

# A Primary Care Based Interdisciplinary Team Approach Improves Uncontrolled Hypertension in Rural Adult Populations

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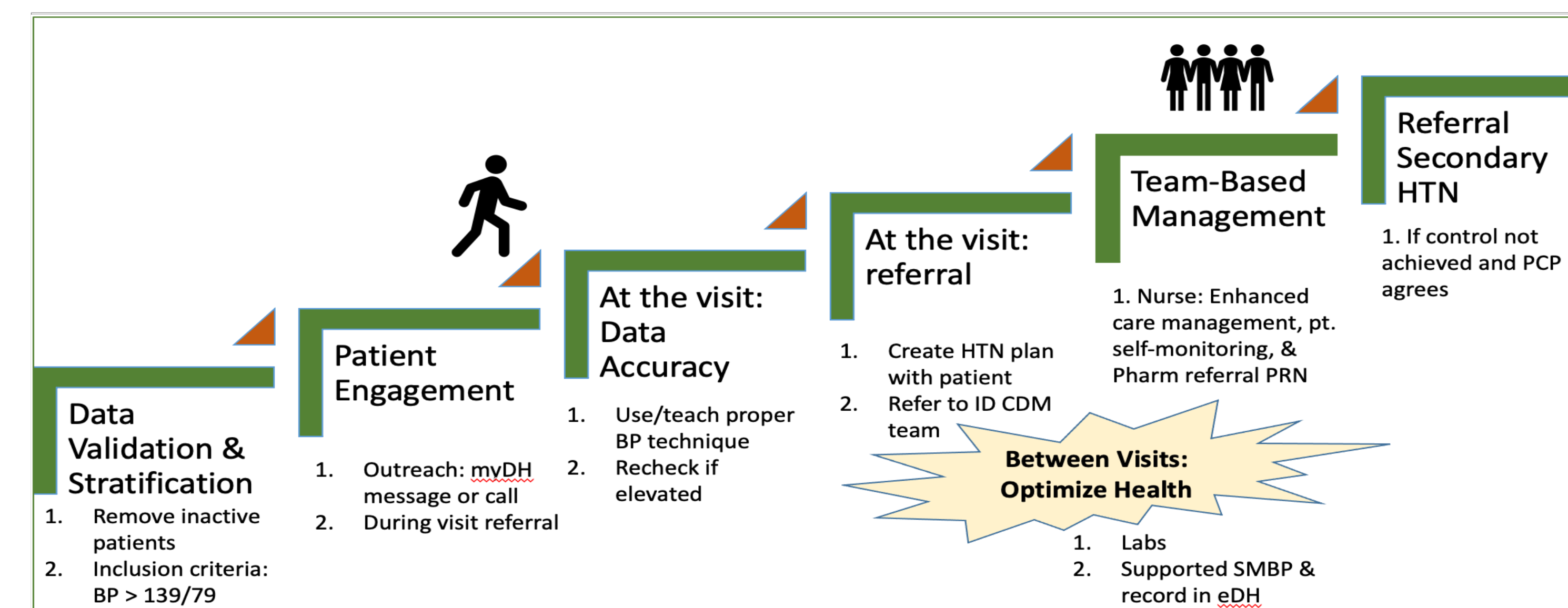
## Background

Hypertension (HTN) is a major risk factor for cardiovascular disease leading to increased morbidity, mortality, healthcare cost, and disease burden

Rural Americans are disproportionately affected by HTN due to socioeconomic status (SES), lifestyle, and access to care factors

Interdisciplinary, or team-based care, where each professional works to the top of the scope of their licensure is a demonstrated approach to improve control of HTN

## Intervention



## Discussion

Consistent with the literature on interdisciplinary, or team-based care, this project demonstrated that this approach is effective for improving HTN control rates, patient health confidence, and satisfaction

**Strengths** of this project include use of the “My Health Confidence” survey that measures confidence and engages patients in developing a shared care plan, confirmation of HTN based on multiple readings, and being both nurse-led and focused on all available team members working to the top of the scope of their licensure utilizing unique skills developed in their education and training

**Limitations** of this project include a small and homogenous sample, the intervention occurred during rapid clinical changes due to the COVID-19 global pandemic, changes in BP readings only measured at three-months, and no follow up with patients referred to the intervention who did not participate

**Sustainability** Senior leadership directed development of a HTN standard care model for the health system with support for ACO metric tracking and billing

## Purpose, Aims & Procedure

The purpose of this quality improvement project was to improve HTN control by implementing an existing evidence-based nursing Clinical Practice Guideline (CPG) for interdisciplinary care in a rural primary care practice below benchmark standard.

