Healthy Homes and Communities
Putting the Pieces Together

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Context: This article reviews and updates the evidence base informing four recommendations of the Robert Wood Johnson Foundation Commission to Build a Healthier America (the commission) that address the creation of healthy, vital neighborhood and community environments.

Evidence acquisition: Reviews of published research, consultation with experts in housing, community development policy, and site visits by the commission were conducted between 2006 and 2009. The literature reviews and national statistics were updated with publications appearing through the first half of 2010.

Evidence synthesis: The physical, social, and economic environments of local communities affect residents' health and exacerbate health disparities. Public and private decision makers are increasingly recognizing the importance of investing in cross-cutting strategies to reduce exposures harmful to health and to establish conditions that support healthful daily practices. Pilot and demonstration projects that engage community members in identifying priorities and implementing interventions that improve health and quality of life show promise in terms of their overall impact and effect on health disparities.

Conclusions: Consistent with the broad policy directions outlined in the commission's recommendations, an effective population health improvement strategy requires enlisting new partners among public agencies including housing, transportation, recreation, community development, and planning, and joint efforts between private sector business and voluntary organizations. Evaluation research of community-based interventions is needed to generate strong evidence of impact in order to guide policy and secure future investments in such measures.
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Introduction

The physical characteristics and social dynamics of neighborhoods can exert both positive and negative effects on residents' health. In its examination of "upstream" factors affecting health, the Robert Wood Johnson Foundation Commission to Build a Healthier America (the commission)[1] considered the evidence that community environments contribute to suboptimal and disparate population health outcomes. Based on its review and deliberations, the commission addressed the goal of and strategies for developing communities conducive to health and well-being with the following recommendations:[2]

1. Integrate safety and wellness into all aspects of community life.
2. Create "healthy community" demonstrations to evaluate the effects of a full complement of health-promoting policies and programs.
3. Develop a "health impact" rating for housing and infrastructure projects that reflects the projected effects on community health and provides incentives for projects that earn high ratings.
4. Ensure that decision makers in all sectors have the evidence they need to build health into public and private policies and practices.

The commission arrived at its recommendations for priority actions at the community level after reviewing evidence of these key realities:[2–5]

1. Poor conditions in homes and neighborhoods tend to cluster together, compounding the risks for adverse health consequences.
2. Such environmental health risks are disproportionately found among people with low SES and among racial/ethnic minority households.

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3. A community's social assets as well as the quality of its physical infrastructure affect the health and well-being of its residents.
4. The decisions and activities of general government at the local and state level, not just those that traditionally have been construed as matters of public health, are integral to primary prevention.
5. For community-based interventions to be successful and sustained over time, community members must be engaged from the outset in defining local health problems and goals for improvement and in devising strategies for achieving community health objectives.
6. In many cases multiple residential and neighborhood risk factors can be addressed simultaneously, achieving efficiencies and reducing unintended adverse consequences of single-purpose interventions.
7. The evidence base for the effectiveness of specific interventions at the community level is frequently very limited for informing policy and programming decisions, underscoring the need to document pilot projects and to collect and analyze health outcomes data for small areas (census tracts and even census blocks) and for population subgroups (by race/ethnicity, income).

This article examines the social, economic, and physical environments of communities as they affect health and collective responses to remedy problems. It first reviews neighborhood and housing conditions as patterned by economic status and race/ethnicity, then considers community-based and policy approaches for improving population health. It concludes with a discussion of the need for better information about health impacts to establish a firmer basis for future community-level health policies. Two companion pieces in this supplement to the *American Journal of Preventive Medicine* expand on other issues addressed by the commission; one examines health determinants and developmental interventions in early life[6] and the second the roles of primary healthcare providers and institutions such as public media, schools, and workplaces in cultivating and promoting lifelong health.[7] The latter article in particular complements this one, as Woolf and colleagues demonstrate how adopting strategies that promote, normalize, and reinforce healthful practices in a continuum of environments concurrently can increase the potency of particular clinical and behavioral interventions.[7]

Evidence Acquisition

Information collected and synthesized for the consideration of the commission and updated for this publication included reviews of published research in the areas of housing quality and affordability, and their relationship to health status[4] the built environment, and neighborhood characteristics as related to health.[5] It also included consultation with experts in housing, community development policy, and site visits by the commission conducted between 2006 and 2009 (commission materials from field hearings and site visits are archived at www.rwjf.org). The literature reviews and national statistics were updated with publications appearing through the first half of 2010. The charge from its sponsor, the Robert Wood Johnson Foundation, directed that the commission review the evidence about nonclinical strategies for improving population health and reducing social disparities in health that would have salience for American decision makers and policy leaders in both the public and private sectors. Consequently, this synopsis of research and recent policy developments likewise excludes consideration of personal health services and is largely focused on policy research in the U.S. context.

