Brief Review

Research Needs to Improve Hypertension Treatment and Control in African Americans

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● **Online Data Supplement**

This report presents findings of an ad hoc working group assembled by the National Heart, Lung, and Blood Institute (NHLBI) to assess research needs to improve prevention, treatment, and control of hypertension among African Americans. Non-Hispanic Blacks (African American and Black will be used for US and international studies, respectively) tend to have an earlier onset, higher prevalence, and disproportionately high risk of complications for hypertension compared with non-Hispanic Whites and Mexican Americans.[1]

Surveillance and Measurement of Blood Pressure

Surveys identify substantial variation in mean blood pressure (BP) among populations of African origin.[2] In high-income countries, including the United States, mean BP and prevalence of hypertension are higher in adults self-described,[3–6] observer reported,[7,8] or otherwise identified[9,10] as being black or having darker skin color.[11] However, the relationship between African origin and BP is absent or only minimally apparent in reports from middle-income countries.[12–14] Research to clarify reasons for this variability may contribute to understanding of hypertension-related racial disparities in the United States.

In US National Health and Nutrition Examination Survey (NHANES) reports, crude and age-adjusted prevalence of hypertension (systolic BP [SBP] ≥140 mm Hg, diastolic BP ≥90 mm Hg, or taking antihypertensive medication) in adults has remained fairly constant at ≈30% since 1999 to 2000.[3,4] The corresponding prevalence estimate for African Americans is ≈40% and has also remained reasonably stable.

In African Americans, hypertension awareness and treatment rates are higher but control rates lower compared with non-Hispanic Whites (85.7% versus 82.7% for awareness, 77.4% versus 76.7% for treatment, and 49.5% versus 53.9% for control in NHANES 2011–2012).[4] The lower prevalence of BP control is present despite use of more BP-lowering medications, including thiazide diuretics.[15] This contrasts with clinical trial experience, where differences in BP control rates by race/ethnicity are modest or absent, particularly during chlorthalidone-based treatment.[16] High levels of BP control, including in African

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Americans, have been attained in large organizations with system-wide hypertension treatment and control programs.[17,18]

Research is needed to optimize hypertension prevention and treatment in African Americans. US regional cohort studies, including the Bogalusa Heart Study, REGARDS Study (Reasons for Geographic and Racial Differences in Stroke), and Jackson Heart Study, provide opportunities to study psychosocial factors, lifestyle habits, and medication beliefs in African Americans—all of which are potential targets for research. Investigation of African Americans with a normal BP despite exposure to environmental factors that predispose to high BP is also important.

Pathophysiology and Genetic Basis of Hypertension in Blacks

With the exception of *APOL 1* variants in patients with chronic kidney disease (CKD), genome-wide association studies have yielded limited insights into racial disparities in cardiovascular disease (CVD) morbidity and mortality, including hypertension.[19] Given the likelihood that multiple genes are involved, environmental, behavioral, and psychosocial factors probably play a more important role than genetics in the higher prevalence of hypertension in African Americans.[19]

Lifestyle Change and Other Nonpharmacological Interventions

Nonpharmacological interventions, including reduced sodium and increased potassium intake, weight loss, increased physical activity, and healthy diets, such as the DASH (Dietary Approaches to Stop Hypertension), lower BP in adult African Americans.[20,21] However, the body of evidence is limited, especially for randomized controlled trials (RCTs). In efficacy trials, dietary sodium reduction,[22] potassium supplementation,[23] and the DASH diet[24] resulted in greater lowering of BP in African Americans compared with Whites. There has been limited study of the basis for these differences.[25] Few Black participants have been included in RCTs that have demonstrated a beneficial effect of reduced alcohol consumption on BP,[26] and observational analyses suggest African Americans may not derive the same CVD reduction benefits as Whites from consumption of modest quantities of alcohol.[27]

Gradual but progressive reductions in sodium added to food products represents the least onerous nonpharmacological intervention and offers great potential for success.[28] Models for culturally appropriate evidence-based lifestyle modification may provide a good template for lifestyle change in African Americans.[29]

Potassium supplementation shows particular promise in African Americans[23] and those consuming excessive amounts of sodium, but it has not been tested sufficiently in long-term RCTs. More research is needed to understand its efficacy, alone and in combination with reduced sodium, in lowering BP and in mitigating thiazide-related increases in serum glucose in African Americans,[30] as well as documenting its long-term safety in African Americans and other populations with a high prevalence of reduced kidney function or receiving treatments that impair renal excretion of potassium.

