Health and Place: Activating Communities Around the Social Determinants of Health

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American society has always exhibited disparities in power, social status, and economic status, and the gaps separating the advantaged from the less advantaged continue today and are widening and taking on new dimensions. For example, the relationship among the unequal distribution of income, education, health, and longevity in the U.S. is well known and broadly accepted. Health disparities have been examined through a number of lenses, including a focus on access to healthcare and the influences of race and poverty on the differential health outcomes experienced by different groups. The relationship between socioeconomic status (SES) and health outcomes is understood, and SES is considered to be a reliable predictor of mortality, morbidity, and disability in the United States as well as in most industrialized nations (Adler, Boys, Chesney, Folkman, & Syme, 1993). A large body of evidence has demonstrated health inequalities associated with income levels; these findings are consistent and persistent over time (Marmot, 2005; McDonough, Duncan, Williams, & House, 1997; Mustard, Derksen, Berthelot, Wolfson, & Roos, 1997; Wilkinson & Marmot, 2003). The most disadvantaged members of society—the poor, less educated, and racial and ethnic minorities—have simply experienced shorter life spans and more ill health than the affluent (Link & Phelan, 1995).

It is also true that SES largely dictates the sort of neighborhood individuals will live in over the course of their lives, and recently, the research spotlight has focused on neighborhoods and the impact they can have on health outcomes. Scholars increasingly consider "place," (i.e., the physical, social, economic, and cultural environments in which people live, work, and play) as an important factor when investigating how socioeconomic disparities translate into health disparities. The concept that where one lives might influence one's health is hardly novel; a rich body of literature has highlighted the association of community contexts and their physical and social environmental makeup with health outcomes (Diez Roux & Mair, 2010; Ludwig et al., 2011; Steptoe & Feldman, 2001). Affluent communities tend to support healthy development of children and adults, while places of concentrated poverty, along with their attendant characteristics (e.g., distressed housing, poor-performing schools, low social capital), are associated with considerable health concerns, including low birth-weight babies, violence, and high infant mortality (Sampson & Morenoff, 2000).

As awareness of the impact place can have on health outcomes has expanded, efforts to address health disparities have increasingly focused on place. This chapter addresses the kinds of strategies for addressing health disparities that are oriented, at least in part, to the context in which the disparities exist, i.e., place-based strategies. We begin by discussing what is known about health disparities, emphasizing the relationships between poverty and health, and the relationships between neighborhoods (place) and health. We describe several theoretical frames for understanding how place and health interact, and propose a comprehensive model that combines several of these. We follow with reviews of (a) a selection of programs aimed at building healthier communities by attempting to address health and place, (b) programs in which community organizing is deployed as a key strategy, and (c) three programs we consider to hold promise because of their comprehensive approach to place-based improvements in health disparities. The chapter concludes with an argument that supports the idea that the most promising place-based strategies take a comprehensive approach, emphasizing the physical place (e.g., housing, parks and greenspace, streets and sidewalks), the social relationships existing in

the place (e.g., social capital, efficacy and agency), and taking a lifecourse view of altering the neighborhood arrangements (individual, organizational/institutional, and structural/policy) that inhibit good health.

Poverty and Health

In the 21st century, health disparities are pervasive across the United States. The National Longitudinal Mortality Study found a negative association between mortality and education, income, and occupation—all common measures of socioeconomic standing (Institute of Medicine, 2004). Further illustration of health inequalities—in terms of both morbidity and mortality—are found in:

- Infant mortality and children's health. Children born to mothers with less than a high school diploma are nearly twice as likely to die in their first year of life as those children whose mothers have 16 years or more of education (Mathews & MacDorman, 2007). Overall, children in affluent families are seven times more likely to be in good health than low-income children (Braveman & Egerter, 2008).
- Childhood overweight and obesity. Children in poverty are more likely than their more affluent counterparts to be overweight. Almost one-quarter of children living below the federal poverty line are overweight, and prevalence rates decline as families rise above the poverty line (U.S. Department of Health and Human Services, 2006).
- Poverty and health. Poor adults are five times more likely to rate their health as fair or poor as compared to those more wealthy (Braveman & Egerter, 2008).
- Activity and chronic disease. Chronic illness limits the work activity and personal care of poor adults at three times the rate it impacts wealthy adults. The prevalence of diabetes, a major cause of illness, disability, and death, is twice as great in poor adults; heart disease is 50 % more prevalent (Braveman & Egerter, 2008).
- Life expectancy. Adults who have not finished their high school education can expect a life five years shorter than adults who have gone on to complete their college education (Braveman & Egerter, 2008).

