

Compendium

Design and Rationale of the Home Blood Pressure Telemonitoring Linked with Community Health Workers to Improve Blood Pressure (LINKED-BP) Program

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BACKGROUND: Disparities in hypertension outcomes persist among Black and Hispanic adults and persons living in poverty in the United States. The “LINKED-BP Program” is a multi-level intervention linking home blood pressure (BP) monitoring with a mobile health application, support from community health workers (CHWs), and BP measurement training at primary care practices to improve BP. This study is part of the American Heart Association RESTORE (AddREssing Social Determinants TO pRevent hypErTension) Network. This study aims to examine the effect of the LINKED-BP Program on BP reduction and to evaluate the reach, adoption, sustainability, and cost-effectiveness of the intervention.

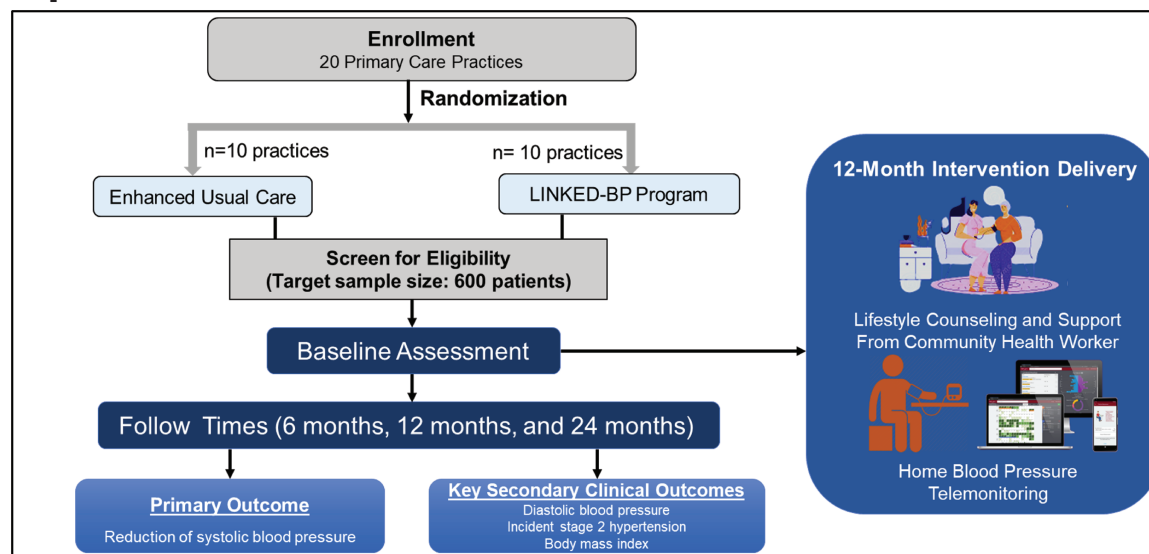
METHODS: Using a hybrid type I effectiveness-implementation design, 600 adults who have elevated BP or untreated stage 1 hypertension without diabetes, chronic kidney disease, history of cardiovascular disease (stroke or coronary heart disease) and age < 65 years will be recruited from 20 primary care practices including community health centers in the Maryland area. The practices are randomly assigned to the intervention or the enhanced usual care arms. Patients in the LINKED-BP Program receive training on home BP monitoring, BP telemonitoring through the Sphygmo app, and CHW telehealth visits for education and counseling on lifestyle modification over 12 months. The primary clinical outcome is change from baseline in systolic BP at 6 and 12 months.

DISCUSSIONS: The LINKED-BP Program tests a sustainable, scalable approach to prevent hypertension and advance health equity. The findings will inform implementation strategies that address social determinants of health and barriers to hypertension prevention in underserved populations.

ClinicalTrials.gov IDENTIFIER: NCT05180045.

