

2-2021

## Improving the Implementation of Home Blood Pressure Monitoring

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# Improving the Implementation of Home Blood Pressure Monitoring

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(\*) indicates primary project advisor

# Disclosures & Acknowledgments

- No Disclosures

# Introduction

- Hypertension as a risk factor<sup>1</sup>
  - Cardiovascular Disease, Overall Disease Burden, and Mortality
- 2017 ACC/AHA Guidelines<sup>2</sup>
  - Promotes use of Home Blood Pressure Monitoring (HMBP)
    - Stronger association with CVD<sup>3</sup>
    - White Coat Hypertension & Masked Hypertension<sup>3</sup>
- Primary Aim
  - Increase the percentage of JFMA patients with hypertension who are insured by Keystone First or Keystone VIP that have access to an automated home BP cuff for future telemedicine visits
- Project Impact
  - Enhance telemedicine diagnostic capabilities
  - Improve the ability of providers to accurately track BP
  - Improve the management and prevention of stage 2 hypertension



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# Methods

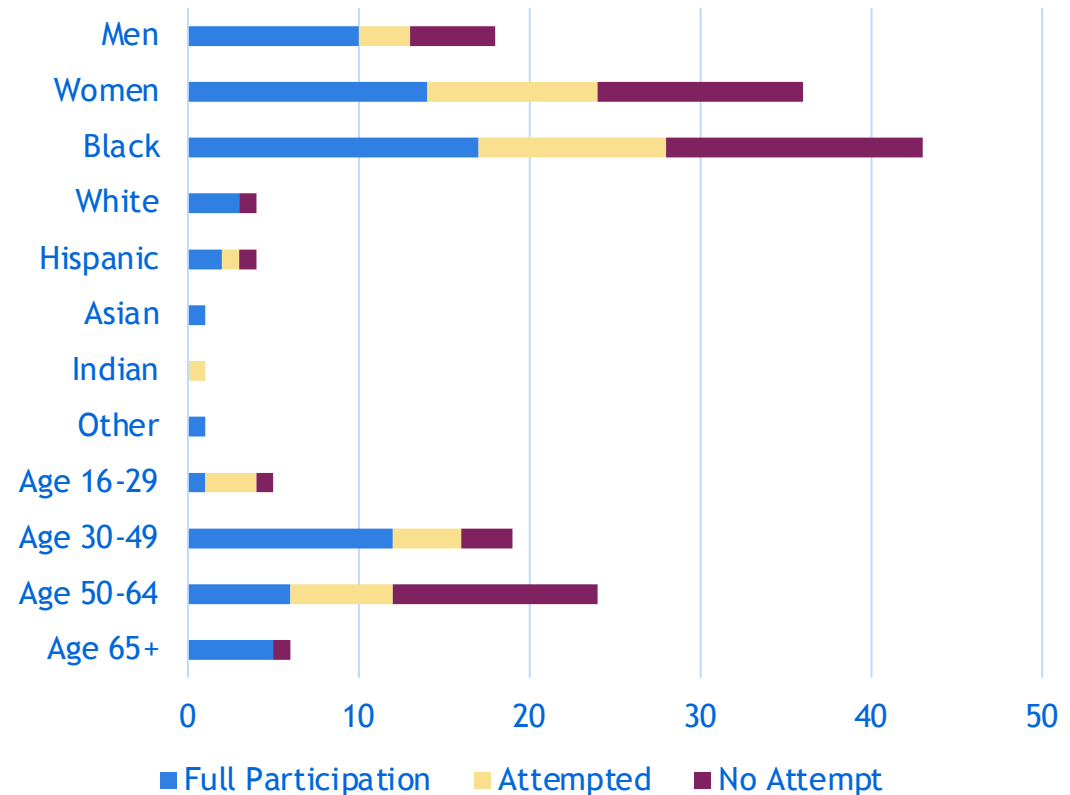
- Target Population
  - JFMA patients, ages 16-85, that have an active hypertension diagnosis and are insured by Keystone First or Keystone VIP
- Patient Outreach
  - Process Map, List Hierarchy
  - Phone Interviews and follow-up MyChart messages
  - Automated BP Cuff delivery via eRx
    - Home readings recorded on Epic
- Data Collection
  - Chart Review → BP Cuff Recipients
  - Number of Readings
    - $\geq 10$  readings defined as Full Participation
  - Age, Gender, Race/Ethnicity
  - Readings from first 5 days and most recent 5 days
    - Only the first reading for each day was collected



# Results

Measure	Value
Patients Contacted	253
BP Cuff Recipients	54
Full Participants (≥10)	24
Attempted (<10)	13
No Attempt	17
Avg SBP Difference	-6.51
Avg DBP Difference	-1.53

Participation by Gender, Ethnicity, and Age



# Conclusions

- Rate of Full Participation varied based on age and gender
  - Highest = Age 65+ and Men
  - Lowest = Age 16-29 and Women
- Observed decrease in average SBP and DBP
- Limited by small, non-representative sample
  - Keystone First or Keystone VIP
- Future PDSA cycles will focus on improving follow-up with low rate groups

# References

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2. Whelton PK, Carey RM, Aronow WS, et al. 2017 acc/aha/aapa/abc/acpm/ags/apha/ash/aspc/nma/pcna guideline for the prevention, detection, evaluation, and management of high blood pressure in adults: A report of the american college of cardiology/american heart association task force on clinical practice guidelines. *Hypertension*. 2018;71(6):e13-e115.
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