"Community" can refer to both geographically colocated and socially or politically affiliated or designated groups of people. Even when designating geographically defined populations, "community" can refer to groups as small as residents of a single street block or apartment building or to populations as large as counties, states, or even a nation. Following usage in the commission's report and recommendations[2] in this discussion "community" refers to both neighborhoods that encompass some commercial and/or civic or social institutions (such as schools and churches) and smaller political jurisdictions such as towns, cities, or counties.

Conditions in Neighborhoods and Homes Affecting Health

Variations in population health status across communities reflect local conditions and resources. The following broad categories offer a brief discussion of factors that affect health at the community level, highlighting those where community-level policies and strategies for intervention may prove most effective. The conceptual framework employed by the commission serves to organize the following discussion of multiple factors that overlap and interact with one another. See "Broadening the Focus: The Need to Address the Social Determinants of Health," Figure 10 in Braveman et al.,[8] in this supplement.

Economic and Social Opportunities and Resources

Education and employment opportunities influence health by providing the means to achieve an adequate standard of living now and in the future. American communities differ dramatically in their educational and economic resources, contributing to the gradient seen in educational attainment, income, and job status.[8–10] Some

of the variability in economic prosperity and investment in education is seen across large regions of the country as a result of historical trends in industrial development. Metropolitan areas typically tend to be better resourced than rural communities. At the same time, however, the quality of primary and secondary schools and access to jobs and higher education can vary widely within a given metropolitan area. Because school systems are predominantly funded with local property taxes, the relative prosperity of the community contributes directly to educational resources. Within metropolitan areas, "opportunity neighborhoods," residential communities with good schools and ready access to jobs, can have lifelong positive impacts on the health of young residents.[11,12] These benefits are far less available to children and youth in lower-income and minority families than to those in higher-income and white families.[12]

Similarly, social environments—the interactions among residents—vary widely among neighborhoods and have important effects on health. Social networks and voluntary affiliations within communities may sustain health by reducing personal isolation and stress and increasing mutual trust. Such networks and opportunities for routine, informal exchanges constitute a community's "social capital." They also underpin local communities' ability to influence their own destiny through collective efficacy.[13] Collective efficacy, ". . . the capacity of a social unit to regulate itself according to desired principles and to realize collective goals," is at work when local communities organize to pursue—and can achieve— good schools, adequate housing, neighborhood safety, or improved commercial services.[14] Neighborhoods with lower levels of social order, cohesiveness, or collective efficacy may negatively affect residents' health through the operation of dysfunctional norms, the absence of social buffers to environmental stressors, and an inability to maintain neighborhood safety.[15,16]

One key factor underlying differences in economic and social opportunities is residential segregation. Although the 1968 Civil Rights Act made discrimination in the sale or rental of housing units illegal, high levels of residential segregation persist almost half a century later. Blacks currently reside under a higher degree of segregation than that of any other immigrant group in U.S. history.[17] Moreover, segregation remains high at all levels of economic status for blacks, with high-income blacks living under higher levels of segregation than the poorest Latinos and Asians.[18]

A recent study of the 100 largest metropolitan areas in the U.S. where children reside documented how segregation produces large differences in opportunities for growth and development for children.[12] High levels of segregation lead to entrenched disparities in wealth, educational attainment, and income between blacks and whites that can be attributed to the lower property values, inadequate schools, and paucity of job opportunities in minority communities.[17] Segregation can also give rise to alternative social norms: The absence of pathways to opportunities for postsecondary educational and employment can lead to peer pressure against academic achievement and in support of crime and substance use.[17] Furthermore, the concentration of poverty and social disorder can create contexts where unhealthy behaviors appear normative, conventional role models of economic mobility are rare, and the stigma of incarceration is absent. The conditions created by concentrated poverty and segregation harm health.[19]

Living and Working Conditions in Homes and Communities

Related to and shaped by a community's economic and social opportunities are the physical conditions within one's home and community. The current study focuses on three factors shown to have important effects on health: access to goods and services within one's community, environmental exposures, and housing quality and affordability.

