

Foundations of Cardiometabolic Health Certification Course







Certified Cardiometabolic Health Professional (CCHP)



Eliminating Disparities

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Factors Reported to Affect Adherence

Health Care System Dimension	
 Provider-patient relationship	Changes/restrictions affecting formulary
 Provider communication skills	 High drug costs/copayments
 Disparity in patient and provider health beliefs	Poor access/missed appointments
Lack of positive reinforcement from provider	Long wait times
Weak system capacity for patient education and follow-up	 Patient information materials at too high literacy level
Lack of knowledge about adherence and how to improve	 Lack of continuity of care

Broad Policy Areas for A Nation Free of Disparities in Health and Health Care

- ➔ 1a) Reduce disparities in health insurance coverage and access to care
- ➔ 1b) Increase proportion of persons with usual primary care provider and patient-centered health homes
- ➔ 1c) Reduce disparities in quality of health care

Potential Sources of Disparities in Care



Patient-Level

- Patient preferences
- Treatment refusal
- Care seeking behaviors and attitudes
- Clinical appropriateness of care



Health Care Systems-Level

- Lack of interpretation and translation services
- Time pressures on physicians
- Geographic availability of health care institutions
- Changes in the financing and delivery of health care services



Provider-Level

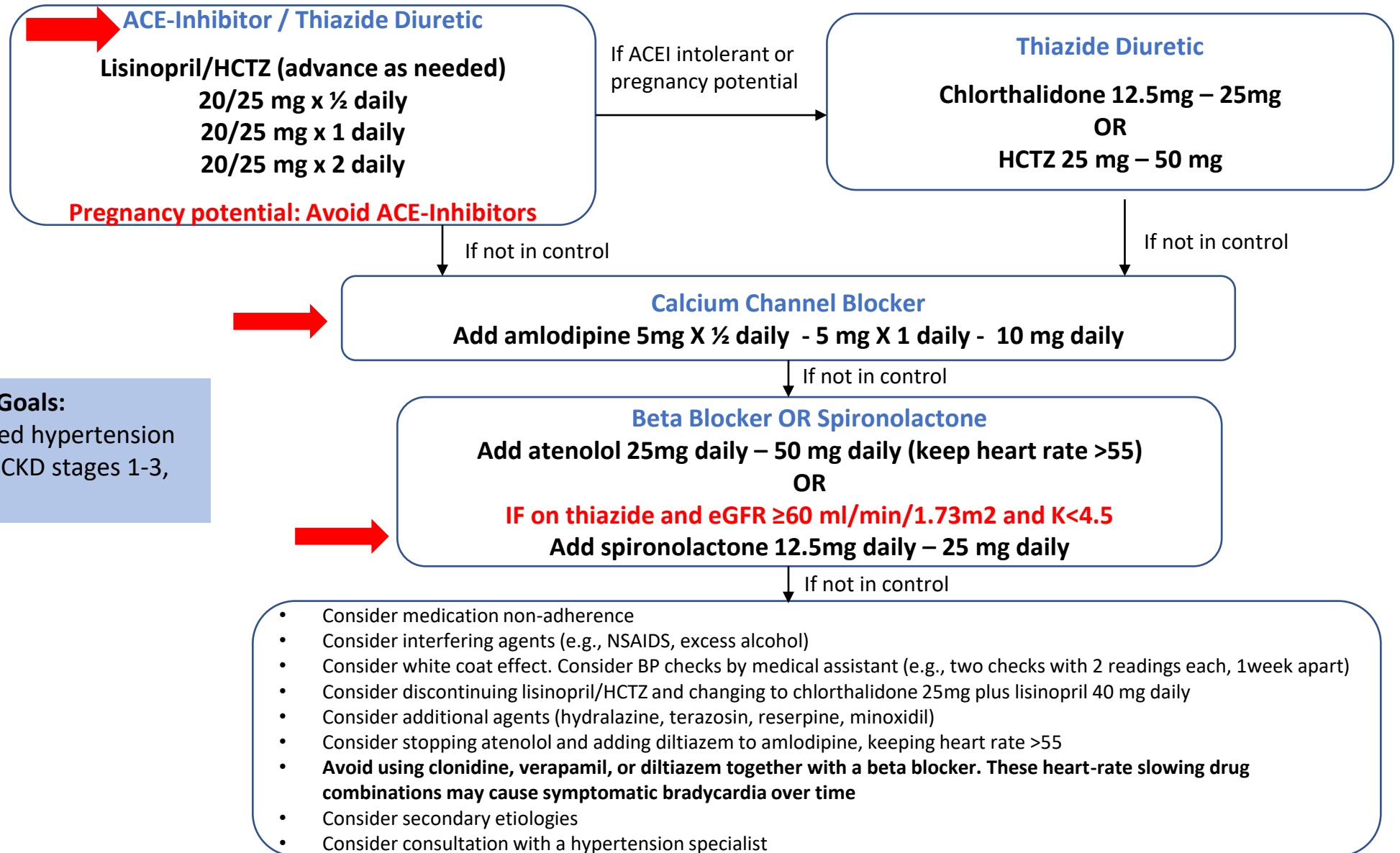
- Bias
- Clinical uncertainty
- Beliefs/stereotypes about the behavior or health of minority patients