Psychosocial Factors

Psychosocial factors, including personality trait, responses to environmental and other stressors, anxiety, hostility, and anger are associated with high BP. In African Americans, stress related to perceived discrimination and residence in a stress-prone neighborhood have been strongly correlated with hypertension.[31,32]

Major Clinical Outcomes in Hypertension Treatment Trials

During the 1970s to 1980s, similar benefits were noted in African Americans and Whites for first-step antihypertensive therapy with thiazide or thiazide-type diuretics compared with placebo or usual care. The 1990s ushered in an era of comparative efficacy and effectiveness trials. The ALLHAT (Antihypertensive and Lipid-Lowering Treatment to Prevent Heart Attack Trial) included >15 000 African Americans in a long-term comparison of first-step therapy with a thiazide-type diuretic and 3 other agents.[33] There was no evidence of superiority for prevention of CVD during first-step therapy with the angiotensin-converting enzyme inhibitor (ACEI) lisinopril, calcium channel blocker amlodipine, or α-receptor blocker doxazosin, compared with the thiazide-type diuretic chlorthalidone. Chlorthalidone was superior to amlodipine, lisinopril, and doxazosin for prevention of new-onset heart failure (HF) in both African Americans and Whites. In African Americans, chlorthalidone was more effective than lisinopril for prevention of stroke, likely due in part to a greater reduction in BP. Despite similar treatment-related reductions in BP by race, a lack of protection against stroke was reported with the angiotensin receptor blocker losartan compared with the β-blocker atenolol in 533 Black (523 African American) LIFE clinical trial (Losartan Intervention for End Point Reduction in Hypertension) participants.[34]

Hydrochlorothiazide, the most commonly used diuretic in the United States, may have a different level of efficacy than chlorthalidone.[35] In ALLHAT, there was no difference in the effect of treatment assignment on incidence of HF across race groups during the randomized treatment phase. When post-trial follow-up (mean of 8.8 years) was included, the hazard ratio for HF associated with randomization to amlodipine compared with chlorthalidone remained significantly higher in African Americans, but not in other race subgroups.

African Americans develop end-stage renal disease at a rate 3× higher than Whites, constituting 13% of the US general population but >32% of patients receiving dialysis for kidney failure. In AASK (African American Study of Kidney Disease and Hypertension), antihypertensive treatment with the ACEI ramipril in patients with nondiabetic CKD was superior to the β-blocker metoprolol or calcium channel blocker amlodipine in slowing progression of CKD, despite a 3 mm Hg higher achieved SBP compared with amlodipine.[36] However, in ALLHAT, first-step therapy with the ACEI lisinopril was not superior to chlorthalidone- or amlodipine-based therapy in preventing end-stage renal disease in African American participants.[37] These results should be reconciled across the spectrum of renal disease. Despite a mean SBP/diastolic BP of 133/78 mm Hg and use of ACEI in >80% during long-term follow-up (≥7 years) in 1094 AASK participants, 54% experienced a doubling of serum creatinine, end-stage renal disease, or death.[38] There is urgent need for more effective treatments in African Americans with hypertension and CKD.

African Americans have higher levels of albuminuria compared with Whites.[39] In AASK, the effect of a lower BP goal on

renal and CVD outcomes was inconclusive, but there was a suggestion of renal disease benefit in participants with proteinuria.[36,40] This should be explored in other BP-lowering trials with a substantial number of African Americans, such as the SPRINT (Systolic Blood Pressure Intervention Trial).[41] RCT evidence for the role of renin–angiotensin system inhibitors in African Americans with albuminuria is inconclusive. Dual renin–angiotensin system inhibition, with ACEI and angiotensin receptor blocker agents, lowered BP and albuminuria more than either drug alone in ONTARGET (Ongoing Telmisartan Alone and in Combination With Ramipril Global End Point Trial), but was associated with increased risk for acute kidney injury, renal disease progression, syncope, and hypotensive events.[42] Unfortunately, the subgroup with African ethnicity was small (2.4% of the study sample). Similar findings were noted in a subsequent meta-analysis.[43] In the REGARDS study, the association of albuminuria with stroke risk was stronger for African Americans compared with Whites.[44] However, there are few data evaluating whether albuminuria modifies the effect of BP interventions on stroke, HF, or mortality risk among African Americans.