Link and Phelan (1995) posit that more affluent groups enjoy power, prestige, and social connections that they utilize effectively to the benefit of their health and increased longevity, and that socioeconomic status is therefore a "fundamental cause" (p. 81) of health disparities. Those with greater resources are able to more easily live a healthy lifestyle, choose healthy neighborhoods in which to live, obtain safe and fulfilling jobs, and surround themselves with an effective social network. Health disparities associated with poverty and other socioeconomic variables impact children, adults, and families, compelling some health experts to refer to social class as "the ignored determinant of the nation's health" (Isaacs & Schroeder, 2004).

Neighborhoods and Health

Neighborhoods are particularly useful settings to examine socioeconomic inequality and concomitant health disparities as they provide a milieu in which to explore the physical, social, economic, and cultural environments that can impact the health of individuals and families.

Neighborhood place of residence is "strongly patterned by social position and ethnicity" (Diez Roux & Mair, 2010, p. 125) and could therefore be a vital contributor to social inequalities in health. For low-income individuals with limited mobility beyond the street or block, neighborhoods may exert a particularly strong influence on life and health (Bernard et al., 2007).

Research on neighborhoods and health, which surfaced in the 1980's, relied primarily on secondary data linking individual health status to a census tract area. The seminal Alameda County study, for example, considered social and physical environments to be determinants for excess mortality in low SES populations (Haan, Kaplan, & Camacho, 1987). The authors found a 50% higher risk of death for individuals living in poor neighborhoods, even after controlling for other sociodemographic factors such as age, race, employment, social isolation, access to medical care, health status, and individual income. The Alameda study identified a powerful effect of place of residence on health above and beyond individual SES.

Diez Roux and Mair (2010) note the limited ability for cross-comparison of early studies due to varied use of census tracts as neighborhood proxies and the variable strengths of associations across studies. Much of this early research supported the premise that neighborhoods impact health beyond the influence of individual characteristics. Living in under-resourced or low SES neighborhoods is "generally associated with poor health outcomes including greater mortality, poorer self-reported health, adverse mental health outcomes, greater prevalence of chronic disease risk factors, greater incidence of diseases such as cardiovascular disease and diabetes, and adverse child health outcomes" (p. 127).

A more recent longitudinal study used data from Moving to Opportunity (MTO), a project sponsored by the Department of Housing and Urban Development conducted from 1994 to 1998, to investigate the association between neighborhoods of residence on specific health outcomes, concentrating on obesity and diabetes. MTO randomly assigned women and children living in high-poverty public housing into one of three groups: a group receiving housing vouchers agreeing to move to low-poverty areas; a traditional voucher group; and a control group. Survey data gathered as part of a follow-up to MTO in 2008 to 2010 included health outcomes data. The study found that those women who moved to low-poverty regions exhibited a decreased risk for extreme obesity and diabetes, further supporting the importance of neighborhood environments on health behaviors and health outcomes (Ludwig et al., 2011).

The influence of place may begin in childhood and carry lasting effects through adulthood. Johnson, Schoeni, and Rogowski (2011) investigated adult health trajectories in relationship to neighborhood environments experienced as children. These researchers hypothesized that, above and beyond influences of individual and family SES, neighborhood conditions during childhood would influence health and wellness into adulthood. They write, "Living in a neighborhood with concentrated poverty may have consequences above and beyond those of growing up in a poor family because of social isolation, crime, weakened social institutions, unrelenting stress, inferior health care accessibility and other factors" (p. 626). Using longitudinal data from the Panel Study of Income Dynamics (PSID), this study found a relationship between living conditions during early childhood and adult health status. Adults having lived in poverty neighborhoods during their childhood were found to have spent 45% of their adult years in fair or poor health. Those growing up in non-poor neighborhoods spent a

much smaller proportion (15%) of their adult years in fair or poor health, signifying lasting effects of growing up in a high-poverty neighborhood (Johnson et al., 2011).

These studies point to the contribution of neighborhood place of residence to health disparities. Macintrye and Ellaway (2003) suggest five aspects of neighborhoods thought to promote or hinder good health: (1) neighborhood physical attributes such as air and water that all residents share; (2) healthy environments for home (including healthy housing), work, and play, such as safe places for children and adults to exercise; (3) services such as education systems and public transportation that families need to support their every-day activities; (4) social and cultural aspects of the neighborhood; and (5) residents' and other stakeholders' perception of the neighborhood. Each of these five domains is socially determined and each may be health promoting or health deterring. Therefore, it is suggested that as health is in some part the result of the extent to which these aspects are present in a neighborhood, the most effective health interventions may be those that take them on directly.

