Experience the Problem

Heart Disease and Hypertension Part 1

- Heart Disease or Cardiovascular disease (CVD) is the leading cause of death in the United States and among the largest contributors to racial, geographic, and socioeconomic disparities in mortality and life expectancy.

- According to the CDC, health disparities are preventable differences in the burden of disease, injury, violence, or opportunities to achieve optimal health that are experienced by socially disadvantaged populations.

- High blood pressure or Hypertension is a major risk factor for CVD. In the studies we will analyze, hypertension is defined as meeting at least one of three criteria:
    - systolic blood pressure greater to or equal to140 mm Hg
    - diastolic blood pressure greater or equal to 90 mm Hg
    - currently taking any prescription medication to lower blood pressure.

- Hypertension control means managing high blood pressure (hypertension) by maintaining blood pressure levels below a certain number. In the studies we will analyze those numbers are:
    - systolic blood pressure less than 140 mm Hg
    - diastolic blood pressure less than 90 mm Hg

- The figure (projected) shows data collected between 2013 and 2018. The study included 16,531 non-pregnant US adults (≥18 years).

Notice	**Wonder**

National Institute on Minority Health and Health Disparities Research Framework

		Levels of Influence*			
		Individual	**Interpersonal**	**Community**	**Societal**
Domains of Influence *(Over the Lifecourse)*	**Biological**	Biological Vulnerability and Mechanisms	Caregiver–Child Interaction Family Microbiome	Community Illness Exposure Herd Immunity	Sanitation Immunization Pathogen Exposure
	Behavioral	Health Behaviors Coping Strategies	Family Functioning School/Work Functioning	Community Functioning	Policies and Laws
	Physical/Built Environment	Personal Environment	Household Environment School/Work Environment	Community Environment Community Resources	Societal Structure
	Sociocultural Environment	Sociodemographics Limited English Cultural Identity Response to Discrimination	Social Networks Family/Peer Norms Interpersonal Discrimination	Community Norms Local Structural Discrimination	Social Norms Societal Structural Discrimination
	Health Care System	Insurance Coverage Health Literacy Treatment Preferences	Patient–Clinician Relationship Medical Decision-Making	Availability of Services Safety Net Services	Quality of Care Health Care Policies
Health Outcomes		**Individual Health**	**Family/ Organizational Health**	**Community Health**	**Population Health**

National Institute on Minority Health and Health Disparities, 2018
*Health Disparity Populations: Racial and Ethnic Minority Groups (defined by OMB Directive 15), People with Lower Socioeconomic Status, Underserved Rural Communities, Sexual and Gender Minority Groups, People with Disabilities
Other Fundamental Characteristics: Sex and Gender, Disability, Geographic Region

Source: National Institute on Minority Health and Health Disparities (2017). NIMHD Research Framework. Retrieved from https://nimhd.nih.gov/researchFramework. Accessed on 12/18/24.

Directions: Read the descriptions of each box on page 2. Consider the list you generated. Place each item from your list in the box that you think most closely matches its Level and Domain of Influence.

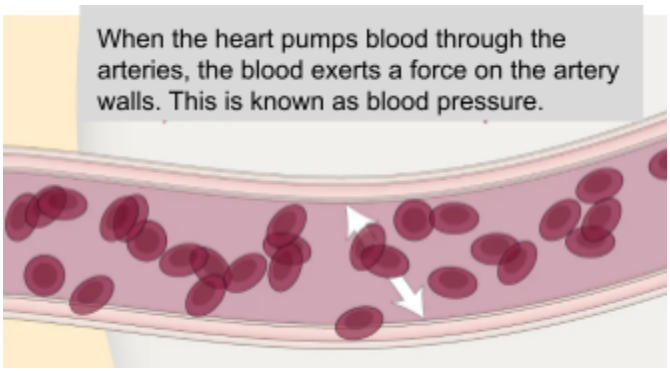
Levels of Influence					
		Individual	**Interpersonal**	**Community**	**Societal**
Domains of Influence	**Biological**				
	Behavioral				
	Physical/Built Environment				
	Socio-Cultural Environment				
	Health Care System				
Health Outcomes		**Individual Health**	**Family/Org Health**	**Community Health**	**Population Health**