In observational studies, the risk of stroke associated with a unit higher level of SBP is greater in African Americans compared with Whites.[45] However, in SPRINT, there was no significant interaction between race (Black versus Non-Black) and treatment effect for the composite primary outcome, which included both ischemic and hemorrhagic stroke.[41]

Higher visit-to-visit BP variability is associated with increased risk for coronary heart disease, stroke, HF, and mortality.[46] African Americans have higher visit-to-visit BP variability compared with Whites, which may be because of abnormal autonomic function, baroreflex function, or altered sodium excretion.[46] Whether visit-to-visit BP variability should be a therapeutic target or inform drug selection is unknown. African Americans also have a high prevalence of nocturnal hypertension (SBP/diastolic BP ≥120/70 mm Hg) and nondipping BP.[47] The underlying mechanisms are poorly understood, but self-reported experiences of racism and perceived ethnic discrimination are possibilities.[32,48,49] Studies comparing the effects of antihypertensive drugs with a longer compared with shorter half-life (eg, chlorthalidone compared with hydrochlorothiazide), bedtime dosing with antihypertensive medication, and nonpharmacological interventions on diurnal patterns of BP are warranted in African Americans with hypertension.

Resistant hypertension is common in African Americans and associated with an increased risk of target organ damage.[50] Novel approaches for prevention and treatment of resistant hypertension are warranted. Few clinicians prescribe chlorthalidone for treatment of hypertension, even in patients with resistant hypertension.[51] In ALLHAT, the benefits of once daily chlorthalidone (12.5–25 mg/d) for first-step drug therapy of hypertension were even more compelling for African Americans compared with Whites.[33] Research on ways to increase use of properly dosed chlorthalidone for initial treatment of hypertension, particularly in African Americans, is needed. The optimal approach to achieving BP control, especially with a BP target like that used in SPRINT, may be to initiate combination rather than monotherapy. Some guidelines emphasize the value of diuretics and calcium channel blockers when treating Blacks.[21,52] However, the International Society of Hypertension in Blacks (ISHIB) recommends a combination of calcium channel blocker and renin–angiotensin system blocker as initial drug therapy in African Americans with stage 2 hypertension, with use of combined thiazide and renin–angiotensin system blocker only if there is volume overload.[1] This is based on evidence from a single RCT, ACCOMPLISH (Avoiding Cardiovascular Events in Combination Therapy in Patients Living With Systolic Hypertension),[53] with no separate results for the 1416 African American participants. The thiazide diuretic used in ACCOMPLISH (hydrochlorothiazide) was relatively short-acting, and its dosage was roughly equivalent to half that of the longer-acting thiazide-type diuretic (chlorthalidone) used in ALLHAT and at most half that which has been shown to reduce CVD events in other RCTs. Identification of optimal combination therapy in African Americans with hypertension remains an important unanswered research question.

Genetic Determinants of the Effects of Antihypertensive Therapy

Most genetic studies in hypertension have focused on predictors of elevated BP. A logical next step is to extend genetic and pharmacogenetic studies to major CVD and renal outcomes. GenHAT (Genetics of Hypertension Associated Treatments), an ALLHAT genetics substudy, provides an opportunity to explore a racially diverse population that includes ≈15 000 African Americans with treated hypertension.[54] Fewer than 500 African American participants have been studied for gene–treatment interactions in GWAS studies.[55–57] Lack of data specific to African Americans has the potential to create a new disparity in the era of precision medicine. Partnerships with Federally Qualified Health Centers and other community-based organizations that predominantly serve African Americans and use of data sets from RCTs with a substantial number of African Americans could remedy this underrepresentation in genomic research.

Pharmacogenomics of hypertension outcomes may benefit from adapting proof of concept studies conducted in other fields, where treatment effects have differed by race. One approach would be to use genetically defined African ancestry for study of hypertension-related disorders and their modification by antihypertensive treatment. Many nondiabetic African Americans with CKD, low level or absent proteinuria, and hypertension have genetically mediated primary glomerulosclerosis associated with *APOL1* variants.[58] In these patients, intensive antihypertensive treatment with ACEI does not appreciably slow loss of kidney function.[59] Others, who present in a similar fashion, have arteriolar nephrosclerosis on kidney biopsy.[58] There is controversy regarding the extent to which antihypertensive therapy slows progression of arteriolar nephrosclerosis–associated CKD. *APOL1* variant genotyping of participants from ALLHAT and other studies with a large number of African Americans might be informative.