Keywords: blood pressure; hypertension; home blood pressure monitoring; health disparities; community health worker; randomized controlled trial; telehealth visit

Graphical Abstract



Hypertension disproportionately affects persons who are medically underserved in the United States, and is a major contributor to racial disparities in cardiovascular disease (CVD) outcomes.^{1,2} In 2017–2018, Black adults (54%) had the highest hypertension prevalence compared to White (44%), Asian (39%), and Hispanic (36%) adults.¹ Persons with lower incomes also have a higher burden of hypertension.³ To mitigate the risk of progression to advanced hypertension stages, it is critical and urgent to implement effective prevention strategies targeting early stages of hypertension in these populations.⁴ Presently, only a few implementation trials have direct interventions towards individuals with elevated blood pressure (BP) or untreated stage 1 hypertension.⁵ About one-quarter of U.S. adults who do not take antihypertensives either have elevated BP or untreated stage 1 hypertension, further underscoring the critical importance of this area of inquiry.⁶

Home blood pressure monitoring (HBPM) is both clinically- and cost-effective; however, its impact on hypertension disparities is unclear.^{7–9} HBPM readings have higher prognostic value for stroke, CVD, and target organ damage than office-based readings.¹⁰ The American Heart Association (AHA) and the American Medical Association (AMA) recommend HBPM plus co-interventions such as team-based care, regular support from trained clinicians, lifestyle counseling, and patient education to reduce BP and achieve BP control.⁸

Engaging community health workers (CHWs) to deliver targeted interventions constitutes a culturally sensitive and effective approach for overcoming barriers to hypertension control in socially at-risk communities and populations.¹¹ Nonetheless, CHWs have not been consistently integrated into healthcare settings and their role in hypertension prevention is unclear.¹² More importantly, few approaches to prevent hypertension combine multi-level strategies into a pragmatic and sustainable plan, improve patient-centered outcomes in underserved communities, and explicitly address social needs.

The rapid expansion of telehealth spurred by the COVID-19 pandemic presents an opportunity to re-engineer primary care.¹³ Telehealth can be leveraged to increase primary care access among racial/ethnic minority groups who face barriers to in-person visits, including employment constraints and transportation.¹⁴ Health systems can enhance the quality of primary care by

integrating remote patient monitoring with telehealth and mobile health (mHealth) applications. mHealth technology, which is currently underutilized, can provide a platform to empower and activate patients to self-manage their BP.

Therefore, we have developed a multi-level, socially contextualized intervention that includes community-level support, patient-level tailored lifestyle counseling, and HBPM telemonitoring. As part of the RESTORE (AddREssing Social Determinants TO pREvent hypErTension) Health Equity Research Network funded by the AHA, this study addresses exposures to deleterious social determinants of health to improve the equitable health of communities that have been medically and socially underserved. This manuscript, co-published with the RESTORE Network protocol, introduces one of its trials, the “Home Blood Pressure Telemonitoring LINKED with CHWs to Improve Blood Pressure”—the “LINKED-BP Program.”

METHODS

Study objective and design

Our study employs a hybrid type 1 effectiveness-implementation design to examine the effect of the LINKED-BP Program over enhanced usual care (EUC) among racial or ethnic minority groups and the socioeconomically disadvantaged. The primary aim of the study is to compare the effect of the LINKED-BP Program versus EUC on systolic BP (SBP) reduction at 6 and 12 months, in a cluster-randomized controlled trial of 600 adults. Participants must have elevated BP or have untreated stage 1 hypertension without diabetes, chronic kidney disease, history of CVD (stroke or coronary heart disease) and age < 65 years. Only participants who do not take antihypertensive medications are eligible. We hypothesize that SBP and diastolic BP (DBP) reduction will be greater in primary care practices randomized to the LINKED-BP Program versus the EUC arm at 6 and 12 months. In addition, we hypothesize that patients in the LINKED-BP Program will have a lower rate of progression to stage 2 hypertension than those in the EUC group. The secondary aim of the study is to use the RE-AIM framework to evaluate the reach, adoption, maintenance, and cost-effectiveness of the intervention at 12- and

24-month post-randomization.¹⁵ This study has been approved by the Johns Hopkins Medicine Institutional Review Board and has been registered on ClinicalTrials.gov (NCT05180045).

Conceptual framework

The Expanded Chronic Care Model guides the study (Figure 1).¹⁶ We intervene at the individual patient-level, via training on HBPM, encouraging HBPM and including family members and caregivers as needed; at the provider and staff levels, by training them to increase technical, interpersonal, cultural, social needs assessment competencies; at the practice-level, by utilizing telehealth, and mHealth to prevent hypertension and engaging additional staff (CHWs); and at the community-level, by continuing

partnerships with primary care practices in Maryland and the larger Mid-Atlantic area. Our study assesses the implementation using a uniform methodology and the RE-AIM framework.¹⁵ The LINKED-BP Program utilizes statistical, intervention, BP measurement, community-based participatory research, and training cores developed by the RESTORE Network coordinating center to leverage collective expertise. The implementation framework is displayed in Figure 2.