Components	Interactions (Causes and Effects)	Criteria	Constraints

Heart Disease and Hypertension Part Two

Blood pressure is the pressure of blood pushing against the walls of your arteries. Pressure is the amount of force exerted per area. Arteries carry blood from your heart to other parts of your body. High blood pressure, also called hypertension, is blood pressure that is higher than normal. Your blood pressure changes throughout the day based on your activities. Having blood pressure consistently above normal may result in a diagnosis of high blood pressure (or hypertension). Systolic blood pressure is the pressure exerted when blood is pushed into arteries. Diastolic blood pressure is exerted within arteries between heartbeats.

One in three US adults has hypertension, and half of these individuals have uncontrolled blood pressure (BP). Guidelines that were used until 2017 defined controlled hypertension or blood pressure as a systolic BP of less than 140 mm Hg and a diastolic BP of less than 90 mm Hg.



Disparities in the prevalence of hypertension and other CVD risk factors are well documented.Black and Hispanic people, people with low income, and rural residents experience less access and poorer quality of care for these conditions. Disparities in control of hypertension are observed even among individuals seen regularly in the health care system.

Risk Factors that Affect Hypertension

- Lack of physical activity: Not getting enough physical activity increases your risk of getting high blood pressure. Physical activity is great for your heart and circulatory system, including blood pressure. Learn more about getting regular physical activity.

- An unhealthy diet, especially one high in sodium: You need good nutrition from many sources for good health. Making healthy food choices can help lower blood pressure. A diet too high in sodium can increase the risk of high blood pressure.

- Being overweight or obese: Too much weight puts an extra strain on your heart and circulatory system. This can cause serious health problems and increases your risk for:
    - Cardiovascular disease
    - Diabetes

    - High blood pressure

- Drinking too much alcohol: Regular, heavy use of alcohol can cause many health problems. Those problems include heart failure, stroke and an irregular heartbeat (arrhythmia). Too much alcohol can cause your blood pressure to increase. Learn more about alcohol, high blood pressure and the importance of moderation.

- Sleep apnea: Obstructive sleep apnea may increase the risk of developing high blood pressure. It is common in people with resistant hypertension.

- Stress: Stress is not always bad. But too much stress may lead to increased blood pressure. Also too much stress can lead to behaviors that increase blood pressure, such as:
    - Poor diet
    - Physical inactivity
    - Drinking alcohol more than usual

      The amount of stress you live with can be influenced by your income level, job and education. This can affect your access to basic necessities, medication, health care and the ability to make healthy lifestyle changes.

- Air Pollution: Ultrafine particulate matter in air pollution can cause systemic inflammation, which can increase the risk of hypertension.

- Preexisting medical conditions

  A small number of high blood pressure cases are secondary hypertension. This is high blood pressure caused by another medical condition, such as:

    - Certain heart defects
    - Kidney disorders

If the condition causing the high blood pressure can be resolved, the person's blood pressure will often get better.

Sources

- Heart.Org
- CDC: Blood Pressure
- CDC: Health Equity Glossary of Terms
- Cooper, L. A., Marsteller, J. A., Carson, K. A., Dietz, K. B., Boonyasai, R. T., Alvarez, C., Crews, D. C., Himmelfarb, C. R. D., Ibe, C. A., Lubomski, L., Miller, E. R., Wang, N., Avornu, G. D., Brown, D., Hickman, D., Simmons, M., Stein, A. A., Yeh, H., Ahima, R., . . . Zeren, K. L. (n.d.). Equitable Care for Hypertension: Blood Pressure and Patient-Reported Outcomes of the RICH LIFE Cluster Randomized Trial. *Circulation*, *150*(3), 230–242. https://doi.org/10.1161/circulationaha.124.069622

Excerpt from Why Are Health Disparities Everyone's Problem? Copyright 2021 The Johns Hopkins University Press and Equitable Care for Hypertension: Blood Pressure and Patient-Reported Outcomes of the RICH LIFE Cluster Randomized Trial

When I began to study African American patients in primary care settings, I noticed that studies to treat or prevent common medical problems often excluded people of color. This was partly because these studies often didn't take place in real-world settings such as clinics, churches, senior centers, or other community places.