In the next section we explore several mechanisms through which neighborhood environments exert an influence on health. These mechanisms include (a) effects on physical activity, (b) access to healthy food, (c) norms, social capital, cohesion, and collective efficacy, and (d) social relationships and perceptions of safety and violence.

Neighborhood Environments: Effects on Physical Activity

The potentially serious effects of physical inactivity—including heart disease, diabetes, hypertension, obesity, and premature mortality—are well documented, and have generated a high degree of concern within public health systems. Despite this grim association, the 2000 Behavioral Risk Factor Surveillance System found that only 26% of adults engage in the recommended amount of physical activity (Macera, Jones, Ham, Kohl, & Buchner, 2003). Often, personal characteristics such as motivation and self-efficacy are used in explanatory mechanisms for inactivity in a population (Sherwood & Jeffery, 2000). Individual-level recommendations are then applied to increase physical activity, with little attention paid to the limitations and supports for physical activity provided by the social and physical environments in which one lives. "Advising individuals to be more physically active without considering social norms for activity, resources and opportunities for engaging in physical activity, and environmental constraints such as crime, traffic or unpleasant surroundings, is unlikely to produce behavior change" (McNeill, Krueter, & Subramanian, 2006, p. 1012).

The study of environmental impacts on physical activity has focused primarily on how neighborhoods promote walking not only for exercise but as part of the typical experience of living in the community. Ross (2000) hypothesized that neighborhood context would have an impact on walking. Her study found that both lower income and more affluent neighborhoods influenced walking, but in distinctly different ways. After controlling for individual factors such as SES, race, and education, this study found that residents of both high poverty and affluent areas walked in their neighborhoods. No distinctions were made between walking for exercise and walking out of necessity, and no data were collected on automobile ownership. In lower-income neighborhoods, even when residents expressed fear of crime and victimization, the density of housing encouraged greater walking than in non-poor neighborhoods. Ross conjectures that individuals in economically disadvantaged neighborhoods would likely walk

even more if they were less afraid when leaving their homes. In contrast, more affluent neighborhoods create a culture that supports walking for good health. An after-dinner walk or a walk to school is visible to others in the neighborhood and creates impetus for those observing to do the same. This study did not, however, explore the meaning of walking to the groups they studied or their perception of health benefits. What remains unclear is if the known health rewards of walking are realized when fear of crime and victimization overshadows this "healthy" action.

A number of studies have demonstrated that the quality of the environment influences the extent to which residents were physically active. In a study of eight European communities, Ellaway and colleagues (2005) used data collected as part of the Large Analysis and Review of European Housing and Health Studies (LARES). Health questionnaires obtained self-report of health, including height and weight measures that were subsequently used to calculate Body Mass Index (BMI). Trained surveyors then assessed through direct observation of the physical environment such things as litter, graffiti, and the amount of green space and open areas. Residents of neighborhoods with more graffiti and litter and less open green space were 50% less likely to be physically active and more than three times more likely to be obese than their counterparts in more inviting communities (Ellaway, Macintyre, & Bonnefoy, 2005).

Macintrye (2000) describes a pattern that she refers to as "deprivation amplification" (p. 6) found over a decade of research in Glasgow, Scotland. In under-resourced places where low-income individuals reside, local facilities for physical activity are substandard. Tennis courts and sports facilities, for example, were less frequently found in poorer areas, as were green spaces to walk or play with children. Research in the United States demonstrates similar findings. Using data from the Multiethnic Study of Atherosclerosis (MESA) study, Diez Roux et al. (2007), found an association between adults living in close proximity to recreational and sports facilities and participation in physical activities.

McCormack, Rock, Toohey, and Hignell (2010) reviewed qualitative studies that investigated urban parks and their associations with physical activity. Their review of 21 such studies revealed the importance of both the physical conditions of parks and social attributes towards encouraging physical activity. As anticipated, parks that are perceived as safe and well maintained support children and youth in use of the space for physical activity. In an analogous fashion, perception of neighborhood safety can influence physical activity and health of children. In the United States, parental perception of their neighborhoods as less safe was associated with increased risk for their children being overweight by age seven (Lumeng, Appugliese, Cabral, Bradley, & Zuckerman, 2006).

Neighborhood Environments: Access to Healthy Food

Like physical activity, nutritional practices are associated with a host of health concerns. Diets high in fat and calories have been associated with numerous health problems, including heart disease and obesity, while diets rich in wholesome and nutritious food are seen as prerequisites for good health. In 2005, the diets of less than one quarter of Americans included the recommended servings of fruits and vegetables. Furthermore, chronic diseases related to poor diets and nutrition costs the U.S. over $33 billion in medical costs (Bovell-Benjamin, Hathorn, Ibrahim, Gichuhi, & Bromfield, 2009).