Access to goods and services within one's community can promote and sustain health. The presence of sidewalks and crosswalks, bike paths, playing fields, parks, shopping accessible on foot, and public transportation—along with the perception that it is safe to be outside—contribute substantially to the average amount of regular physical activity that residents of a neighborhood achieve.[20–23] Other things being equal, health-promoting resources are more likely to be found in higher-income neighborhoods.[22,23]

A recent review of research examining neighborhood differences in access to food concluded that residents of neighborhoods with better access to supermarkets and other retail outlets with minimally processed foods tend to eat a healthier diet than their counterparts in neighborhoods with less access to these goods.[24] Conversely, the ready availability of certain products may damage health. The density of fast food outlets and preponderance of energy-dense foods in convenience stores and other small markets has been linked with higher prevalence of obesity and higher BMI.[24–26] Similarly, liquor stores are more likely to be located in low-income and more heavily minority communities,[27,28] and their greater density is associated with adverse community-level consequences.[29–32] Poorer communities also have higher prevalence of tobacco advertising and accessibility of tobacco products, which are associated with increased prevalence of smoking.[7,33] The accompanying article by Woolf et al.[7] depicts how a community's commercial environment (what is advertised, what is for sale) and civic norms (e.g., indoor

smoking bans, use of social media for health promotion) can support healthier behaviors.

Residential areas across the U.S. are differentially exposed to the effects of 20th century industrial development.[17,34] Communities with large concentrations of low-income and minority residents are especially likely to be exposed to high concentrations of pollutants and are less protected by zoning from the siting of dumps and bus depots and proximity to highways. Children are particularly sensitive to unhealthy conditions in neighborhoods; even low levels of pollution can increase morbidity and mortality.[35] Lead contamination in the soil and vegetation is prevalent near high-vehicle traffic areas and former or existing industrial sites.[36] School environments can be sources of air pollution and asthma triggers due to school bus exhaust,[37] mold, pests, and poor ventilation.[38] The majority of school environments are in need of some repairs or updates to improve safety and decrease harmful exposures, but schools serving predominantly low-income and minority populations are especially likely to present health and safety risks.[39] Drinking water in schools may also suffer from lead contamination with financially strapped school systems having few resources to remedy the problem.[40]

Homes are the places that touch individuals and families most intimately and directly. Approximately one in ten poor households nationally live in inadequate housing.[41] Hazards in the home may include lead, indoor allergens (e.g., dust mites, mold), and radon, each of which has been shown to harm health. Exposures in the home have been implicated in approximately 40% of children diagnosed with asthma.[42,43] Frequently multiple health and safety hazards exist in residences, placing families at increased risk for poor health outcomes. Low-income households may be unable to afford expensive improvements, and renters may fear retaliation from their landlords if they report problems or seek to have them addressed.[44]

Along with the physical dangers within the home, lack of housing affordability has been linked to health. In 2007, roughly 40 million Americans spent more than 30% of their income on housing expenses.[41] The financial strain of unaffordable housing has been associated with decreased spending on health and health care, including delays in seeking preventive and routine medical care, medication non-adherence, and increased emergency department utilization.[45–47] High utility bills place an additional burden on lower-income families, forcing trade-offs among housing, heating, food, medical care, and other basic needs, and this can undermine children's growth and healthy development.[48–52] Further, millions of families are undergoing foreclosure,[53] and the financial strain and emotional stress of the process is associated with worse health.[54,55] Lack of affordable housing is associated with increased prevalence of residential relocation and mobility, causing a disruption in schooling, health care, and social networks.[56–61]

Community Strategies and Policy Tools

The previous section documented several sources of threats to health experienced disproportionately by residents of economically depressed communities and low-income neighborhoods. This section addresses the "how" of creating healthier environments through strategic investments, multisector collaborations, introducing novel interventions in carefully designed and monitored demonstrations, and incorporating information about health impacts more widely into policy development and governance.

Investing in Community-Based Prevention

In recommending "healthy community" demonstrations, the commission exhorted both the private and public sectors to pilot replicable models of integrated approaches to community health improvement. Such demonstrations require the collaboration of a host of partners including: policy entrepreneurs and program innovators; voluntary neighborhood associations that can speak to residents' priorities and problems; local political leaders who work with their constituents to promote health and well-being; the business community who not only has a vested interest in a healthy productive workforce and vital community but also directly shapes the community's commercial and physical environments; local and national philanthropies that can take risks in underwriting innovations that public funding agencies typically cannot; and state and federal officials who may provide financial support and technical assistance (Table 1).

