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POLICY BRIEF

MOVING UPSTREAM: POLICY STRATEGIES TO ADDRESS SOCIAL, ECONOMIC, AND ENVIRONMENTAL CONDITIONS THAT SHAPE HEALTH INEQUITIES

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FOREWORD

Public health researchers and practitioners increasingly recognize that social, economic, and environmental conditions in communities and settings where people live, work, and play powerfully shape health. The fact that these kinds of conditions are often systematically poorer in communities of color is a major determinant of racial and ethnic health inequities. Majority-minority communities are more likely than majority-white communities to face environmental health risks, such as those brought about by polluting industries and waste. They are less likely to have safe spaces for exercise and recreation. And they often face a poorer retail food environment, with fewer vendors selling fresh, low-cost fruits and vegetables and a heavier concentration of unhealthy foods such as fast foods and highly-processed, high-fat convenience products. These kinds of community conditions make it difficult for people to maintain healthy behaviors and reduce risks for disease and illness.

While many of these problems have persisted for years, if not generations, they are not intractable. A number of promising policy strategies can help to address the heavy concentration of health risks in communities of color, while at the same time building upon community strengths to improve access to health-enhancing resources and create healthier communities. Many of these policy strategies lie outside of the healthcare arena, in sectors such as housing, transportation, land use, economic development, and education. Expanding opportunity in these sectors often can have important health benefits, and can be more cost-effective in reducing health inequities than by trying to solve these problems through the provision of health care or individual education or awareness efforts alone.

This policy brief, "Moving Upstream: Policy Strategies to Address Social, Economic, and Environmental Conditions that Shape Health Inequities," identifies some of the policy strategies that are being studied and implemented in communities across the country. Prepared by Bryant Cameron Webb, a rising leader in medicine and health policy, we expect that this brief will be useful for policymakers, public health practitioners, community organizations, researchers, and others committed to improving the health of people of color and eliminating health inequities. This analysis furthers the Joint Center's long history of work to identify solutions to some of our nation's most pressing policy issues, and ensure that people of color can continue to contribute to the fullest extent to the rich social, economic, and political life of the nation.

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INTRODUCTION

Many racial and ethnic minorities in the United States experience a disproportionate burden of disease when compared to their white counterparts. These disparities have been consistently documented in a range of health conditions including asthma, diabetes, hypertension, and HIV infection, as well as infant mortality and deaths from coronary heart disease and stroke. There are similar disparities in the various factors that are known to influence health. These "social determinants of health" include social and economic factors, social support networks, physical and social environments, access to health services, and social and health policies.¹ Research indicates that social and economic conditions are more powerful in determining who is healthy and who is sick than access to medical care, genetic endowment, or other factors.²

Social, economic, and environmental conditions often vary by income and by race and ethnicity to create or contribute to inequities in health. For example, racial and ethnic minorities such as African Americans and Latinos are more likely than whites to live in neighborhoods with a high concentration of poverty, even when they possess the same income and education levels as whites.³ The differences observed in neighborhood conditions, work conditions, education, and income are examples of well-studied social factors that are associated with inequitable health outcomes.¹ Because each of these factors is socially constructed, the policymaking process that helps to shape our society emerges as an appropriate tool for redress.

A number of evidence-based policy strategies have been described to reduce the disparities in health status and the social determinants of health. In the brief that follows, we review this evidence base and identify promising policy solutions. In Part I, we review some of the leading economic and social factors that impact health, such as early childhood development and education, economic development, and poverty reduction. In Part II, policies are described that address living and working conditions, such as unhealthy homes and neighborhoods. It is our hope that this brief can be used by many stakeholders—including policymakers, scholars, advocates, community members, and elected officials—to assist them in their efforts to eliminate health disparities.

restrictive eligibility at present. With Texas, Alabama, and other Southern states setting their income eligibility for Medicaid at less than 20 percent of FPL, this provision will greatly expand coverage for individuals in these states—a large number of whom are members of racially and ethnically diverse groups."

PART II. LIVING AND WORKING CONDITIONS THAT IMPACT HEALTH

As the health equity movement took shape, those leading the charge sought consistent messaging rooted in research. Few messages resonated as much as the headline of an April 23, 2009 article in the Huffington Post: "Why Your Zip Code May Be More Important to Your Health Than Your Genetic Code."⁴

The phrase aptly describes the all-important role of living and working conditions on the health of all populations, as well as the centrality of these conditions on the persistence of health disparities. Place, it turns out, truly matters. Unfortunately, the environments where many minority community members "live, learn, work, play, eat and pray" are too often the insidious cause of their illnesses.