In their study of food environments and obesity, Cummins and Macintyre (2006) argue that poor people with less education are more likely to be obese, and "recent observational studies have found that dietary patterns and obesity rates vary between neighbourhoods, with living in a low-income or deprived area independently associated with the prevalence of obesity and the consumption of a poor diet" (p. 100). Unhealthy diets may be influenced, in part, by the ease with which healthy and nutritious foods are available and affordable. Focus group participants in Schulz and Lempert (2004) voiced their concerns that the quality of food in their local convenience stores was poor, yet riding two busses to access a higher quality market outside of their neighborhoods was challenging. The result, according to one woman, is "it's always easier to do the wrong thing than it is to do the right thing when it comes to nutrition" (p. 447). A number of studies support this assertion.

Access to healthy food has profound implications for diet and nutrition. When supermarkets are available in African American neighborhoods, residents are more likely to reduce the amount of fat in their diets and eat healthier diets—including more fruits and vegetables (Morland, Wing, Diez Roux, & Poole, 2002). Low-income neighborhoods and neighborhoods with predominately African American residents are less likely to enjoy an abundance of reasonably priced produce and other fresh products due to a paucity of nearby supermarkets. The lack of healthy choices at the local corner market and limited transportation to reach larger grocers compound matters (Altschuler, Somkin, & Adler, 2004; Macintyre & Ellaway, 2003; Morland et al., 2002).

The prevalence of obesity has been demonstrated to be associated with the location of convenience stores, supermarkets, and fast food chains (Morland & Evenson, 2009). Moreland and her colleagues (2002) discovered in a number of cities in the United Sates that supermarkets are four times more likely to be found in white neighborhoods than in African American neighborhoods, and that fast food restaurants, not known for serving healthy fare, are more likely available in middle- and low-income areas than more affluent communities. Similarly, healthy foods were found less available in Black and low-income neighborhoods in Baltimore than in white and high-income neighborhoods. This study used a healthy food availability index in a cross-sectional study of 159 census tracts (Franco, Diez Roux, Glass, Caballero, & Brancati, 2008).

Two qualitative studies attempt to gain insight on the ways residents take action to obtain food within their environment despite neighborhood conditions. First, Rose (2010) demonstrates how residents engage in food practices in Detroit. This study found that residents of low-income neighborhoods faced numerous struggles to obtain healthy, nutritious food at a cost that was affordable. Residents displayed resourcefulness obtaining food, despite the challenge of finding food locally available. For example, fear for personal safety when walking to stores and limited availability of food banks nearby were cited as constraints. Nonetheless, residents shared transportation costs to find food sources outside of the area and carefully examined food purchased in nearby stores known for poor quality provisions. Next, Altschuler, et al. (2004) captured resident activism targeting securing a supermarket for their low-income neighborhood. This community achievement was not merely about obtaining healthy food, but also signaled a neighborhood moving towards recovery from crime and drugs. As with the Rose study (2010), these examples of engagement represent a type of activism that illustrates how people can act within and upon their neighborhood environments to secure better health.

Each of these studies provides evidence for the ways that the physical environment promotes or hinders individual behaviors—specifically physical activity and the consumption of healthy foods. These behaviors are directly linked to intermediate and chronic health outcomes. These important studies do not, however, fully explain how and to what extent individuals act within and upon the physical environment and how such actions result in healthy or unhealthy developmental trajectories. Overreliance on the assertion that environment causes lack of physical activity and unhealthy food consumption is mistaken, overly deterministic, and overly simplistic. It is, rather, the complex interplay of individuals reacting to and acting on their environment that shapes healthy behaviors and ultimately, health. Moreover, efforts to change health outcomes by changing aspects of the environment without consideration of personal and collective agency are likely to be, at best, partial solutions.

Neighborhood Environments: Norms, Social Capital, Cohesion, and Collective Efficacy

Research on social environments acknowledges that people are interconnected, and therefore their health and well being are interconnected. According to Sampson (2003), social processes that occur within collective neighborhood life mediate health outcomes and must be explored to understand neighborhood impacts on health. Putnam (1995) refers to social capital as those "features of social organization such as networks, norms, and social trust that facilitate coordination and cooperation for mutual benefit" (p. 67). Social supports and positive relationships—both between individuals and across a community—are important contributors to health. Strong social networks and high levels of social cohesion are protective of good health, while individuals who experience less social support are more likely to experience illness and premature death. Social isolation is more commonly experienced by those living in poverty – and communities with the widest income gaps separating the rich from the poor exhibit less social cohesion, more violent crime, and higher rates of heart disease (Wilkinson & Marmot, 2003).