In addition, most of the studies involved healthy people. These volunteers were willing to drive to research facilities and follow strict treatments. These studies required participants to have high levels of motivation and resources.

In other cases, studies weren't based on data from active participants. The studies were done using data sets from insurance companies and national surveys.

In contrast, the work I was doing was taking place in community health centers and clinics. These clinics didn't have many resources or high staffing levels. Patients were often faced with many medical conditions. For the past 40 years, the Health Resources and Services Administration (HRSA), an agency of the US Department of Health and Human Services, has supported such community health centers as a source of comprehensive primary health care to people of all ages, races, and ethnicities. The centers provide care to those without health insurance. Fees are based on a person's ability to pay. Some centers specialize in certain populations. For example:

- migrant and seasonal farm workers,
- people and families experiencing homelessness,
- people living in public housing, or
- particular minority communities.

They're located in medically underserved areas or provide services to medically underserved populations. They're governed by a board that sees and listens to the needs of the community. They provide culturally competent care. Patients receiving care in these centers and clinics were not the ones who typically signed up to be in research studies. They often did not have:

- transportation,
- couldn't get time off from work to participate in a strict study protocol, or
- had medical conditions that might exclude them from a study that required them to be relatively healthy.

Changes Proposed to Studies by Dr. Cooper and her Colleagues

In the studies we designed, we set things up differently. We worked with people where they were. This was with the staff, clinics, and admin, not just for the patients. For example, we didn't expect the patients getting their health care in community-based clinics to follow strict rules that were different from their usual behaviors connected to diet and exercise. If we wanted them to

have an interview or medical exam, we tried to reduce the hassle for them. Over time, we tried to have studies at their doctor's office, their job, or their home.

We thought about the beliefs and medical myths within the community. We added people's perspectives into our messages too. This made them more relatable and effective. We use what we call "cultural targeting" to focus some of our efforts on dispelling myths. Developing solutions targeted at improving patient-centered care has great potential to reduce health disparities. Ultimately, solutions that target improving patient-centered care could improve the physical and mental health of millions of underserved patients.

The RICH LIFE Project

RICH LIFE stands for: Reducing Inequities in Care of Hypertension: Lifestyle Improvement for Everyone.

The project was designed to help lower blood pressure and heart disease risk among ethnic minority, low-income, urban, and rural populations.

- 1,820 patients were enrolled, and
- data about their health and healthcare experiences were collected.
- Thirty participating clinics, including community health centers from across Maryland and Pennsylvania, were divided into two groups as described in the table.