Individuals with recent African ancestry may inherit *APOL1* G1 and G2 renal-risk variants. Both variants are rare in non-African populations, but ≈40% of African Americans with end-stage renal disease have *APOL1*-associated nephropathy and *APOL1* renal-risk variants predict progression of CKD.[59] Additionally, these risk variants are associated with earlier failure of renal allografts transplanted from deceased African American compared with White donors.[60] In the ARIC study (Atherosclerosis Risk in Communities), a majority of African Americans with and without *APOL1* risk genotypes in the general population

experienced a similar rate of decline in glomerular filtration rate. *APOL1* genotypes in ARIC were associated with a significant risk for adverse renal outcomes, but they only explained a minority of kidney outcomes. Compared with African Americans at high risk for CKD, the ARIC findings do not support general population screening for *APOL1* in African Americans.[61]

Intervention Approaches and BP Outcomes in Quality Improvement Clinical Trials

Considerable research has focused on quality of hypertension care in African Americans, elimination of the race-related gap in BP control, and the higher rates of stroke and premature mortality in African Americans.[62] Much of this has focused on RCTs testing interventions that target patients, providers, clinics, health systems, or some combination of these groups.[63] Team-based interventions that assign responsibilities to a health professional other than the primary care physician provide a potent and cost-effective strategy for improving BP control.[64,65] They seem to be as effective in African Americans as in others, but more scrutiny is needed. There is also need to determine the ideal composition of hypertension care teams, the best strategies for interaction and communication, and the most efficient and cost-effective utilization of individual team members. Team care delivered in nontraditional locations, including community pharmacies, patient homes, barber shops, faith-based organizations, and workplaces, shows promise, but the cost-effectiveness and sustainability of these approaches need to be studied.

Technology, including telemanagement, is highly effective, especially when combined with home BP monitoring and web-based management[66] but has been insufficiently studied in African Americans.

Medication adherence in patients with hypertension is an important concern, especially in African Americans.[67] Practitioners want better and more practical methods for detection and management of poor adherence, particularly in patients with apparent treatment-resistant hypertension. In-person, telephone, and web-based motivational counseling all show promise,[68] as does provider training in patient-centered communication skills[69] but additional research is needed to identify the value and durability of these interventions on change in lifestyle and clinically meaningful outcomes.

With a rapidly changing clinical practice environment, clinician attitudes[70] and uncertainty[71] may be equally important compared with level of knowledge. The quality of BP assessments for decision making in clinical practice is important but poorly studied, especially in practices that predominantly serve African Americans. There is need to understand the extent to which practitioners, including those predominantly caring for African Americans, adhere to recommendations for accurate BP measurement and the barriers that limit adherence to BP measurement recommendations.

Recent comparative effectiveness quality improvement trials incorporate implementation research methods.[72] However, there is need for greater attention to hypertension implementation and dissemination research in African Americans.[73] Especially needed are studies of how specific activities and strategies affect integration of evidence-based interventions into routine health care. Likewise, there is need to study factors necessary for adoption and implementation of evidence-based interventions ready for widespread use. Barriers to hypertension control in African Americans exist at multiple levels, including factors related to individual patients; family and social support systems; healthcare providers; organization and practice settings where care occurs; the local community environment; and local, state, and national health policy. Research is needed to test interventions that target ≥3 levels, such as interventions that link community, system, and team-level approaches to individual provider- and patient-level programs of care.

Performance Measures in Clinical Settings

National Committee for Quality Assurance Healthcare Effectiveness Data and Information Set (HEDIS) measures are commonly used in federal quality reporting programs. The current HEDIS measure for BP control uses the most recent clinic BP reading. If multiple readings are available, the lowest value can be selected. This approach has substantial potential for ascertainment bias[74] and fails to account for differences in difficulty controlling hypertension based on patient characteristics.

In RCTs that target specified BP goals, attention is paid to guideline recommendations for measurement of BP, and not all patients in the intervention arm reach the goal BP.[41] Research is needed to understand whether use of an RCT BP target as a performance metric in clinical practice is safe and beneficial.[75] Such an approach has potential to result in a higher proportion of patients having a lower BP compared with experience in RCTs.