Study setting

The study team is recruiting 20 primary care practices that provide care to populations that are medically underserved. We invited health systems to participate if they met the following

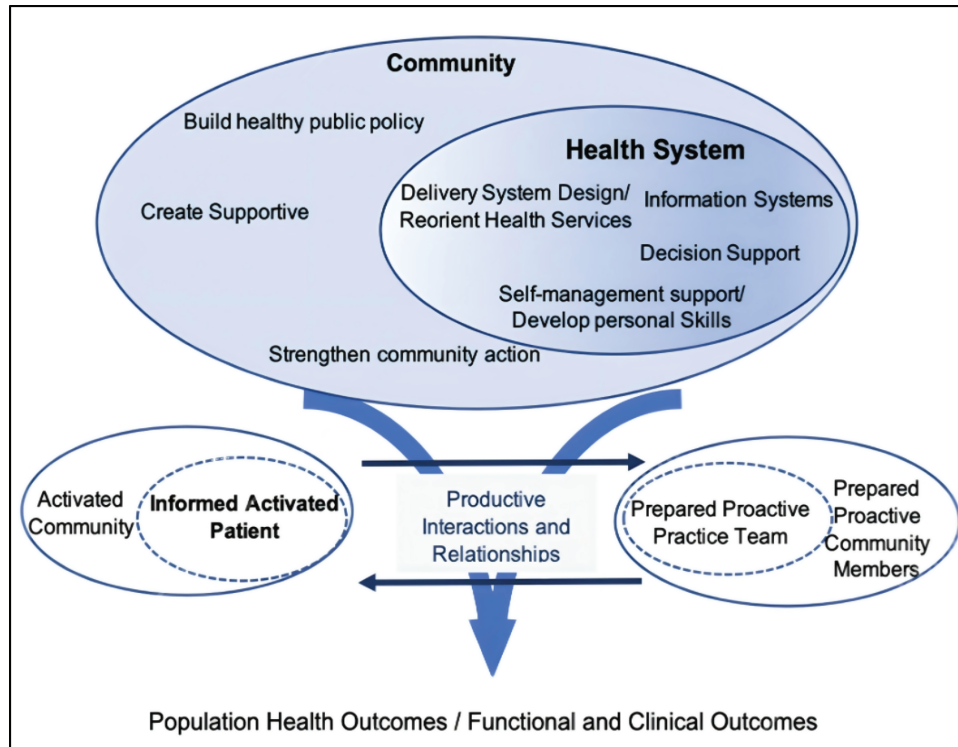


Figure 1. Expanded Chronic Care Model.