Support/Training Both Groups of Clinics Received	**Support/Training/Interventions Group 1 received** **SCP = standard of care plus**	**Support/Training/Interventions only Group 2 received** **CC/SC = collaborative care/stepped care**
Clinical staff have received training in correctly measuring blood pressure; they get certified to do this on an annual basis. The staff members are also taking part in web-based training about taking care of people with high blood pressure. Finally, they're getting monthly feedback about how well their patients' blood pressure is being kept at a healthy level using what we call a hypertension dashboard; this information is provided overall and then separately for Black,White, and Latino patients. Educational programs for the health system leaders are also deployed to enhance the uptake and effectiveness of the other programs.This training includes webinars and telephone calls to disseminate evidence-based practices for health equity and facilitate dialogue among health system leaders and representatives from community organizations regarding efforts to advance health equity.	In one group of clinics, in addition to the programs described above, primary care doctors, nurses, and staff members also receive more in-depth training that focuses on factors that cause people from socially disadvantaged groups to have a higher risk of uncontrolled blood pressure. This group is using a team approach to providing care. Primary care doctors, and other health professionals, such as pharmacists, social workers, and nutritionists if they are available at the clinic, all work together with a nurse care manager who delivers one-on-one education and counseling to patients to help them take care of their health. The nurse care managers get special training in motivational interviewing—a patient-centered communication approach similar to the one we used with physicians in my earlier studies.	Collaborative care team of a Care Manager (CM) and Primary Care Physician (PCP), with on-call behavioral health specialist Community Health Worker (CHW) referral: A community health worker is a frontline public health worker who is a trusted member of and/or has an unusually close understanding of the community served. This trusting relationship enables the worker to serve as a liaison/link/intermediary between health/social services and the community to facilitate access to services and improve the quality and cultural competence of service delivery. With the second group, some patients may get home visits from community health workers who help them meet their needs related to transportation, financial or emotional stress, or housing or employment instability. The community health workers also get trained in motivational interviewing. In addition, some patients may have a group of specialists review their treatment plans and give recommendations to their primary care doctor to control their high blood pressure.These specialists include experts in heart and kidney diseases, diabetes, mental health, behavioral elements such as smoking, and high blood pressure. Regular case management meetings allow the team to discuss patient cases in depth and to brainstorm approaches to patient care. Meetings also allow the group to consider whether to bring in a community health worker to engage with difficult-to-reach patients or patients with complex social needs.

This study combines tested approaches with new ideas in an innovative program that treats patients as whole people, not simply treating a disease. It's looking at their quality of life and their ability to reach personal health goals from multiple perspectives. It's been designed to give doctors, insurers, and lawmakers the confidence to support similar programs in a wide variety of medical settings and among other at-risk populations. The goal of the program is to help patients control their blood pressure, feel healthier, have more energy, and lower their risk of heart attack, stroke, or kidney failure, along with both recognition and better control of any coexisting conditions they might have. Our hope is that people will feel more in control of their lives, having set goals for themselves that they've been able to accomplish. They'll know how to monitor and track their high blood pressure. They'll understand the importance of letting their primary care team know of any concerns or needs that they have.They'll know more about the services that are available to them. I hope this program will help those who need it the most so that when it ends, everyone will be healthier, and those who were in the poorest health at the beginning will be just as healthy as those who were healthiest. We hope many other health care systems will adopt these strategies to address their own patients' needs.

Results

This unique program treated patients as whole people, not simply treating a disease. It looked at their quality of life and their ability to reach personal health goals. It was intended to give doctors, insurers, and lawmakers the confidence to support similar programs in a wide variety of medical settings and other at-risk populations.

The goals of the program were:

- to help patients control their blood pressure,
- feel healthier,
- have more energy, and
- lower their risk of heart attack, stroke, or kidney failure, along with both
- recognition and
- better control of any coexisting conditions they might have.

The hope was that people would feel more in control of their lives because they,

- set goals for themselves that they accomplished.
- They'd know how to monitor and track their high blood pressure.
- They'd understand the importance of letting their primary care team know of any concerns or needs that they have.
- They'd know more about the services that are available to them.

We hoped this program would help those who need it the most. So that when it ended, everyone would be healthier. Those who were in the poorest health at the beginning would be just as healthy as those who were healthiest to start.

The study investigators' hypothesis that the CC/SC intervention would improve BP control rates more than the SCP intervention was not confirmed. Both intervention arms saw statistically and

clinically significant achievement of BP control over 12 months (P<0.001 in both arms). Among Black and White patients, there were no significant differences in the estimated probabilities of BP control at 12 months between intervention arms. The estimated probability of BP control among Hispanic patients was significantly lower in the CC/SC arm than in the SCP arm, and the relationship between intervention assignment and BP control among Hispanic patients was significantly different from the relationship among White patients. In both intervention arms, there were no statistically significant differences in BP control at 12 months in pairwise comparisons between racial and ethnic groups.