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Kaiser Permanente Hypertension Algorithm



Blood Pressure (BP) Goals:
 ≤ 139/89 mmHg – uncomplicated hypertension
 ≤ 129/79 mmHg – Diabetes or CKD stages 1-3, CVA, TIA

NNT CVA = 63
 NNT MI = 86
NNT CVA or MI = 36

In the Kaiser algorithm, what is the first step?

- a. Lisinopril + HCTZ
- b. Amlodipine + Thiazide
- c. Amlodipine + ACE inhibitor
- d. Chlorthalidone alone

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Strategies to Improve Hypertension Treatment and Control

- Adherence strategies
 - Once daily dosing
 - Combination pills
- Strategies to promote lifestyle modification
- Team-based care
 - Health professionals: physicians, nurses, pharmacists
 - Patient
 - Staff: office staff and community health workers
 - Others: spouse, relatives, friends
- Use of EHR and Patient Registries
- Telehealth strategies
- Performance measures and Quality Improvement initiatives
- Financial incentives

Keys to Effective Blood Pressure Control in Adults With Hypertension

1. Agree (patient and provider) on blood pressure target
2. Use fixed-dose combinations
3. Substitute long-acting chlorthalidone for hydrochlorothiazide (alternatively indapamide)
4. Use long-acting amlodipine as first-line calcium channel blocker
5. Monthly visits until blood pressure target achieved
6. Replace prescription of 30 d with 90-d refills, if allowed
7. Use telehealth strategies to augment office-based management
8. Enhance connectivity between patient, provider, and electronic health record for better feedback and communication
9. Screen for social determinants of health and consideration of obstacles to care
10. Use multidisciplinary team-based care to enhance lifestyle and medication adherence and to solve social issues

Which of the following is a key to effective blood pressure control?

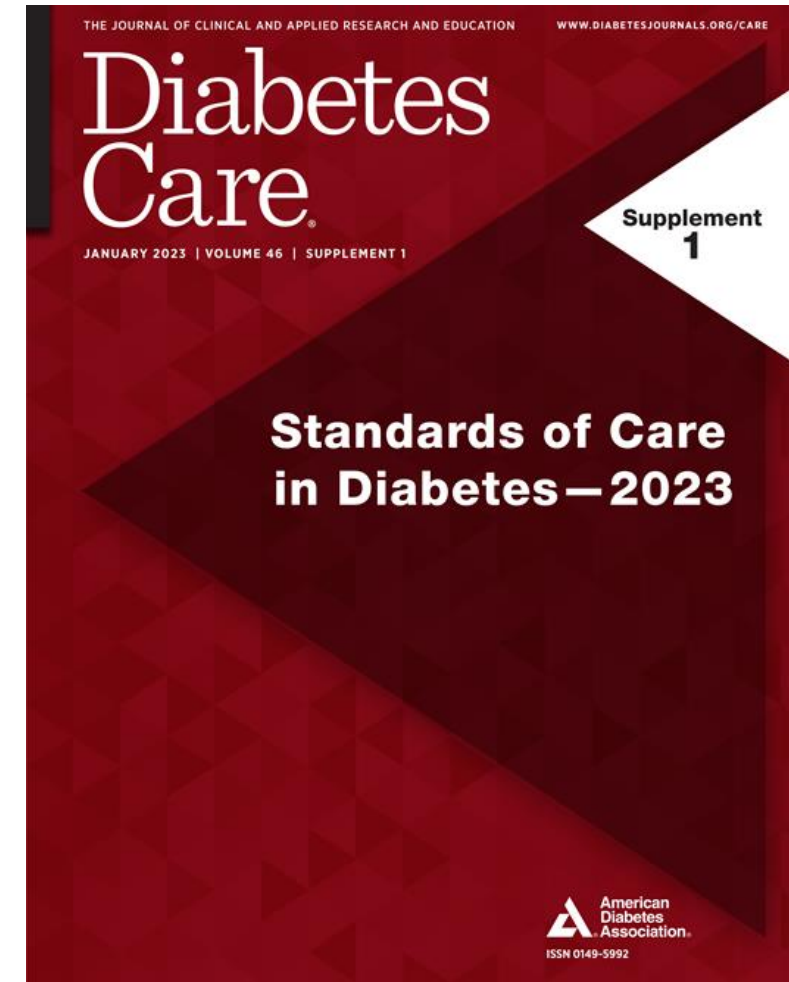
- a) Avoid fixed dose combination
- b) Replace 30 day with 90 refills, if allowed
- c) Avoid emphasizing lifestyle adherence
- d) Substitute HCTZ with furosemide

