three patients had CKDstage3 (GFR 30-59). All others had normal kidney function.
- Sample patient-stated inconvenience that hinders reporting of blood pressure reading: "The only issue is sending results back, I have been busy and I'm trying to send it in before my appointment."

Figure 1: Frequency of comorbid diabetes with hypertension

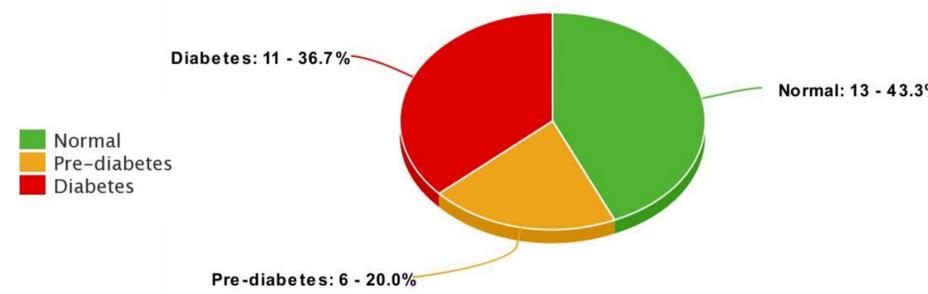


Figure 1: Diagnostic criteria: HbA1c level lower than 5.7% is normal, between 5.7-6.4 is prediabetes, and 6.5% and above is diabetes. HbA1c levels were available from 30 patient charts.

Figure 2: Frequency of comorbid obesity with hypertension

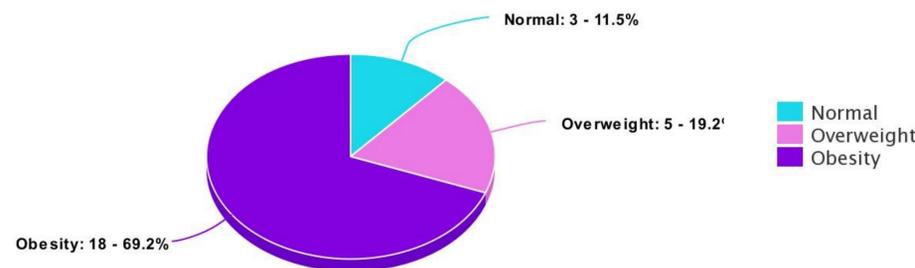


Figure 2: Diagnostic criteria: BMI level 18.5-24.9 is normal, 25-29.9 is overweight and 30 or higher is considered having obesity. BMI levels were available from 28 patient charts.

### CONCLUSION

- Low patient participation in the phone motivational interviews is due to a lack of incentive/time — only six of the 31 patients were reached and responded to requests for interviews.
- Hypertension control for individuals with comorbid diabetes/prediabetes and obesity is more complex and requires multi-level preventative education in diet and lifestyle improvements.

### RECOMMENDATIONS

- Adopt Bluetooth-enabled blood pressure monitoring devices that will sync with Patient Gateway, mitigating the barriers for patients to report blood pressure readings.
- Conduct more frequent laboratory surveillance to monitor comorbid conditions that complicate hypertension.
- Focus more on verbal education during clinic visits instead of informational handouts.

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