Patient Data at the Beginning of the Study

Table 3. Patient Baseline Clinical Characteristics

Characteristic	All patients (n=1820)*	SCP (n=927)	CC/SC (n=893)	*P* value†
SBP, mean±SD, mm Hg				
All race groups	152.3±12.1	151.9±11.7	152.7±12.5	0.37
Black patients	153.5±13.0	153.1±12.8	153.8±13.2	0.86
Hispanic patients	151.3±10.5	151.9±10.5	149.7±10.6	0.25
White patients	150.4±10.5	150.2±10.3	150.7±10.7	0.70
P for race and ethnicity‡	<0.001	0.003	0.001	
DBP, mean±SD, mm Hg				
All race groups	85.5±12.3	84.4±11.7	86.6±12.9	0.16
Black patients	87.9±12.3	87.2±11.8	88.4±12.7	0.43
Hispanic patients	85.1±11.2	85.2±10.3	84.9±13.8	0.94
White patients	81.4±11.6	80.2±10.8	82.8±12.3	0.06
P for race and ethnicity‡	<0.001	<0.001	0.008	
Comorbid conditions (from EMR), n (%)				
Diabetes	821 (45.1)	429 (46.3)	392 (43.9)	0.43
Hyperlipidemia	1346 (74.0)	700 (75.5)	646 (72.3)	0.52
CHD	259 (14.2)	149 (16.1)	110 (12.3)	0.19
Depression	519 (28.5)	263 (28.4)	256 (28.7)	0.95
Tobacco smoking	547 (30.0)	267 (28.8)	280 (31.4)	0.65
PROMIS mental health score, mean±SD	47.7±8.9	47.9±9.0	47.5±8.9	0.67
PROMIS physical health score, mean±SD	44.4±8.9	44.8±9.1	44.1±8.7	0.48
PHQ-8 score, mean±SD	5.0±5.2	4.9±5.2	5.1±5.2	0.67
Medication adherence, n (%)§				0.48
Adherent	891 (49.0)	469 (50.6)	422 (47.3)	
Nonadherent	889 (48.8)	443 (47.8)	446 (49.9)	
Not on medication	40 (2.2)	15 (1.6)	25 (2.8)	

CC/SC indicates collaborative care/stepped care; CHD, coronary heart disease; DBP, diastolic blood pressure; EMR, electronic medical record; PHQ, Patient Health Questionnaire; PROMIS, Patient-Reported Outcomes Measurement Information System; SBP, systolic blood pressure; and SCP, standard of care plus.

*The number is 1818 for blood pressure data because 2 patients were on dialysis (1 in each intervention arm).

†*P* value is from χ^2 or 2-sample *t* test controlling for the design effect (clustering).

‡*P* value is from a mixed-effects model controlling for the design effect (clustering).

§Medication adherence was categorized as adherent if the patient responded "no" in response to missing medication to all 4 questions, nonadherent if the patient responded "yes" to any of the 4 questions, and not on medication if patient responded "not applicable."