Which of the following is a key to effective blood pressure control?

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- b) Replace 30 day with 90 refills, if allowed**
- c) Avoid emphasizing lifestyle adherence
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Standards of Medical Care in Diabetes— 2023 American Diabetes Association

- For individuals with DM and HTN at higher CV risk (existing ASCVD or 10-year ASCVD risk $\geq 15\%$), BP target $< 130/80$ mmHg may be appropriate, if it can be safely attained.
-incorporating one of the SGLT2 inhibitors or GLP-1 RAs that have been demonstrated to have CVD benefit is recommended



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CONCLUSIONS

Historical housing discriminatory practices are associated with modern-day cardiometabolic disease and risk factors. Future studies should examine micro-level neighborhood characteristics, which make redlined neighborhoods more susceptible to disease.

CARDIOVASCULAR MEDICINE AND SOCIETY

Historical Neighborhood Redlining and Contemporary Cardiometabolic Risk



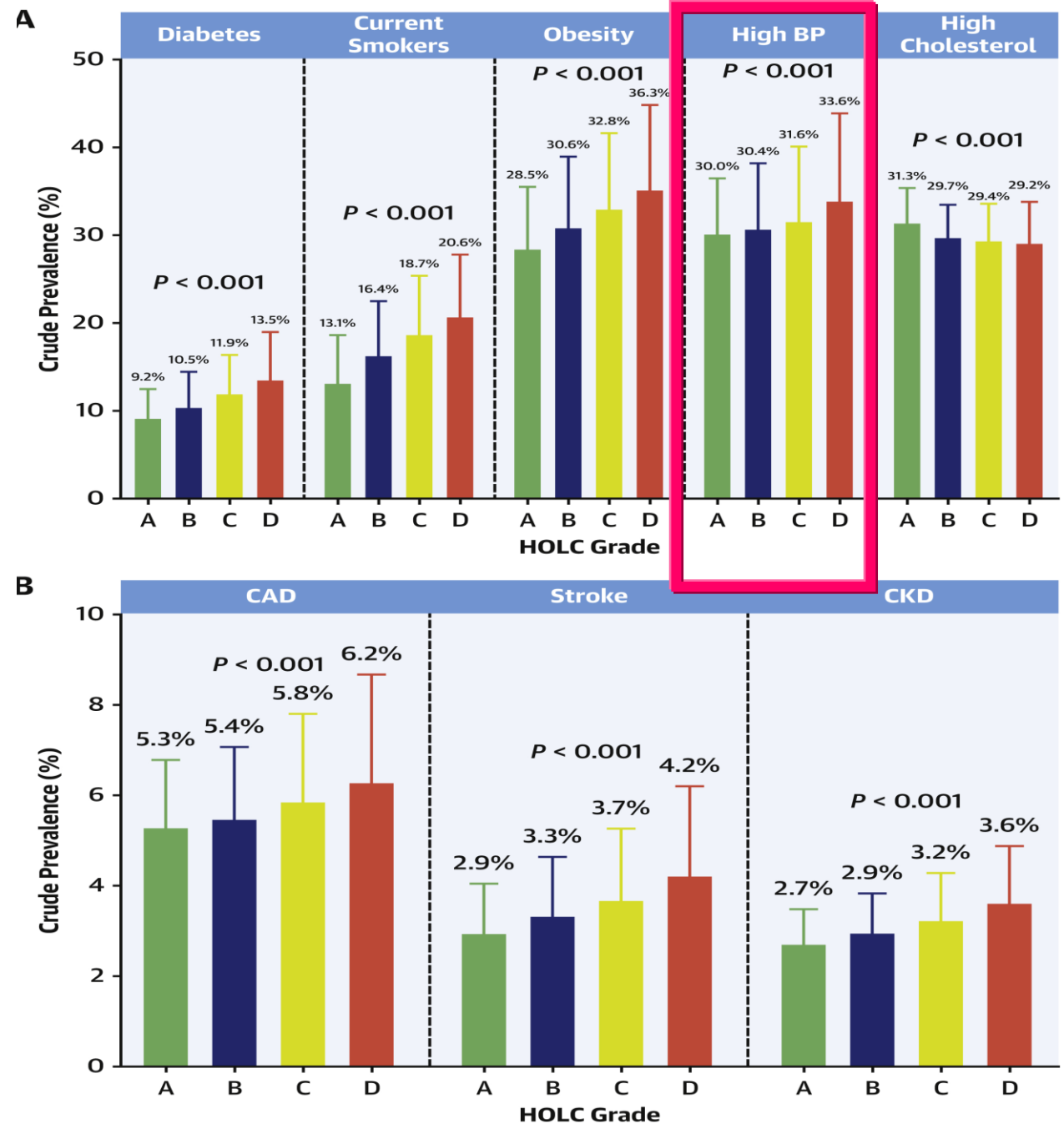
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Mean Prevalence of Cardiometabolic Health Indicators Across HOLC Grades