The importance of taking a social-ecologic approach, as Daniel Stokols has articulated,[62,63] to reduce exposures harmful to health and to establish conditions supportive of healthful practices is increasingly reflected in public and private investments.

In 2009 the American Recovery and Reinvestment Act (ARRA) appropriated $650 million "to carry out

Table 1. Ecologies of health are local

"Every community has an ecology of health—a distinctive constellation comprising physical structures and spaces; social relationships, means of transit and patterns of travel; kinds of work, learning and play; goods and services for sale or exchange, and a particular distribution of economic resources . . . . [O]pportunities for improving [a community's health] emerge from a local configuration of resources and assets, leadership and priorities."[2]

evidence-based clinical and community-based prevention and wellness strategies . . . that deliver specific, measureable health outcomes that address chronic disease rates."[64] The CDC's "Communities Putting Prevention to Work" initiative, which implements this provision of ARRA, included $373 million in federal funding for community-level interventions for physical activity, nutrition, tobacco cessation, and obesity prevention with an additional $76 million allocated for community support and evaluation; $119 million for grants to states and territories for statewide policy and environmental efforts in disease prevention and tobacco cessation; and $40 million for a national prevention and media initiative to launch messaging campaigns and advertisements, amplified by engaging national organizations as sponsors.[64,65] This emergency legislation was unprecedented in the magnitude of resources made available for community prevention programming. The initiative explicitly called for "statewide policy and environmental change" to leverage state authority to achieve behavioral health goals.[65]

The ARRA's one-time infusion of funding served as an essential "down payment" on community prevention and brought broader policy and environmental approaches into the public health mainstream. In 2010, the Patient Protection and Affordable Care Act (ACA) further established a federal commitment to community prevention and wellness, authorizing mandatory spending of $15 billion over 10 years through a Prevention and Public Health Fund (Section 4002 of ACA).[66] As part of its prevention provisions, ACA authorizes a program of Community Transformation Grants (Section 4201) to public agencies and community-based organizations for implementing, evaluating, and disseminating evidence-based community preventive measures. Following are lessons drawn from recent collaborative and pilot projects in community health, with ACA's new investment opportunities in mind.

First, if economically disadvantaged communities are to be engaged in population health research and policy development, they will need technical and material support. Participatory research, systematic inquiry that engages those affected in a collaborative effort to produce knowledge by taking action and effecting change, offers a model for enlisting community members as full partners in novel health-promoting programs and interventions. Ideally, community-based participatory research (CBPR) should involve the reciprocal transfer of expertise, shared decision making, and mutual ownership of the products of research among researchers and community participants.[67,68] Participating in and sharing control of important events affecting their lives might be especially key for socially disadvantaged individuals, who have few opportunities to weigh in on such matters and often cannot prevent undesirable events or bring about good things.[69,70]

Second, comprehensive, multisector efforts to reshape communities inevitably are political and require political skills to balance potentially competing interests. The Robert Wood Johnson Foundation Active Living by Design projects, community initiatives that sought to modify roads, parks, and recreation facilities to promote physical activity, illustrate this point. These projects engaged extremely diverse community partners— cyclists, environmentalists, community development and public safety advocates and officials, and public health professionals— in developing a collective vision and goals for infrastructure investments and redesign.[71] Articulating goals and reconciling priorities of different constituencies to construct an overlapping consensus required political skill on the part of project directors and the involvement of political leaders as champions. Such projects not only have economic winners and losers, but also potentially involve conflicts with respect to other values (e.g., preferences for additional bike paths versus preferences for a less-developed nature preserve).[71]

Third, community foundations can spearhead local initiatives that address health from different angles, reflecting their historical missions, such as child and family well-being, housing, education, and economic development as well as health. Affinity groups such as the Council of Foundations, Grantmakers for Children, Youth and Families, and Grantmakers in Health have emphasized the importance of joint efforts among funders for the greatest impact—and to avoid redundancy—in their community investments. Private sector funders can also play a crucial role as conveners of public sector and other private organizations, attempting to leverage public dollars to support innovative practices.