Patient Data After 12 Months

Table 5. Intervention Effects on Continuous Outcomes at 12 Months

Outcome measure	Least squares mean* (95% CI)		Differential change from baseline*	*P* value
	SCP (n=750)	CC/SC (n=754)		
SBP, mm Hg				
All Patients				
Baseline	152.4 (151.1 to 153.6)	153.1 (151.8 to 154.4)		
12 mo	137.8 (136.2 to 139.4)	139.3 (137.6 to 140.9)		
Change from baseline	−14.6 (−15.9 to −13.2)	−13.8 (−15.2 to −12.5)	0.7 (−1.2 to 2.7)	0.45
12 mo by race and ethnicity:				0.24
Black patients	138.6 (136.5 to 140.8)	140.4 (138.4 to 142.4)		
Change from baseline	−14.9 (−16.9 to −13.0)	−13.5 (−15.2 to −11.8)	1.4 (−1.3 to 4.1)	0.31
Hispanic patients	136.5 (132.4 to 140.6)	144.0 (137.3 to 150.8)		
Change from baseline	−14.7 (−18.7 to −10.7)	−6.6 (−13.5 to 0.4)	7.6 (−0.7 to 15.9)	0.07
White patients	136.4 (134.1 to 138.8)	136.3 (133.7 to 138.9)		
Change from baseline	−14.2 (−16.3 to −12.0)	−15.4 (−17.8 to −13.0)	−1.2 (−4.2 to 1.7)	0.42
P value for race and ethnicity†	0.18	0.02		
DBP, mm Hg				
Baseline	85.0 (84.1 to 85.8)	86.5 (85.7 to 87.4)		
12 mo	79.5 (78.5 to 80.4)	79.6 (78.6 to 80.6)		
Change from baseline	−5.5 (−6.4 to −4.6)	−6.9 (−7.8 to −6.1)	−1.4 (−2.6 to −0.2)	0.02
12 mo by race and ethnicity				0.22
Black patients	80.7 (79.4 to 81.9)	79.5 (78.4 to 80.7)		
Change from baseline	−5.5 (−6.7 to −4.2)	−7.4 (−8.5 to −6.4)	−2.0 (−3.7 to −0.3)	0.02
Hispanic patients	78.9 (76.2 to 81.5)	82.6 (78.4 to 86.8)		
Change from baseline	−5.7 (−8.2 to −3.2)	−1.8 (0.9 to 2.5)	3.7 (−1.8 to 9.1)	0.19
White patients	77.6 (76.1 to 79.1)	79.3 (77.7 to 80.9)		
Change from baseline	−5.5 (−6.8 to −4.1)	−6.6 (−8.1 to −5.0)	−1.1 (−3.0 to 0.8)	0.26
P value for race and ethnicity†	<0.001	0.37		
PAM-13 score, n	789	731		
Baseline	63.9 (62.5 to 65.2)	64.1 (62.7 to 65.4)		
12 mo	65.2 (63.7 to 66.6)	65.9 (64.4 to 67.4)		
Change from baseline	1.3 (0.0 to 2.6)	1.8 (0.5 to 3.1)	0.5 (−1.3 to 2.3)	0.58
PACIC score, n	788	731		
Baseline	3.13 (3.04 to 3.23)	3.18 (3.09 to 3.28)		
12 mo	3.17 (3.07 to 3.27)	3.34 (3.24 to 3.45)		
Change from baseline	0.04 (−0.03 to 0.11)	0.16 (0.09 to 0.23)	0.12 (0.02 to 0.22)	0.02

CC/SC indicates collaborative care/stepped care; DBP, diastolic blood pressure; PACIC, Patient Assessment of Chronic Illness Care; PAM-13, Patient Activation Measure; SBP, systolic blood pressure; and SCP, standard of care plus.

*Mixed-effects models are adjusted for patient age, Medicaid insurance status, diabetes diagnosis, and health system and controlled for clustering within practice. Differences in differences by race and ethnicity are from models stratified by race and ethnicity.

†*P* value comparing differences across race and ethnicity at 12 months within intervention arm.

Testimonial From a Participant

One of our study participants, Mrs. Willi McNair, enthusiastically shared her experience: *My sugar was bad, my pressure was high, but when I got with them [my RICH LIFE nurse care manager and community health worker] it was better. They gave me a cuff to take my blood pressure. That helped me. They gave me paperwork to keep my pressure down and my sugar*

down. They made sure that I had food and that I was okay about where I lived. They did come out to see me. They would call me in the evening to make sure I was on task; who does that? RICH LIFE does. When I started early on, I didn't listen, but then it hit me: These people actually care enough to come out, to call me, I better listen. My sugar came down, my pressure came down, [and] everything came into place. I would recommend them to anybody!