Social capital and a related concept, collective efficacy, are considered somewhat intangible yet highly influential factors within a neighborhood. Sampson, Raudenbush, and Earls (1997) define collective efficacy as " social cohesion among neighbors combined with their willingness to intervene on behalf of the common good" (p. 918). They found that tight-knit communities with high collective efficacy are more likely to act in union against crimes in the community. It is asserted that social capital and collective efficacy influence the quality of life in a neighborhood such that in places with higher levels, neighbors can trust each other and rely on each other more. Knowing that a neighbor can be relied upon for help is theorized to reduce stress and worry. An alternative notion is that collective efficacy is an indicator of political power, such that neighborhoods with high collective efficacy work together to maintain or improve neighborhood conditions (Cohen, Finch, Bower, & Sastry, 2006).

Using state-level data, researchers explored the connections between levels of social capital (measured by perceived levels of fairness, trust, helpfulness of others, and levels of civic engagement) and overall mortality rates. After controlling for income and poverty, a strong correlation was discovered between social capital and lower rates of mortality. Additionally, states with the greatest income disparities had very low levels of social trust and civic engagement. Large gaps separating the rich from the poor were "powerfully and negatively related to level of investment in social capital" (Kawachi, Kennedy, Lochner, & Prothrow-Stith,

1997, p. 1495). In subsequent work, Kawachi and colleagues investigated the relationship between individual factors such as low-income, education, and smoking and self-rated health using data from the Behavioral Risk Factor Surveillance System. This study found that these individual factors were associated with self-report of poorer health. After controlling for these individual factors, this study demonstrated that where people lived and levels of trust and cohesion within their place of residence made a difference in their self-reported health status. This relationship was intact for all income levels, while those in the lowest income groups saw the largest effects of social capital on health (Kawachi, Kennedy, & Glass, 1999).

Lochner, Kawachi, Brennan, and Buka (2003) examined social capital on a smaller scale, extending previous research on social capital to the neighborhood level. This study used a cross-sectional design using data from the Project on Human Development in Chicago. Data linked deaths for persons between the ages of 45 and 64 years, race, sex, and neighborhood social capital across more than 300 neighborhoods to explore the association between social capital and mortality rates. Using perceived reciprocity and trust and organizational membership as indicators of social capital, this study found that higher neighborhood social capital was associated with lower death rates for total mortality. For whites, a similar relationship was seen for death from heart disease and from other causes, while this relationship was less strong for African Americans.

Comparable research attempted to distinguish between two types of social capital—bonding and bridging social capital—and their distinct relationships with self-reported health status. Bonding social capital was conceptualized as relationships between persons similar to each other, while bridging social capital is that derived among dissimilar persons. Modest levels of protective health mechanisms for both forms of social capital, again greater for whites than for African Americans, were identified in this study as well (Kim, Subramanian, & Kawachi, 2006).

Cohen, et al. (2006) investigated collective efficacy not only in relationship to self-report of health, but with a specific intermediate health indicator, that of overweight in youth. Youth overweight was chosen as the focus of this study in part because youth generally do not choose the neighborhoods in which they live and are reliant on their social environments. Measures of height and weight were used to calculate BMI with data from the Los Angeles Family and Neighborhood Survey (LAFANS), and items relating to collective efficacy were collected based on the work of Sampson et al. (1997). After controlling for neighborhood SES and other individual level factors, this study demonstrated significant relationships between collective efficacy, BMI, risk for overweight, and overweight status in youth. Youth in neighborhoods with low efficacy demonstrated 64% higher odds of being at risk for overweight than those youth living in neighborhoods with average levels of efficacy. Social relationships among adults are therefore associated with overweight status of neighborhood children (Cohen et al., 2006).

In neighborhoods where many neighbors know and trust each other, innovative health ideas such as preventive health measures are more likely to be accepted and implemented. In such communities, healthy behaviors such as walking for exercise are more likely to become normal, accepted, everyday activities (Kawachi et al., 1999). Likewise, when neighborhoods provide walkable designs, residents are more likely to know their neighbors and be involved socially—building greater social capital (Leyden, 2003).

Cattell's (2001) qualitative work and series of case studies in two London neighborhoods realistically capture true meanings of neighborhoods and attempt to understand the multiple aspects of social connections and exclusions. In a working-class neighborhood, social networks and social capital were found to be shaped by the context of the neighborhood, including employment history, resources, services and facilities, housing, as well as opportunities for casual meetings. Identity with a neighborhood was found tied to class identity, with working class residents expressing pride in their employment history. Social norms for reciprocity in this community included those for caring for children and intervening when children are acting out of bounds. In a contrasting neighborhood, there was little sense of neighborhood pride or history. Housing design coupled with neighborhood transience made social network development difficult. Here, residents do not trust one another, feel alienated from community, and keep to themselves. Many residents fear crime and drug dealing and express that stress from living in the neighborhood impacts health negatively. Within this otherwise dark picture, however, there were still positive aspects of the social community, including self-help groups and tenants groups (Cattell, 2001).