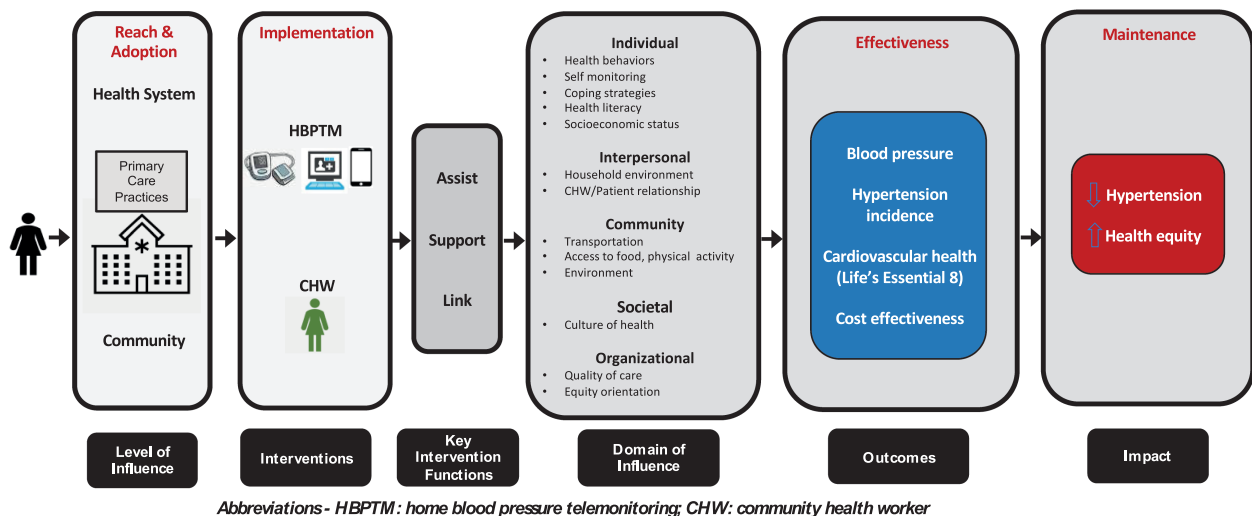


Figure 2. Implementation framework of the LINKED-BP Program.

criteria: (i) locate in Maryland and the larger Mid-Atlantic area; (ii) have adult medicine practices, (iii) have at least 4,000 patients, and (iv) have at least 13% patients from racial or ethnic minority backgrounds.

Randomization

Randomization assignments occur at the primary care practice-level to avoid contamination across study arms. A 1:1 randomization scheme is used to assign 10 practices to the LINKED-BP Program and 10 practices to the EUC arm. Randomization is stratified first by health system and then by the number of patients in the practice.

Sample

We are recruiting an average of 30 adult patients from each of the 20 practices based on the criteria displayed in [Table 1](#). Using the electronic medical record (EMR) data for the previous 12 months, each health system identifies patients seen at the participating practices with the study criteria and provides the research team with a list of potentially eligible participants. Those patients will be mailed recruitment materials that include a participant recruitment letter, a study brochure, a copy of informed consent form, and a refusal postcard. After a waiting period of 10 days, we will follow-up with patients who have not contacted the study team to opt out of the study. Patients who express interest are screened for eligibility (elevated BP or have untreated stage 1 hypertension without diabetes, chronic kidney disease, history of CVD [stroke or coronary heart disease] and age < 65 years). Eligible patients who remain interested are consented electronically and invited to participate in the baseline telephone survey interview. A participant is considered enrolled once they have completed the baseline survey.

Intervention

Enhanced usual care.

Participants in the EUC arm are provided with a validated home device (e.g., Omron 5 Series, 7 Series, 10 Series, or HEM-9210T) and are managed by their primary care providers as usual. This may include referral to hypertension specialists and conventional home BP measurement. BP readings are typically tracked

by patients on BP logs or sent to providers through electronic medical record (EMR) messages. Other components of usual care at the practices may include dietary counseling, on-site clinical pharmacists, social workers, case managers as needed for BP follow-up, and assistance with medications and appointments as needed.

LINKED-BP Program.

Each participant in the LINKED-BP Program receives 12 months of intervention and 12 months of post-intervention monitoring. The following sections and [Table 2](#) describe the key components of the intervention.

Home blood pressure monitoring.

Participants are provided with a home BP device, which is included in the U.S. BP Validated Device Listing (VDL) website and validated by the Association for the Advancement of Medical Instruments and the International Organization for Standardization (AAMI/ISO) protocol. Participants are instructed to obtain 2 readings, 1-minute apart, in the morning after awakening, before eating, and 2 readings, 1-minute apart, in the evening before going to bed. The participants are asked to sit quietly for at least 5 minutes, in a comfortable chair with their arm and back supported, with their legs uncrossed and feet flat on the floor prior to the BP measurements. A complete HBPM measurement cycle is defined as having a minimum of 12 readings over seven days in a month.

Sphygmo blood pressure telemonitoring platform.

The Sphygmo BP (mmHg Inc, Canada) consists of an easy-to-use, intuitive patient-facing smartphone application. Participants receive guidance on how to download the patient-facing app and receive a unique study link. HBPM readings are automatically transmitted from the BP device to the app via Bluetooth. The primary care provider and CHW have access to patients' readings via the clinician portal or EMR. This platform promotes HBPM tracking, improves the identification of patients who require urgent care, and facilitates timely communication on the achievement of BP goals ([Figure 3](#)). We will leverage the English and Spanish languages capability of the Sphygmo BP app.

Community health worker intervention.