Unhealthy housing and neighborhood conditions are among the most proximate and well-defined threats to the health of disadvantaged communities. Through the identification of the specific threats, however, residents, organizers, and policymakers are able to propose and implement thoughtful solutions to the problems that disproportionately plague their communities. Below, we describe a range of housing and neighborhood policies to help optimize living and working conditions for health.

5. HEALTHY NEIGHBORHOODS

Just as the housing environment can have a significant health impact, so too can the surrounding community. Neighborhoods can influence health through physical characteristics as well as through the structure and composition of the built environment. Physical characteristics of a neighborhood that impact health include air and water quality, as well as proximity to facilities that produce or store hazardous materials. The built environment in a neighborhood and its impact on health will be the focus of this section of the brief.

The health of neighborhood residents can be impacted by the availability of safe places to exercise; access to nutritious foods; the availability and quality of neighborhood services, such as schools, medical facilities, and the transportation system; and the availability of jobs. Additionally, social relationships within the neighborhood can impact health, as neighborhoods that have high levels of mutual trust and respect experience less violence, while less closely knit communities are marked by higher levels of social disorder."

Far too often, the negative characteristics of neighborhoods impact minority communities. With the high prevalence of chronic diseases in these communities across the country, we have focused our analysis on the neighborhood characteristics that either ameliorate or exacerbate the burden of illness. First, we discuss the keys to developing safe places to play and exercise. Next, we discuss barriers to, and facilitators of, access to healthy foods in vulnerable communities. Finally, we'll conclude with strategies to address the violence in minority communities.

5.1 Spaces to Play and Exercise

The availability of safe spaces for people to play and exercise is critical to the promotion of health and prevention of illness in all communities. Exercise has been linked with reduced risk of obesity, heart disease, high blood pressure, diabetes, high cholesterol, and several forms of cancer." Similarly, exercise (along with diet) is often recommended as a first-line therapy for many of those same diseases. In the absence of a neighborhood that is conducive to such physical activity, both the prevention and first-line treatment options for these diseases are not actually options at all. The policies described below work to redesign neighborhoods to encourage fitness and health and are necessary to the health and wellness of the community.

Urban Design and Land Use

Community-scale urban design and land use policies are efforts to change the physical environment of urban areas of several square miles in ways that support physical activity. Street-scale urban design and land use policies involve efforts to change the physical environment of small geographic areas, generally limited to a few blocks, to similarly facilitate greater physical activity. Both of these practices employ a combination of building codes, roadway design standards, and environmental changes to increase physical activity. Design components of such policies include improved street lighting, infrastructure projects to increase safety of street crossing, the use of traffic calming approaches, and enhanced street landscaping.⁶⁰

Communities can also restructure the physical environment to facilitate the incorporation of physical activity into daily life. This restructuring includes increasing the proximity of residential areas to stores, jobs, schools, and recreation areas, as well as continuity and connectivity of sidewalks and streets. Additional efforts include creating walking trails, building exercise facilities, and providing access to existing nearby facilities.⁶¹

The Task Force for Community Preventive Services recommends design and land use policies and practices that support physical activity in urban areas of several square miles or more as well as in small geographic areas (generally a few blocks). These recommendations for community-scale and street-scale urban design and land use initiatives are based on sufficient evidence of effectiveness in facilitating an increase in physical activity. Median improvement in some aspect of physical activity was 35 percent for street-scale projects and 161 percent for community-scale initiatives."

5.2 Access to Healthy Foods

Just as safe outdoor exercise space is fundamental to the maintenance of health, so too is access to healthy foods. Areas with significantly limited access to healthy foods have been referred to as "food deserts." The U.S. Department of Agriculture defines food deserts as low-income census tracts where a substantial number or share of residents has low access to a supermarket or large grocery store.⁶² As many as 5.9 percent of households across the country in majority-black communities are currently located in areas described as food deserts.⁶² The policy strategies described below are literature-supported mechanisms to achieve greater access to healthy foods for these disadvantaged communities.

Community-Level Interventions

The development and support of farmers' markets can provide access to healthy food, especially fresh fruits and vegetables. Farmers' markets promote regional agriculture while ensuring the availability of fresh, local produce for state residents. Markets can also accept food stamps and WIC coupons for low-income community members. Additionally, the use of SNAP benefits at farmers' markets is an important policy consideration, as it would involve a component of the largest U.S. food and nutrition assistance program and is effectively a mechanism by which the federal government can increase access to healthy foods.