- (A) Mean prevalence of cardiometabolic health outcomes according to HOLC grade.
 (B) Mean prevalence of cardiometabolic health risk factors according to HOLC grade.

Columns color-coded based on HOLC grading:
A (“best” or green),
B (“still desirable” or blue),
C (“definitely declining” or yellow), and
D (“hazardous” or red).

HOLC =Home Owners’ Loan Corporation.



Redlining and Cardiometabolic Health in the U.S.

- ➔ • In analysis of individual risk factors and indicators of CVD, relationship between HOLC grade and almost all comorbidities (i.e., HTN, diabetes, obesity).
- ➔ • Reasons for these associations may be related to psychosocial stress, lack of access to care, environmental exposures, and unhealthy behaviors (e.g., smoking)

Redlining and Cardiometabolic Health in the U.S.

- Redlined neighborhoods had decreased routine health care visits and higher rates of lack of insurance.
- Residents of red-lined neighborhoods, especially minority groups, have lower access to public transportation, health care insurance, and healthy food choices
- → at risk for missed prevention and adverse health outcomes



Contents lists available at [ScienceDirect](https://www.sciencedirect.com)

American Heart Journal Plus: Cardiology Research and Practice

journal homepage: [www.sciencedirect.com/journal/
american-heart-journal-plus-cardiology-research-and-practice](https://www.sciencedirect.com/journal/american-heart-journal-plus-cardiology-research-and-practice)



Research paper

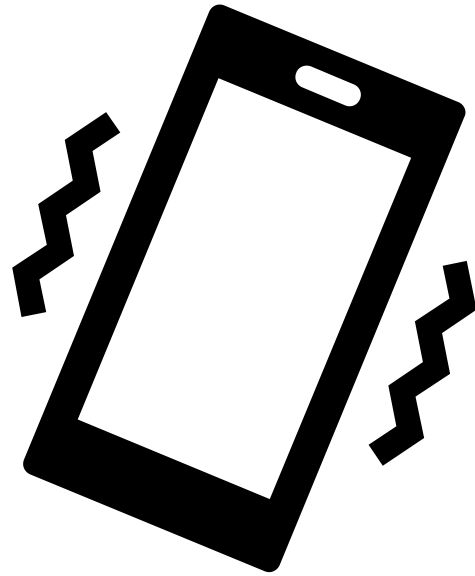
TEXT MY BP MEDS NOLA: A pilot study of text-messaging and social support to increase hypertension medication adherence[☆]

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Simple Text-Messaging to Increase Hypertension Medication Adherence

- ➔ Adults 18 and older
- ➔ Speak or read English
- ➔ Diagnosis of hypertension
- ➔ Internet and mobile phone access

- ➔ **Participants will be asked to:**
 - 2 in-person visits at Tulane Cardiology Clinic
- ➔ **Participants will receive:**
 - Costs for transportation and time

Text My BP Meds: Results

- ➔ • Mean age- 58.7±12.8 years n=35
- ➔ • Mean BMI-34.8±7.8
- ➔ • 63.9%-female
- ➔ • 91.7%- self-identified NHB
- ➔ • 25.7 %-previous diagnosis of diabetes
- ➔ • 72%-obesity