The CHW intervention seeks to strengthen support for self-management and address the community-level of influence. CHWs

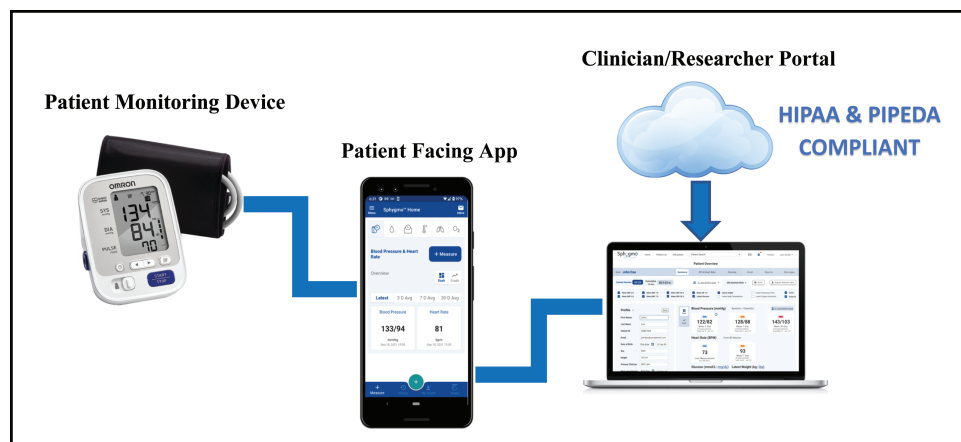
Table 1. Study criteria for the LINKED-BP Program

Inclusion criteria	Exclusion criteria
<ul style="list-style-type: none"> At least 18 years of age as of the date of data extraction Self-identify as non-Hispanic white, non-Hispanic African American, or Hispanic Have elevated BP (120–129/<80 mm Hg), or Have untreated stage 1 hypertension (130–139/80–89 mm Hg) for patients without diabetes, chronic kidney disease, history of cardiovascular disease (stroke or coronary heart disease) and age < 65 years (defined by the 2017 ACC/AHA blood pressure guideline), and Receives primary medical care at one of the participating community health centers or primary care clinics 	<ul style="list-style-type: none"> Age <18 years Patients who have average BP 130–139/80–89 mmHg with diabetes, chronic kidney disease, history of cardiovascular disease (stroke or coronary heart disease), or age ≥ 65 years Prescribed antihypertensive medication Diagnosis of end-stage renal disease Condition which interferes with outcome measurement (e.g., dialysis) Serious medical condition which either limits life expectancy or requires active management (e.g., cancer) Patients with serious cognitive impairment or other condition preventing their participation in the intervention Upper arm circumference >50 cm (maximum limit of the extra-large BP cuff) Those planning to leave the practice or move out of the geographic area in 24 months Those who no longer consider the practice site the location where they receive primary care Unwillingness to provide informed consent

Table 2. The LINKED-BP Program: components at the patient, provider, system, and community levels

Description of intervention components	Patient	Provider	Community	System
HBPM. An Omron BP device (e.g., 5 Series, 7 Series, 10 Series, or HEM-9210T) is provided to the patients. CHWs in the LINKED-BP Program arm receive training from the study team using a standardized BP measurement protocol developed by the BP measurement Core of the RESTORE Network. The CHWs will in turn train participants to accurately measure their BP using the standardized protocol.	X			
Sphygmo Home BP telemonitoring platform. Patients in the LINKED-BP Program receive the patient-facing app and CHWs and primary care providers have access to the clinician portal.	X	X		
Training on office-based BP measurement. To ensure standardization of BP measurement across all primary care sites, the study team will provide training to all healthcare providers and staff with an annual refresher course. The Omron HEM-907XL BP device is used at each practice.		X		X
Education and counselling on lifestyle modification by CHW using culturally relevant educational materials at the patient's home or in another community-based setting.	X		X	
CHW telehealth visits include self-management support and management of complex needs by developing an individualized care plan to enhance understanding of hypertension, improving self-management skills, coordinating care, providing lifestyle counselling, addressing social needs, assessing digital literacy, and non-clinical issues that affect the quality of life and hypertension outcomes.	X		X	X

Abbreviations: BP, blood pressure; CHW, community health worker; HBPM, home blood pressure monitoring.