BP is higher and more resistant to treatment in African Americans.[50] Providers who treat African Americans may be penalized by use of the current HEDIS BP performance indicator. Similarly, there may be a disincentive for accurate reporting of BPs. Alternative measures, including change in BP over time, should be considered. Reliance on office-based BP performance measures ignores the impact of nocturnal and masked hypertension, which are common in African Americans, and may contribute to overall disparities in CVD.[47,76] Incorporation of home BP readings into performance measures may be warranted but requires a change in electronic medical records reporting and validation studies. Hypertension in adolescents is an emerging contributor to race-related disparities in hypertension control. African American adolescents have markedly higher rates of uncontrolled BP compared with their White counterparts.[77]

Quality improvement initiatives based on use of performance measures have the potential to close racial inequalities in BP control. However, substantial gaps remain in collection of race and ethnicity data, and few governmental organizations or health systems report data on racial/ethnic disparities in BP control.

Building the Workforce Capacity

Existing models suggest workforce diversity is an important element in reducing health disparities, but little is known about the diversity of the workforce committed to hypertension disparities research. Most training programs are focused on academic scholarship and devote insufficient attention to skills needed to address racial disparities by measurement of social determinants associated with hypertension; application of health services research methods to explore burden and mechanisms of racial disparities; or selection of clinical outcomes in event-based RCTs and BP outcomes in quality improvement trials that are especially relevant in African Americans. This highlights the need for interdisciplinary

training programs that incorporate social and behavioral sciences, environmental factors, and expertise in health policy. Existing programs, particularly training cores within larger programs, should be evaluated for success in developing early-stage investigators committed to hypertension disparities research. Workgroups designed to facilitate training related to hypertension in African Americans should be explored in large ongoing multisite observational studies, such as CARDIA (The Coronary Artery Risk Development in Young Adults Study) and MESA (Multi-Ethnic Study of Atherosclerosis), and in multicenter RCTs, such as SPRINT. Databases from completed RCTs with continued participant follow-up, such as ALLHAT, and ACCORD (Action to Control Cardiovascular Risk in Diabetes Trial) also provide opportunities for mentored learning and exploration of issues related to high BP in African Americans. Hypertension training programs need to bridge instruction related to etiology and translation of research findings to application in clinical practice and formulation of health policy. Further, they need to focus on developing multisectorial partnerships that intervene at the environmental, housing, educational, and behavioral levels, including the built environment and access to better quality and affordable foods that are low in sodium and saturated fat. There is need for National Institutes of Health workshops that target scientific inquiry within the topic of disparities in hypertension—similar to the Office of Behavioral and Social Sciences (OBSSR) Summer Institute on RCTs. Programs should foster development of professional networks for trainees and young investigators through networking and cross-institutional training while recognizing the importance of role models in the early stages of career development. Given the importance of clinical practice to dissemination and implementation of research results, training programs should include practicing clinicians who do not plan to make research the main focus of their career.

Conclusions

Despite remarkable progress in recent decades, African Americans continue to have a disproportionately high prevalence of hypertension and risk of BP-related complications compared with non-Hispanic Whites. A list of research needed to improve prevention, treatment, and control of hypertension in African Americans is provided in the online-only Data Supplement and includes studies related to surveillance of hypertension; the environmental, social, and psychosocial determinants of high BP; genetic and pharmacogenomic studies of BP-related cardiovascular and renal disease; nonpharmacological and drug intervention trials; and dissemination and implementation of evidence-based strategies for hypertension control in clinical and public health practice. In addition, there is need for customized training programs to develop the next generation of scholars who will address racial disparities in prevalence and control of high BP.

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Research Needs to Improve Hypertension Treatment and Control in African Americans

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The following list provides recommendations for the most important research needs. They are grouped into broad categories and the ordering does not convey priority.

Surveillance, assessment and causes of high BP

- Surveys that are more relevant to clinical practice settings, including those that predominantly serve African Americans. An important focus should be to determine adequacy of BP measurements and their use in diagnosis and management of hypertension.
- Additional study of environmental, psychosocial and behavioral factors (social determinants) that underpin prevention of hypertension and improved BP control.
- Strategies for identification and management of masked hypertension in African Americans.
- Study of physiologic factors that contribute to altered diurnal variation and visit-to-visit variability of BP.