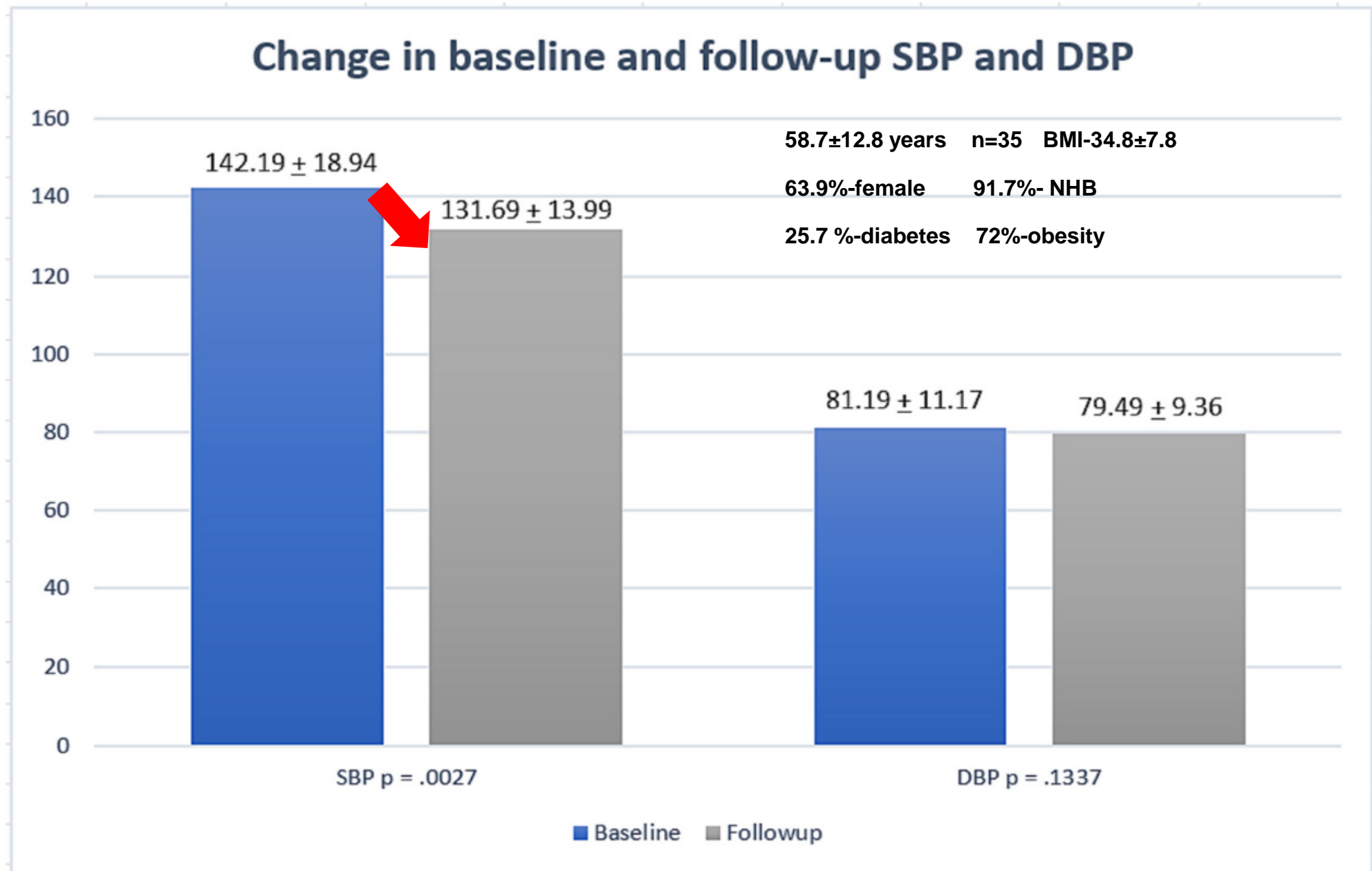


Fig. 2. Change in baseline and follow-up SBP and DBP.

Text My BP Meds:Conclusions

- A novel approach combining cloud-based Bluetooth SMBP transmission with health communication significantly improved medication adherence and SBP in a predominantly NHB urban cohort without modifying existing pharmacotherapy.

Eliminating HTN Disparities: Current and Emerging Interventions