**Figure 3.** Sphygmo home telemonitoring platform.

support participants by: (i) providing education on how to manage BP through self-monitoring and practicing dietary modification and exercise; (ii) reinforcing positive BP self-management behaviors through follow-up encounters; (iii) assisting with linkages to existing clinical and administrative services; and (iv) linking participants with community resources to address health-related social needs. The form of CHW engagement is flexible and patient-centered (Table 3). The goal of CHW visits is to provide participants with HBPM training and lifestyle counseling and to build rapport and trust. The CHW may also begin to identify and address the array of proximal social/cultural/structural factors affecting participants' self-management of hypertension during the first visit. During the follow-up visits, the CHW evaluates the participants' HBPM skills; elicits and addresses concerns regarding HBPM; coaches participants on communication with providers; and provides education on lifestyle modification.

Standardized blood pressure measurement.

The study team will distribute one Omron HEM-907XL BP device kit to each practice site. The kit contains one device, 4 sizes of

cuffs (S, M, L, XL), a rolling stand, and an AC power adapter. The devices are introduced, and practice staff are trained by the research team before the interventions roll out in the practices. Practice staff are provided with standardized BP measurement protocols and training materials and resources to standardize BP measurements at all participating practices using a "tiered" approach. The research team will conduct a BP measurement refresher training every year to ensure that the practice staff are following the BP measurement protocol and using accurate BP measurement techniques.

Study timeframe.

This study is carried out over four years. In year 1, the study team will formalize collaborations with key stakeholders including health system leaders, apply for IRB approval, finalize the study protocol, train study personnel, and establish procedures for EMR data extraction, among other study start-up activities. Activities in years 2 and 3 include patient recruitment and enrollment, intervention implementation, and data collection. Patients who are assigned to the LINKED-BP Program receive one year of

Table 3. Community health worker's core competencies

Core responsibility	Description of activities
Reinforce patient education about disease self-management behaviours and attainment of personal goals	<ul style="list-style-type: none"> • Reinforce education on hypertension, healthy lifestyle (e.g., smoking cessation, nutrition, and exercise), and medication adherence through motivational interviewing • Conduct the first in-person CHW visit (location dependent upon patient's preference) to deliver equipment and provide training on the use of a home BP monitor • Conduct follow-ups with patients through telehealth or in-person visit to reinforce skills and address barriers to self-monitoring
Assist patients in accessing care and address barriers to care and treatment Serve as facilitator and navigator to clinical and social services and other	<ul style="list-style-type: none"> • Conduct outreach calls and home visits to encourage patients who are hard to reach to access health care and to provide education; make referrals; and offer psychosocial support to patients who do not access healthcare services • Conduct initial patient assessment • Conduct routine follow-up assessments to identify barriers to reducing BP levels and address questions and concerns • Identify community-based resources • Communicate patients' status with healthcare providers and report barriers to BP measurement and other self-monitoring behaviours, as well as high BP reading alerts • Document findings and outreach activities in the study database • Liaise with patients and clinical status
Support patient adherence to disease self-management behaviours and communication with providers	<ul style="list-style-type: none"> • Engage, activate, and empower patients and their family members by: <ul style="list-style-type: none"> - Providing ongoing support and encouragement - Facilitating the identification of challenges - Coaching patients to disclose concerns to the healthcare team - Building skills in asking questions - Discussing treatment options - Helping them learn to make joint decisions regarding treatment options - Overcoming common communication barriers • Address competing family priorities and needs • Assess and reinforce patient's and family members' pro-adherence beliefs and behaviours • Assess and reinforce patient's and family members' communication skills around disease-related needs and goals
Improve patient digital health literacy	<ul style="list-style-type: none"> • Identify factors associated with limited digital health literacy • Improve patient skills and abilities in using digital technology • Guide patients to select appropriate digital health resources

Abbreviations: BP, blood pressure; CHW, community health worker; EMR, electronic medical record.

the CHW intervention. In year 4, the team will complete the follow-up data collection, conduct data analysis, and disseminate the findings.

Outcomes.

The primary outcome of this study is change from baseline in SBP at 6 and 12 months. Secondary clinical outcomes include change from baseline in DBP at 6 and 12 months, proportion of patients with incident stage 2 hypertension at 6 and 12 months, body mass index and the average number of HBPM readings per month. Other secondary outcomes are ascertained through self-reporting. Table 4 presents study measures, data sources, and data collection time points.