For women in Detroit, social interactions were found to be vital to health and paramount to the maintenance of social relationships and roles in the neighborhood. Relationships and health were clearly situated for women in the study within the context of their neighborhood. For example, women spoke easily of the importance of social relationships to their health, and clearly saw the contradiction when they hesitated to open their doors or invite others into their homes out of fear that someone would intrude on their personal matters or that young people might steal from them. They saw neighborhood conditions as the source of worry, leading to the subsequent closing of their doors to others. They recognized that this action undermined the social relationships that otherwise may provide connections and supports integral to good health as they defined it (Schulz & Lempert, 2004).

Similarly, women in Schulz and Lempert's (2004) study spoke of the ways that they limited the outdoor activity of their children in the neighborhood to protect them—again fully recognizing that constraining the social relationships of children might also impact their health negatively (supporting the findings from the 2006 study by Lumeng, et al.). These women did make attempts to remain socially connected to good friends and family and physically active for their health and wellness, including active participation with younger generations and maintaining valued social positions through cooking and sharing meals (Schulz & Lempert, 2004).

Neighborhood Environments: Social Relationships and Perceptions of Safety and Violence

Geis and Ross (1998) found that living within neighborhood conditions lacking social control—places where violence, graffiti, crime, and drug use are common—produces feelings of powerlessness among residents, especially when connections to neighbors have frayed. "As a belief, perceived powerlessness forms the mental bridge between external conditions and emotional and behavioral responses. Through continued experience with objective conditions of powerlessness and lack of control, individuals learn that their own actions cannot produce desired outcomes" (Geis & Ross, 1998, p. 233). Social bonds formed between neighbors provide a level of protection against neighborhood disorder and subsequent feelings of powerlessness. Unfortunately, those individuals that need these social connections most greatly due to

neighborhood conditions are least likely to attain them (Geis & Ross, 1998). Broken social bonds therefore could help explain studies that demonstrate that residents of neighborhoods with high levels of stressors in the forms of crime, violence, traffic, and noise were more likely to self-report poorer health and physical functioning (Steptoe & Feldman, 2001).

A qualitative study considered how the concept of social capital and residents' perception of their neighborhoods might impact health. Through a series of interviews and focus groups in diverse neighborhoods in a large city in California, Altschuler, et al. (2004) identified three main themes relevant to neighborhoods and health: meaning of neighborhood, amenities and liabilities, and mobilization and activism in neighborhoods. When speaking about meaning of their neighborhood, residents mentioned their block-level relationships with neighbors and what the authors identify as bonding social capital and trust and reciprocity between families.

Personal safety and the safety of neighbors were very important to residents and related to feelings of belonging. In lower-income neighborhoods, higher levels of crime and feeling unsafe were a bigger problem than in middle-income communities, and perceptions of safety were somewhat relative to neighborhood norms (Altschuler et al., 2004). Fear for personal safety, especially when walking in the neighborhood, was cited as a stressor for some residents in working-class and low-income neighborhoods. This contrasts to financial stress that residents of middle-income neighborhoods express associated with the cost of living in their neighborhood. Residents who felt a sense of belonging in their neighborhood stated that their place of residence contributed to good health or alleviated some of the stress that they experienced. Perceptions of beauty also differed between neighborhoods. Prosperous neighborhoods valued the natural splendor of their neighborhood which included woods and streams. Residents of lower SES communities mourned the absence of the most basic green spaces such as lawns and medians (Altschuler, et al., 2004).

Altschuler et al. (2004) also investigated how neighborhood residents could be agents of change—mobilizing and acting in response to neighborhood threats. In lower SES neighborhoods, threats were in the forms of graffiti, crime, and violence. More prosperous neighborhoods bonded against new retail stores entering the neighborhood or against street lights that might destroy the peaceful darkness of their wooded street. Again, while not explicitly conceptualizing this action in terms of human agency, this study demonstrates they ways that social cohesion can be transformed into collective efficacy. This study concludes that "becoming involved in one's community and organizing for its improvement involves the development of ties with others in the neighborhood, becoming more involved citizens, and possibly the provision of affective support and self-esteem" (Altschuler et al., 2004, p. 1228).