### The aims were:

- Decrease of SBP 10 mmHG and DBP 5 mmHG for the intervention group in 12-weeks.
- Increase patient confidence for self-management of HTN.
- Report increased satisfaction with the care received for management of HTN among patients participating in the project

**Design:** Paired pre-post cohort study

**Setting:** Rural primary care clinic

**Sample:** All adults 18+ in the clinic over 12-week intervention

### Measures:

- Change in systolic and diastolic blood pressure
- Change on My Health Confidence survey
- Change on the brief instrument to measure patient satisfaction with their primary care provider

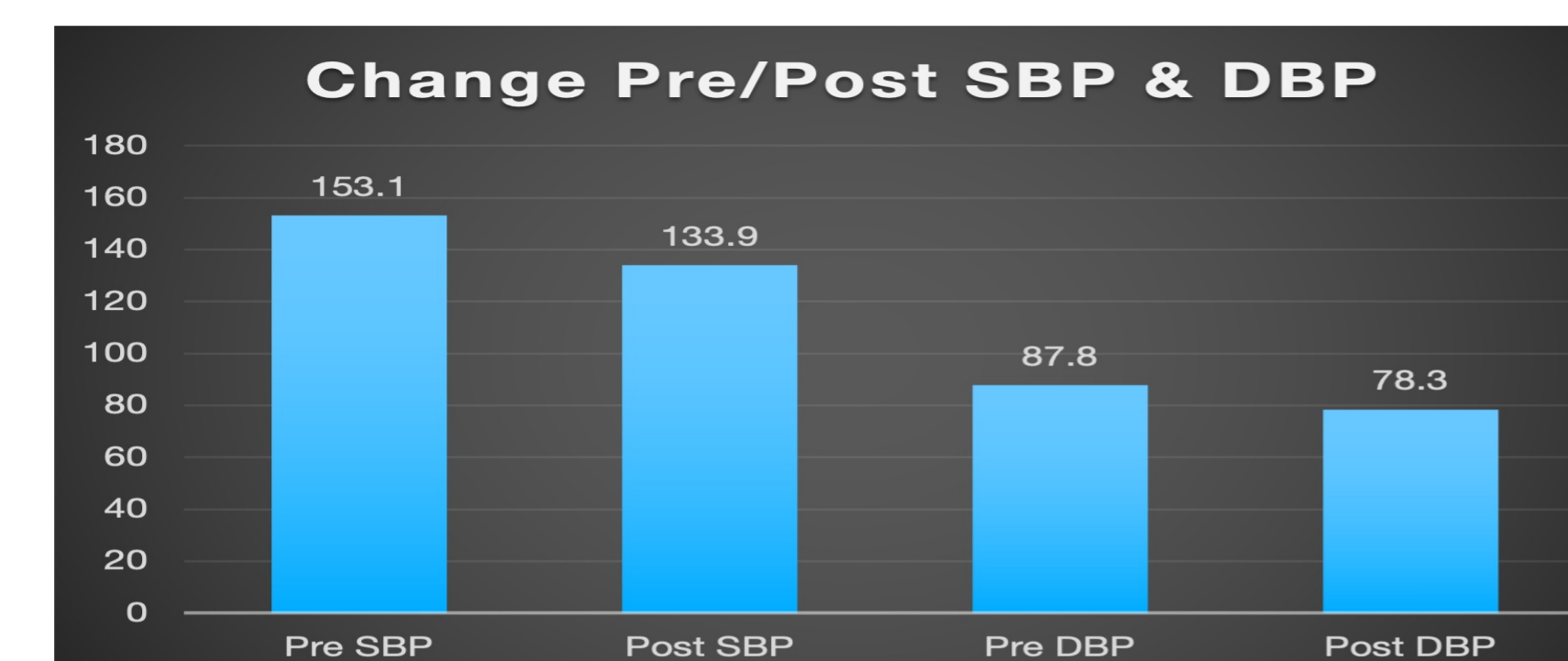
## Results

Table 1. Baseline Characteristics of Intervention Participants

Demographic characteristics	(N = 31)
Age, mean (SD)	61.2 (12.9)
Sex at birth, n (%)	
Male	14 (45.2)
Female	17 (54.8)
Non-binary	0 (0)
Race, n (%)	
Asian	0 (0)
Latino	0 (0)
Black	1 (3.2)
White	29 (93.5)
Biracial	1 (3.2)
Other	0 (0)
Highest level education, n (%)	
Less than high school	0 (0)
High school	9 (29)
Some college	6 (19.4)
College	9 (29)
Graduate degree	3 (9.7)
Missing	4 (12.9)
Insurance status, n (%)	
No insurance	1 (3.2)
Insured	30 (96.8)
Diabetes Mellitus (DM) diagnosis, n (%)	
Yes	5 (16.1)
No	26 (83.9)
Body Mass Index (BMI), mean (SD)	32.3 (9.1)

SD=standard deviation

### Aim 1: reduce SBP & DBP:



Paired t-test: There was a statistically significant mean reduction in systolic and diastolic blood pressure 19.1 mmHg ( $SD = 13.4$ ) and 9.7 mmHg ( $SD = 11.3$ ) respectively.

### Aim 2: Improved Health Confidence:

Wilcoxon-Signed Rank: There was a statistically significant median increase in patient health confidence 1.0 (IQR: 2). Cohens effect size was large ( $d = 1.14$ )

### Aim 3: Improved Patient Satisfaction

Wilcoxon-Signed Rank: There was a statistically significant median increase in patient satisfaction 1.0 (IQR: 6). Cohens effect size was large ( $d = .98$ )

The sample size was too small to do further Chi Square analysis of demographic characteristics with any of the aims

## Conclusion

Rural primary care offices with hypertensive patients should utilize a CPG to support nurses working at the top of their licensure, with pharmacy collaboration on medication issues, and in partnership with providers to provide access to high quality care for this underserved population

## References

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