Statistical analysis plan

Statistical analyses will be conducted masked to randomization assignment using the latest release of R. Descriptive statistics for participant characteristics will be calculated overall and by randomization assignment (the LINKED-BP Program or the EUC). If any data items are more than 10% missing, we will analyze patterns of missingness and, if appropriate, we will conduct the main analyses using multiple imputation and sensitivity analyses among those with complete data. All analyses will be intention-to-treat, regardless of intervention fidelity and intensity of the intervention received. Statistical significance will use a two-sided alpha of 0.05.

Primary outcomes.

We will estimate the intra-class correlation coefficient (ICC) of SBP within the practice. Analyses will apply distribution-appropriate mixed models to participant-level data and account for

clustering using practice- and participant-specific random intercepts. The primary analysis will be unadjusted, with secondary analyses adjusting for participant or practice-level factors that are unbalanced at baseline. To assess if the LINKED-BP Program lowers SBP, we will fit a linear mixed model using SBP measured at baseline, 6 months, and 12 months following baseline as the dependent variable. In a secondary analysis, we will test if the LINKED-BP Program reduces SBP at 6 and 12 months, separately. We will calculate the cumulative incidence of stage 2 hypertension in each randomization group and use discrete-time survival analysis with logistic regression and a cumulative log-log link to estimate the hazard ratio for incident hypertension comparing those randomized to the LINKED-BP program versus the EUC.

Secondary outcomes.

We will use Glasgow and colleagues' RE-AIM framework to guide our assessment of the intervention's implementation at the individual and community levels.¹⁵ To assess reach within our implementation framework, we will track the number of patients approached and record the number that agreed to participate. Effectiveness is assessed in the primary aim. We will also collect information about the reasons why people declined to participate. Adoption will be ascertained by estimating the proportion of practices and CHWs willing to participate and deliver the intervention. Implementation will be assessed at 12 months post-intervention; at the practice-level, we will assess adherence to the protocol, the dose of the program delivered, quality of program delivery, and protocol modifications; while at the individual level, we will assess participants' use of goal setting and self-monitoring. Maintenance of SBP levels will be discerned by modeling the

Table 4. Outcomes and study measures at baseline, 6 months, 12 months, and 24 months

	Baseline	6 M	12 M	24M	Data Source	
Patient-level variables						
Biomedical/clinical outcomes						
SBP	X	X	X	X	EMR	
DBP	X	X	X	X		
Incident stage 2 hypertension	X	X	X	X		
Patient-reported outcomes						
Health-related quality of life (Short Form Health Survey, SF-12) ¹⁷	X	X	X	X	Phone interview	
Patient activation (Patient Activation Measure, PAM-13) ¹⁸	X	X	X	X		
Cardiovascular disease medical history baseline and follow-up (Questions developed by the study team)	X	X	X	X		
Perceived risk (Questions derived from Schwarzer and Renner, 2000) ¹⁹	X	X	X	X	Phone interview	
Physical activity (International Physical Activity Questionnaire, IPAQ) ²⁰	X	X	X	X		
Diet (Mediterranean Eating Pattern for Americans Questionnaire, MEPA) ²¹	X	X	X	X		
Maladaptive eating behaviour (Three-Factor Eating Questionnaire, TFEQ-R18) ²²	X	X	X	X	Phone interview	
Tobacco use (National Health Interview Survey) ²³	X	X	X	X		
Alcohol use (National Health Interview Survey) ²⁴	X	X	X	X		
Sleep (PROMIS Sleep Disturbance Short Form) ²⁵	X	X	X	X	Phone interview	
Discrimination (Experiences of Discrimination, EOD) ²⁶	X					
Stress (Perceived Stress Scale, PSS-4) ²⁷	X	X	X	X		
Depression (Patient Health Questionnaire Depression, PHQ-8) ²⁸	X	X	X	X	Phone interview	
Electronic health literacy (eHealth Literacy Scale, eHEALS) ²⁹	X	X	X	X		
Health literacy (Single Item Literacy Screener, SILS) ³⁰	X	X	X	X		
Shared decision making (collaboRATE) ³¹	X	X	X	X	Phone interview	
COVID-19 screening (Questions developed by the study team)	X	X	X	X		
Experience working with community health workers (Questions developed by the study team)	X			X		
Healthcare utilization (PhenX Toolkit) ³²	X	X	X	X	Phone interview	
Biomedical covariates						
Body mass index	X	X	X	X		EMR
Average number of home blood pressure monitoring readings	Monthly data extraction				Sphygmo blood pressure application	
Social and demographic measures						
Sociodemographic characteristics	X				Phone interview	
Health-related social needs (The Accountable Health Communities Screening) Tool) ³³	X	X	X	X		

Abbreviations: SBP, systolic blood pressure; DBP, diastolic blood pressure; EMR, electronic medical record.

change in SBP from 12 to 24 months following baseline among participants in the intervention arm using linear regression models.