Limits and Strengths

Some limits of this study may explain the lack of clear differences between the interventions.

1. The SCP (Structured Care Process) intervention was effective.This might have reduced differences between it and the other intervention CC/SS (collaborative care/stepped care).This may have driven the "null findings." (That means there were no significant differences between the interventions)
2. The effects seen in the SCP arm may have been an improvement in the patient's usual medical care. This makes it hard to see a difference in interventions.
3. Although unlikely, it is possible that "cluster contamination" at the leadership level (eg, sharing CC/SC coaching call insights) occurred among practices in the same health system.
4. It is possible that the limited uptake and lack of fidelity to the CC/SC intervention had no difference in outcomes between intervention arms and no impact on racial disparities.

Several factors limited success in implementation, including:

- Finance and staff resources for care managers (CMs) and community health workers (CHWs),
- staff turnover,
- individual staff factors, and
- Org norms, such as CM possibly not using CHW enough due to misunderstandings of the CHW's role in patient care.

The BP measurement protocol in RICH LIFE had user-centered features and was widely adopted. BP measures used in this trial may be less reliable than those from research staff. The study used clinicians and medical assistants to collect BP measurements (using an automated device). Data were entered into practices' EMR as primary outcome measures of BP control. A more traditional clinical trial approach would be using trained research staff. However, these measures likely approximate those used for quality improvement and clinical care purposes.

COVID-19 affected this study in unknowable ways. After March 2020, services and measures were reduced for several months until patients and systems learned about disease transmission protocols.

Last, the findings of this study are generalizable only to systems and populations similar to those who participated.

With regard to strengths, the study design and interventions were significantly shaped by extensive engagement with a broad and diverse group of stakeholders, including patients, healthcare leaders, payers, community organizations, clinicians, CMs, and CHWs.

Five health systems, including federally qualified health centers, partnered to implement RICH LIFE using existing clinical staff to deliver the intervention. Recruitment and retention of a large and diverse patient population was successful. The patient's clinical and social needs made them an important population to engage in efforts to advance equity in cardiovascular health. The study achieved high follow-up rates and collected validated measures of important clinical and patient-reported outcomes.

Conclusions
Adding a collaborative care team, including a CM and a CHW, did not increase the effectiveness of an enhanced standard of care intervention for BP.

However, it did improve patient assessments of chronic illness care. Patients with CHD and those living in rural areas had greater achievement of BP control in the CC/SC arm than in the SCP arm.

More research is needed to find out whether healthcare teams working together to meet patients' social and medical needs will reduce disparities in how well BP is managed among these patients.

Group Discussion Prompts to Evaluate the RICH LIFE Project

- What were the goals or criteria for success for this project?
- What were the constraints for this project?
- How does this project address the criteria and constraints you identified?
- What additional components or interactions did this project take into consideration that you had not thought of? Why do you think this was important?
- What Levels and Domains of Influence (Table on page 3) did the project address or consider?
- What were the health, social, and cultural impacts of the project?
    - Did it meet its criteria for success?
    - What limitations in the data or study make it challenging to evaluate the project?
    - What additional information would be helpful to determine the effect of the interventions?

How can we evaluate a solution (the RICH LIFE Project) for addressing disparities in hypertension control?

A. **How does the RICH LIFE project aim to reduce disparities in hypertension control?**
B. **What interventions were used in the project? What conclusions can be drawn from the results?**

Part 1

On Your Own

In the space below, list the components of a model that are necessary to explain how the RICH LIFE Project aimed to reduced disparities in hypertension control.

Examine the same resources to describe how those important components of the models you listed above *interact with each other*. Record those descriptions below.

Part 2

Putting It Together

Use the components and interactions you've listed in the previous space to write an explanation that answers these questions:

How can we evaluate a solution (the RICH LIFE Project) for addressing disparities in hypertension control?

C. **How does the RICH LIFE project aim to reduce disparities in hypertension control?**
D. **What interventions were used in the project? What conclusions can be drawn from the results?**