A recent initiative by the Council on Foundations is an example of such leveraging. The council's Green and Healthy Homes Initiative (GHHI), inspired by the influx of weatherization funding from ARRA,[72] seeks to integrate the "greening" of buildings (energy efficiency retrofits such as insulation and caulking) with healthy housing interventions (lead abatement, mold removal, and ventilation).[73] With leadership from the Annie E. Casey Foundation and the Coalition to End Childhood Lead Poisoning (CECLP), the Council of Foundations has enlisted private funders in nine communities in this initiative to demonstrate how the resources of several federal housing intervention programs can be efficiently applied to achieve multiple objectives (Table 2).[74]

Fourth, the involvement of employers and business leaders in community health initiatives can be cultivated with small investments. With the support of the CDC and

Table 2. Baltimore's Green and Healthy Housing Initiative pilot project

In Baltimore MD, the 450-unit GHHI pilot project is serving as a national and local learning network. Services include an energy audit, a healthy homes assessment, a lead hazard risk assessment, indoor allergen testing, and follow-up with integrated remediations, counseling and education as needed.[74] Preliminary results indicate that the use of urgent care for children's asthma and other respiratory problems has diminished and that providing comprehensive assessment and integrated remediations of lead hazards, moisture and mold, safety hazards, and energy efficiency retrofits are less costly than they would be if provided separately (G. Wesley Stewart, CECLP, personal communication 2010).

in partnership with National Association of City and County Health Officers (NACCHO) and the Association of State and Territorial Health Officers (ASTHO), in 2009 the National Business Coalition on Health (NBCH) launched an ongoing effort to develop and sustain Community Health Partnerships (CHPs).[75] CHPs are collaborations between local business-led coalitions and public health officials with the goal of improving community health by taking employers' wellness efforts beyond the workplace. To stimulate the growth of such collaborations, the following year the CHP project awarded seed grants to seven communities to promote potentially replicable, evidence-based initiatives through a diverse range of approaches and local applicants.[76] NBCH provides technical assistance to the local collaborations and facilitates information-sharing among the local grantees. Measuring the return on investment for these initiatives—both their direct effect on employees as well as indirect effects on the community—may further the business case for these efforts.

Last, one of the perils of community demonstration projects, which are often initiated by researchers or universities with no more than 3–5 years of grant support, is that the interventions disappear at the end of the funding cycle, leaving community partners and participants feeling let down and even used. Cultivating a large and diverse set of partners, including revenue sources for services, and explicitly addressing the issue of sustaining a project past its initial period early on is a prerequisite of some funders for investment. The Bounce Learning Network, established by the Buffett Early Childhood Fund in collaboration with other philanthropies, has stressed financial planning for the longer term (www.educare.org). It requires that the local community board of directors, with whom the network collaborates to early childhood development and family services centers in low-income is communities, first devise a business plan to cover operational costs (Head Start grants, child care subsidies, or other private sources of funds) before the network commits capital funds for the facility.[6] Ensuring sustainability at the outset, however, may be especially challenging for new and unproven projects and in the current economic climate. It may also be an insurmountable challenge for many economically stressed communities, where the greatest need for such programs is likely to exist.

Another strategy for securing ongoing support for place-based demonstrations is to engage community development financial institutions (CDFIs).[77] This is the model on which the Pennsylvania Fresh Food Financing Initiative was built, with the participation of The Reinvestment Fund (a regional CDFI). The initiative establishes full-service supermarkets in economically disadvantaged communities with private capital. It has been replicated by several other states and cities, and served as the model for the Obama Administration's Healthy Food Financing Initiative, a $400 million program involving three federal departments: HHS, the USDA, and the Treasury.[2,78]

Tools and Strategies for Building Health into Policies and Programs

In addition to drawing on the expertise and perspectives of a diverse group of stakeholders to address health-related issues facing communities, public and private leaders need better information and incentives to make health-wise policy decisions and investments. Community health cannot remain the exclusive province of public health agencies; general government, urban and regional planning agencies, and the private sector have critical parts to play. Several initiatives at the national level suggest progress toward these ends, including an effort recently begun to integrate and develop common standards for housing interventions.

A new analytic framework, health impact assessment (HIA), has emerged in public health practice to inform local and regional decision makers about the potential health consequences—positive and negative—of their actions. HIAs are "a combination of procedures, methods, and tools by which a policy, program, or project may be judged as to its potential effects on the health of a population, and the distribution of those effects within the population."[79] While HIAs have been adopted more widely in Europe and other English-speaking developed nations over the past two decades, in recent years its use by some local U.S. public health agencies and other groups has grown.[80,81] Last year the Robert Wood Johnson Foundation and Pew Charitable Trusts launched a capacity-building program to support the development and application of HIAs at local, regional, and national levels.[82]

In the first step of an HIA, policies are screened for their potential to affect health. These policies are broadly conceived and frequently include land use and zoning

and transportation decisions. Next, the health impacts are scoped, determining which health impacts to consider. Practitioners frequently include direct and indirect effects among different populations. By examining the distribution of effects among population subgroups, HIAs attempt to understand the potential impact of policies on health disparities. After the assessment is performed, critical steps include communicating the results to policymakers and evaluating whether the HIA influenced decision-making.[83] As noted by two of the leading U.S. developers and proponents, the HIA is a "new application and consolidation of existing analytic, decision-support, and communication tools," not an entirely novel methodology.[84] Because HIAs typically need to be performed in an expedited fashion in order to affect public and private decision-making, they frequently rely on existing literature on health. Thus, HIA practitioners need a strong evidence base to draw on.