Power calculation

We used PASS version 14 to estimate the sample size needed to detect a 4 mm Hg difference in SBP among participants randomized to the LINKED-BP Program versus the EUC. A 4 mm Hg reduction in SBP was chosen as it reflects ~50% of the benefit of lifestyle interventions observed in efficacy trials. We assumed

that (i) the ICC for SBP will be 0.025, (ii) there will be 20% attrition of participants over 12 months of follow-up, (iii) change in SBP would be evaluated at baseline and 6- and 12-months following baseline, (iv) the standard deviation of change in SBP for a study participant between visits will be 11 mm Hg, and (v) the correlation of SBP between visits for a study participant will be 0.7. With a sample size of 600 participants (20 clusters and 30 patients per cluster), we will have 90% statistical power to detect a difference in SBP of 4 mm Hg. For the secondary outcome, we will have 86% power to detect a difference in DBP of 3 mm Hg, and we will have 86% power to detect a 50% reduction in incident hypertension

comparing those randomized to LINKED-BP Program versus the EUC arm.

DISCUSSION

The LINKED-BP Program comprises HBPM telemonitoring and CHW-delivered interventions in underserved populations and provides BP measurement training at primary care practices. This program is designed to promote the systematic uptake of evidence-based intervention into routine practice and also provide a rigorous approach to address hypertension disparities.³⁴ Findings from this multi-level intervention may help develop a health equity and hypertension prevention website that builds on an established dashboard at the coordinating center and can provide stakeholders with information on hypertension risk factors and interventions to apply in communities across the United States. Our study has the potential of expanding access to care to prevent and manage hypertension in all patients with hypertension risk.

This study is innovative in three perspectives. First, we employ the novel Sphygmo BP app, which is available in four languages; English and Spanish languages are included in this study. This telemonitoring platform is widely scalable, cost-efficient in primary care practices and other low-resource settings from an equity perspective. The patient-facing app allows users to record health parameters via manual entry or Bluetooth transmission. This platform integrates with all validated home BP devices on the U.S. Blood Pressure VDL website. The provider portal allows healthcare professionals to monitor these parameters remotely, rapidly calculate guideline-concordant averages, assess trends, perform practice analytics, and securely send instant messages to patients. Second, this is one of few existing interventions that alter clinical care to accommodate identified social barriers (such as transportation) while also providing assistance in connecting patients with relevant social care resources via support from a CHW.³⁵ Third, our study builds on previous lessons gleaned from implementation science as well as our past experiences providing in-service training and regular case management support through CHWs.^{36,37}

Despite the advantages discussed above, we must acknowledge some limitations and anticipated challenges of this study. First, the health systems may be concurrently implementing other hypertension related programs during the conduct of the trial, which may threaten our ability to assess the effectiveness of the intervention in isolation. Our research team will continuously monitor for competing hypertension initiatives or programs across participating health systems and assess potential impact on our study interventions and outcomes. Second, identifying eligible participants in the EMR systems of the participating practices could be challenging. To overcome this issue, the research team provides a comprehensive list of the study criteria and will routinely communicate with the health systems to achieve successful EMR data extraction. Third, the financial and resource constraints posed by the COVID-19 pandemic could be a potential barrier to the study implementation. The participating health systems have demonstrated commitment to the study and appreciation for the importance of addressing equity in access and prevention of hypertension. The research team will continue to actively engage with these practices.

Taken together, the LINKED-BP Program contributes to the overall vision of the RESTORE Network by testing a sustainable approach to advance health equity and prevent hypertension in underserved populations. Sharing the central theme of the

RESTORE Network, we will disseminate the findings to community stakeholders, healthcare providers and payers through traditional and innovative approaches to ensure that the long-term benefits of the intervention on hypertension prevention and health equity.

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Disclosures

The authors declare they have no financial interests. The authors have no conflict of interest to declare.

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