Another option to bring healthy foods to the community is the development of community gardens. These collaborative projects use open spaces for participants to share in the maintenance and products of the garden, including healthy and affordable fresh fruits and vegetables.⁶³ At the same time, the gardens encourage

residents to engage in physical activity, skill building, and creation of green space. They help to beautify vacant lots, revitalize communities in industrial areas, revive and beautify public parks, and sometimes even create green rooftops. Finally, they have been shown to decrease violence in some neighborhoods and improve social well-being through strengthening social connections."

While significant data exist on the successful operation and sustainability of farmers' markets and community gardens, there is a growing evidence base for the health impacts of these efforts. For example, a number of studies have demonstrated that vouchers to farmers' markets increase consumption of fresh fruits and vegetables.¹⁰ One study even noted that the increased consumption was sustained even six months after termination of the intervention.¹¹ Additionally, studies have indicated that community gardeners consumed fruits and vegetables 1.4 more times per day than those who did not participate, and were 3.5 times more likely to consume fruits and vegetables at least five times daily.¹²

Transportation-Related Improvements

In some communities, the healthy food access issue is rooted in a poor transportation system. Individuals and families who do not own a car and do not have access to reliable or affordable public transportation may be forced to choose from the food options directly available to them options that can be largely unhealthy. A number of transportation policy improvements have been studied and supported. These include increasing bus routes to food retailers, creating transit routes connecting low-income neighborhoods with supermarkets, and creating supermarket-sponsored shuttle services.¹³

Another proposed consideration for SNAP is to create a transportation benefit in conjunction with SNAP benefits for participants who do not own cars and who have poor access to healthy food retailers. SNAP benefits for people who live in areas with poor access could include a transportation subsidy in addition to the food benefit that could be used to compensate for the expenses associated with traveling to the supermarket. Another option could be to deduct transportation costs from total income for applicants with limited access to healthy foods, effectively providing them with a larger benefit. Although these interventions seem promising, additional research should be conducted to determine the feasibility, costs, and consumer reactions to these efforts.¹⁴

Designing Communities for Healthier Food Options

Several opportunities exist through zoning regulations to help design and maintain healthier communities. First, community food gardens or farmers' markets could be designated within the zoning code. Next, zoning can be used to limit commercial food retail, such as fast food businesses, or to allow as-of-right or incentives to those businesses that increase access to healthy food.¹⁵

The economic feasibility of these types of interventions depends on the ability of policymakers to identify communities most at need. By targeting economically disadvantaged communities with high prevalence of obesity-related diseases, computer models have provided an effective means of identifying areas where policy implementation will be most beneficial for improvements in health outcomes, such as body-mass index.¹⁶

Additionally, there are multiple policy options to improve access to healthy food by making changes to the retail food environment. The interplay between factors of cost and demand for food retailers (supermarkets and grocery stores) and consumers, respectively, leave many areas underserved by certain types of food retail stores. Focusing on the supply side, efforts to reduce costs have been proposed that include subsidizing the development of new or expanded stores. Efforts range from financing for new large-scale supermarkets to small incentives to existing stores to stock healthier foods.¹⁷

One example is the Pennsylvania Fresh Food Financing Initiative, a public-private partnership involving the state of Pennsylvania, The Food Trust, the Greater Philadelphia Urban Affairs Coalition, and the Reinvestment Fund. This program provides grants of up to \$250,000 or loans of up to \$2.5 million for the development of new supermarkets or other grocery stores where infrastructure costs or credit are lacking.¹⁸ Similarly, New York City's Food Retail Expansion to Support Health (FRESH) program provides zoning and financial incentives to promote the establishment and retention of neighborhood grocery stores in underserved communities throughout the five boroughs.¹⁹ Financial incentives in the FRESH program include real estate tax reductions, sales tax exemptions, and mortgage recording tax deferrals each over 25 years. Federally, financing and incentive programs, including grants and low-interest financing, tax incentives, and training or technical assistance in community development, have been used to encourage new store

TABLE 5: EVIDENCE-BASED POLICIES TO ENSURE HEALTHIER NEIGHBORHOODS

Category	Policy Recommendation
5.1 Spaces to Play and Exercise	Use community-scale and street-scale urban design and land use policies and practices to support physical activity in urban areas.
5.2 Access to Healthy Foods	<p>Farmers' Markets</p> <p>Provide vouchers for low-income populations to use farmers' markets.</p>
	<p>Transportation</p> <p>Increase bus routes to food retailers. Create transit routes connecting low-income neighborhoods with supermarkets. Incentivize supermarket-sponsored shuttle services. Provide SNAP benefits for individuals in food deserts to account for cost of transportation to healthy foods.</p> <p>Zoning</p> <p>Limit commercial food retailers within certain areas. Allow incentives for businesses that increase access to healthy food. Fund Healthy Food Financing Initiative and similar programs to assist populations in food deserts.</p>
5.3 Violence	Create and support universal, school-based programs to teach children of all ages about the problem of violence and its prevention.

development. Examples of these federal programs include New Market Tax Credits, Community Development Block Grants, the Empowerment Zone program described earlier, and HUD's Section 108 loan program.