In addition to acquiring better information on potential health impacts of policies and investments prospectively, aligning the goals and standards employed by agencies with similar missions also may improve the effectiveness and efficiency of health-related interventions. As suggested by the Baltimore GHHI pilot project described in Table 2, integrating the interventions typically provided separately by several categoric housing and energy programs can cost less and result in better health outcomes.

One example of a national initiative working to promote integrated approaches to housing-related problems is led by U.S. Department of Housing and Urban Development (HUD). A program makes grants to nonprofit and government agencies for demonstrations, technical studies, and capacity building in integrated approaches to abating housing-related hazards, including mold, lead, asthma triggers, burn and fire risks, carbon monoxide, pesticides, and radon (www.hud.gov/offices/lead/hhi). In 2009 HUD and USDHHS coordinated release of the HUD Healthy Homes Strategic Plan and the Surgeon General's Call to Action to Promote Healthy Homes.[85] The joint press event is notable for stressing the need for collaborations, including the enlistment of private sector partners, in pursuing disease and injury prevention in homes.[86] A related federal collaboration with a potentially substantial impact on reducing health hazards in homes is an interagency working group including HUD, USDHHS (the CDC and the Surgeon General's Office), and the Department of Energy's Office of Weatherization, which has been tasked with developing a common Healthy Homes standard to serve as a minimum scope of work for housing repairs and improvements across federal agencies and programs.[87]

The Need for Better Information for Policy Choices

As Adler noted in 2003, when the Task Force on Community Preventive Services issued its report on community-based strategies to improve population health and reduce health disparities, the evidence base for many of the promising approaches discussed in the report was weak.[88] In a separate article in this supplement, Braveman and colleagues conclude that this remains true today.[89] The commission emphasized the importance of better monitoring of population health, at a more disaggregated level, both by geography and by income class, race, and ethnicity, to facilitate ongoing assessment of program and environmental impacts.[2]

For responsible investment of scarce resources for competing needs, sponsors of pilots and demonstration projects should provide for an evaluation component at the outset of the project. In addition, policymakers and research agencies should be alert to opportunities to assess policy changes and interventions that emerge as natural experiments. For example, if there is lottery assignment for receipt of benefit or phased implementation by location or state-level variations, conclusions about probable causal connections can be drawn with somewhat less worry about unmeasured covariates than in observational studies that do not have such a quasi-experimental design.[88,90] Finally, policymakers should consider using approaches developed by social scientists, such as Bayesian analysis,[91] that better suit the nature of the information available for assessing community-based and population-wide interventions and impacts instead of judging social policy research by the design standards applied to biomedical and clinical research.[89,92]

Conclusion

The features of neighborhoods vary in systematic ways that affect their residents' health. Parks, green spaces and recreational facilities, high-quality schools, competitively priced supermarkets and other commercial services, and zoning that keeps industrial sites and pollutants at a distance from residential areas contribute to an environment that is conducive to the achievement and maintenance of good health. These local assets reduce adverse environmental exposures, promote opportunities for self-development, and allow individuals and families to engage in health-promoting activities. Such amenities are typical of wealthier neighborhoods and municipalities; they are infrequently found in the neighborhoods in which many minority and low-income Americans (and disproportionately children) live. If every community is to enjoy conditions that are safe and support healthful living, population health must be the business of general

government and not merely the concern of public health agencies and the medical care enterprise. Businesses and voluntary organizations, including philanthropies and community groups, are essential partners.

The commission proposed several general strategies for achieving healthier communities. In this discussion the authors identified some specific steps to realize this vision and also work that remains unfinished. There is evidence than many public- and private-sector decision makers are increasingly receptive to the need for greater attention to population health impacts in the domains of community design, commercial development, and housing policy. The challenge of achieving greater integration and harmonization of efforts across multiple public agencies and private initiatives should not be underestimated. Neither, however, should researchers shy away from this vital work.

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