Models for Understanding Place and Health

As early placed-based research developed, a number of conceptual paradigms for the spatial patterning of health emerged. Individual-level, compositional explanations (who you are) propose that individuals living in a neighborhood share characteristics that explain, in part, the connection of health to place of residence. Compositional models require individual-level interventions to improve health status. In contrast, structural-level or contextual models (where you are) contend that the environment impacts groups of residents living within it over and above the contribution of individual characteristics (Macintyre & Ellaway, 2003). Macintrye and

Ellaway (2003) claim "the distinction between people and places, composition and context, is somewhat artificial. People create places, and places create people" (p. 26), a notion closely aligned with an ecological framework.

Bernard et al. (2007) provide a compelling conceptualization of neighborhoods and the local production of health, with an emphasis on resource distribution and individuals as active agents in acquiring resources. They posit that health disparities are in large part the result of access to resources—both positive resources such as good schools and green space and negative resources such as liquor stores and broken social ties. Those more dependent upon neighborhood resources—often the poorest, sickest, or those without transportation—experience the impact of neighborhood influence to a greater degree than more mobile groups. Building on the work of Galster (2001), they propose the notion of users and producers and resources—individuals who influence the movement of neighborhood resources.

> Through their consumption, service use, political processes and social connection patterns, these neighborhood actors reproduce and transform their context, while the lifestyle and health of individuals are affected by the goods consumed, the services used, and the social relationships built. This collective lifestyle heuristic is an attempt to capture this dialectical relationship between individuals and places. (Bernard et al., 2007, p. 1840)

Considerable emphasis is placed not merely on the number and types of resources that are available within a neighborhood, but the systems by which those resources are distributed across different neighborhood families and individuals (Bernard et al., 2007).

This kind of explanation moves away from the simplistic contextual vs. compositional analysis of neighborhood health and instead presents a more dynamic model that explores the relationships between people and environments (*how you interact with your environment*), proving more useful in understanding the complexities of spatially distributed health outcomes.

Ecological Frameworks, Lifecourse Theory, and Health Disparities

Health research and health promotion have often located personal responsibility at the nexus of efforts to improve health. This strategy is predicated on the assumption that personal health behaviors (e.g., exercise, diet, medication adherence) are infinitely modifiable given adequate education and motivation. Such an individual focus is consistent with Western ideology and the American tenet that we are masters of our own fate. But firm attachment to these principles fails to acknowledge the ways that health behaviors are socially acquired within groups, and ignores the roles of the physical and social environment in creating opportunities to engage in a healthy lifestyle. Becker (1993) challenges public health systems to widen their perspective:

> But to turn our attention beyond the individual—to recognize the social and economic determinants of disease, health, and wellness—is complex and threatening. Doing something about poverty, racism, unemployment, inequitable access to education and other resources, and quality of environment involves notions of planned social and economic change. (p. 4)

Capturing "upstream" determinants of health and "the processes through which the social structure shapes the social circumstances and health experiences of different socioeconomic groups" is unachievable with an individualistic focus alone (Pearce & McKinlay, 1998). Thus, as socioeconomic disparities in health cannot be understood or remedied by the application of an individualistic, personal-behavior paradigm, the systems and structures that generate and reproduce health inequities must also be in focus.

Lifecourse theory provides a lens for studying health inequalities occurring within social pathways and across diverse developmental trajectories. Five principles of lifecourse theory are helpful to place current research in context and to guide both future studies and the development of health interventions. The first principle, *life-span development*, acknowledges that development is a life-long process, and can be applied to better understand the intersection of health, place, and SES over the life course as cohorts live and develop in different contexts over time (Elder et al., 2004). The next principle, *agency*, encompasses the ways that choices made and actions taken across the life span promote or hinder the attainment of a healthy life. "Children, adolescents, and adults are not passively acted upon by social influence and structural constraints. Instead, they make choices and compromises based on the alternatives that they perceive before them" (Elder et al., 2004, p. 11). Individuals are active agents who not only mediate the influence of social structure but also shape social structure via the choices they make and the goals that they set. The third principle, *time and place*, reflects that lives are embedded in and shaped by the historical times and places experienced over a lifetime (Elder et al., 2004). The fourth principle, *timing*, can be applied to help understand how the "developmental antecedents and consequences of life transitions, events, and behavior patterns that vary according to their timing in a person's life" (Elder et al., 2004, p. 12) are related to health inequalities. The fifth principle, *linked lives*, suggests that lives that are interdependent and reliant on social relationships (Elder et al., 2004). The presence and quality of social relationships, created within and shaped by one's environment, have increasingly been linked to health status (Wilkinson & Marmot, 2003). These five principles suggest the need to understand human lives and health outcomes within a social and historical context, with consideration to relationships with significant others (Elder et al., 2004).