Programs to improve offerings in existing stores include increasing the availability of nutritious food, decreasing the availability of less healthy food, adjusting the relative prices of both of these types of food, or rearranging store layouts to highlight healthy products. Projects that use improvements such as these include New York's Healthy Bodegas Initiative, Baltimore Healthy Stores, and Apache Healthy Stores. Each of these programs has been regarded as successful and serves as a model for changes that can be made to existing stores.

Looking ahead, a new program to help create communities with adequate food access is the Healthy Food Financing Initiative (HFFI). Modeled after the Pennsylvania Fresh Food Financing Program, this national program is a partnership between the Departments of Treasury, Agriculture, and Health and Human Services. The goal of the HFFI is to eliminate food deserts across the country by 2018—only seven years after the initiative's launch. HFFI will bring grocery stores and other healthy food retailers to underserved urban and rural communities across America through a federal investment of over \$400 million. Additionally, the initiative promotes a range of interventions that expand access to nutritious Foods. These include developing

and equipping grocery stores and other small businesses and retailers selling healthy food in communities that currently lack these options. Despite the political support for this national, multiagency project, budgetary challenges faced by the government could place the funding for the HFFI at risk in the near future.

5.3 Violence Prevention

To categorize violence in the community as a disruptive force is an understatement. In fact, violence can paralyze a community psychologically while deterring economic growth, social interaction, and outdoor activities. While community gardens, mentioned earlier, have been described as a mechanism to promote social interactions in the community and reduce violence, only one strategy has been scientifically validated to reduce violence in communities: universal, school-based programs.

Universal, School-Based Programs

Universal, school-based programs to reduce violence are designed to teach all students about violence prevention or aim to reduce aggressive or violent behavior. Programs are offered in pre-kindergarten, kindergarten, elementary, middle school, and high school classrooms. All children in a given grade or school,

regardless of prior violence or risk for violent behavior, receive the programs.⁷¹

A number of studies have demonstrated the effectiveness of these programs. For all grades combined, the median effect was a 15 percent reduction in violent behavior among students who received the program. Combining the findings of four studies, the reduction in violent behavior among high school students was 29.2 percent. A meta-analysis of 26 studies involving elementary school students found a violent behavior reduction of 18 percent. Finally, the greatest reduction in violent behavior was seen among pre-kindergarten and kindergarten students. In that group, six studies yielded a median relative reduction of 32.4 percent. The Task Force on Community Preventive Services notes that all intervention strategies (e.g., informational, cognitive/affective, and social skills building) were associated with a reduction in violent behavior, and that the programs appeared to be effective in reducing violent behavior among students in all school environments, regardless of socioeconomic status or crime rate. Additionally, these programs were effective among all school populations, regardless of the predominant ethnicity of students.

CONCLUSION

Just as society has created inequalities in health, society has the tools to remedy them. Several strategies identified in this brief have great potential to reduce inequities that are at the root of racial and ethnic health inequalities. For example, the impact of economic conditions on the health of minority and low-income populations can be mitigated by the provision of income supplements. Investments in early childhood development and education can have large impacts on improving adult health. Neighborhoods can be designed to facilitate health by ensuring healthy housing, improving access to healthy foods, creating safe spaces to play and exercise, and reducing violence in the community. For each of these interventions, there is a strong evidence base to support implementation of the program or policy. Still, without the political will to achieve these improved outcomes, change is not possible. Awareness of proven policy solutions to the social ills that create and exacerbate health disparities is a powerful tool in the hands of a mobilized community.

While we acknowledge that health care services are a social determinant of health and health disparities, we chose not to

include this factor in our analysis. Policy approaches to problems in the health care sector have been discussed in a number of different publications, and we felt that this would be an issue that would warrant an analysis all its own.

Moving forward, additional research needs to be conducted to identify how these strategies perform over the long term and to fill gaps in the evidence base. Metrics that acknowledge the concept of "health in all policies" must be established to protect against the continuation or development of policies that disproportionately harm minority and low-income populations. For example, Health Impact Assessments (HIAs) have been effective in helping policymakers understand the potential consequences of policies and practices in a range of different sectors, such as housing and transportation, on health.

The body of research on the nature of health disparities continues to build. Now, however, the body of research on the best mechanisms to eliminate these disparities builds too. By utilizing evidence-based strategies to eliminate disparities in the social determinants of health, communities make a pivotal move toward health equity.