Lifestyle change and other nonpharmacological interventions

- Population-based studies that promote adherence to lifestyle and other non-pharmacological interventions and antihypertensive drug therapy, especially exploration of mobile and technology-based solutions. This is an area for potential collaboration with the OBSSR in the broader context of improving health in African Americans across their lifespan.
- Mechanistic studies and clinical trials, to test the main and interactive effects of increasing potassium intake and reducing sodium intake in African Americans. For potassium, there are several unresolved issues, including dose response relationship, long-term beneficial effects, safety, and the role of non-chloride anions.
- Study of the efficacy and effectiveness of lifestyle and other non-pharmacological interventions to prevent and delay the onset of hypertension in African American children.

Treatment and adherence

- Clinician and patient barriers to use of chlorthalidone and other recommended antihypertensive treatments. Understanding mechanisms of the clinical effects of chlorthalidone, especially in African Americans, could facilitate greater use of this agent in clinical practice.
- Additional study of albuminuria as an effect modifier during BP-lowering and pharmacotherapy in African Americans with hypertension and CKD.

- Trials comparing different combination therapies in African Americans to optimize long term clinical outcomes, improve adherence, and prevent or delay the onset of treatment resistant hypertension.
- Trials to determine whether treatment strategies targeting reduction in visit-to-visit BP variability or nocturnal hypertension can reduce the CVD risks associated with these conditions in African Americans.
- Strategies to enhance management and improve outcomes in African Americans with resistant hypertension, including targeting of barriers to treatment adherence with nonpharmacological and drug interventions.

Genetics, genomics and pharmacogenetics

- Additional pharmacogenomic studies in patients with hypertension, especially in African Americans, including utilization of ALLHAT and GenHAT resources.
- Whole genome (and exome) sequencing are now affordable and practical for use in RCTs. Consideration of African ancestry may be a useful approach to study modification of response to antihypertensive treatment on CVD outcomes.
- Further study of *APOL1* variants may improve understanding of the relationship between CKD and hypertension, and whether affected patients require alternative treatment approaches. Specifically, there is need for additional studies, including: 1) Improved characterization of underlying kidney diseases within the framework of “hypertension-attributed” nephropathy in African Americans. Important goals include determining which non-diabetic African Americans with CKD, hypertension and low level proteinuria have *APOL1*-associated glomerulosclerosis and better

understanding of the value of *APOL1* in risk prediction and treatment decisions, 2) Identification of factors that modify the relationship between *APOL1* and renal disease, including *APOL1*-second gene and *APOL1*-environmental interactions. Modifying factors may contribute to the multiplicity of renal histologic patterns in African Americans with kidney disease, and could prove useful in selection of interventions, 3) Definition of the genetic basis for non-*APOL1*-mediated renal glomerulosclerosis, CKD, and secondary hypertension, and 4) Conduct of genotyping in large clinical services-based prospective series, such as the Patient Centered Outcomes Research Network (PCORNet) Clinical Data Research Networks (CDRNs), which have the capacity to screen, treat, characterize, follow and obtain biological specimens in large cohorts that include African American patients.

Quality improvement

- Patient, provider, clinic/system, team, and multilevel strategies for implementation of hypertension quality improvement interventions in clinical practice settings.
- Scaling up best practices and trial-tested effective interventions with a broad constituency that includes regulatory authorities, patient advocacy groups, and multi-sectorial partnerships outside of the health care delivery system. Evaluation of such strategies needs to include investigation of factors influencing successful implementation and assessment of short- and long-term individual- and population-level beneficial and adverse effects.

- Development of performance measures that facilitate achievement of quality improvement goals in patient care settings with a high proportion of African American patients.

Building the workforce capacity

- Training programs that cover the full spectrum of hypertension, from etiology to clinical and public health practice. They should underscore proficiency in skills necessary to investigate racial disparities in hypertension. Training program teams should include social scientists, policy makers and clinicians who do not plan to make research the focus of their careers. They should emphasize the value of multi-sectoral models for enhancing care and fostering networking for trainees and junior investigators. Existing programs have the potential to accommodate many of these requirements. New initiatives, such as focused scientific workshops, should concentrate on hypertension in African Americans, addressing both the health disparities and clinical needs of this population.