Graham applies lifecourse theory to build three explanatory models for health disparities (2002). A "critical periods model" (p. 2007) conceives that SES disparities in health are determined by exposures (e.g., poor fetal nutrition, childhood deprivation, family disruptions and disadvantage) that occur at critical periods of development to influence physical and mental health status in adulthood. Next, a "pathways model" (p. 2007) proposes that conditions early in life form a conduit towards adult health, with disadvantage early in life affecting future trajectories such as school and future employment. Finally, "accumulation models" (p. 2007) view advantage and disadvantage to have both a cumulative and a dose impact on health (Graham, 2002). Cumulative advantage is the "systemic tendency for interindividual divergence in a given characteristic (e.g., money, health, or status) with the passage of time" (Dannefer, 2003, p. 237). Cumulative impacts of disadvantage, endured consistently over the life course, pose the greatest likelihood for development of poor health as an adult. Thus, improvement in socioeconomic position at a later stage in life can ameliorate—though not eliminate—health risks associated with early hardship (Graham, 2002).

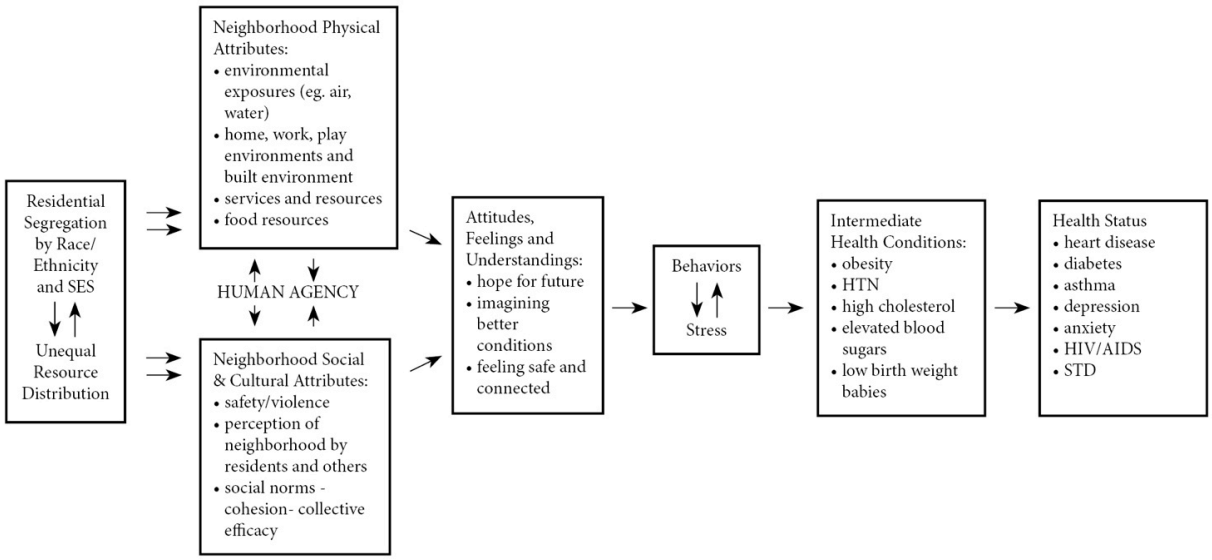
According to Elder (1985), uncovering the social, physical, and economic life trajectories of groups of individuals, the stability or change in lives over time, and the relationships between life trajectory and transitions, can help to better understand health inequalities and better shape responses. But despite the passing of nearly 25 years since the public health field has drawn attention to social-ecological models of health improvement, calling for a focus on both individuals factors and social-environmental determinants of health, leaders in control of policy and funding often are stifled by short-term visions for achievement within narrow time frames.

> Because social norms and the physical environment of a community can take years to show meaningful change, ecological models that account for a long, often slow chain of events are necessary both to program design and to help decision makers understand the need for patience and continued support (Glanz & Bishop, 2010, p. 410).

A Comprehensive Model

What we learned from our broad review of the literature encourages us to propose a comprehensive framework for understanding and addressing health disparities. We incorporate concepts associated with lifecourse theory and build upon the work of Cummins et al., (2007), Diez Roux and Mair, (2010), Bernard et al., (2007), and Macintrye and Ellaway, (2003). Our framework, illustrated in Figure 1, recognizes what is clearly a complex pathway from the health disparities associated with poverty and place to improvements in the health status indicators we typically use to measure well being. It begins with the acknowledgement that low-income and segregated neighborhoods are under-resourced to a degree to which they fail to provide residents with physical and social environments that foster good health, as outlined by Diez Roux and

Figure 1.
A Comprehensive Framework for Understanding and Addressing Health Disparities



Mair, 2010 and Macintyre and Ellaway, 2003. What differentiates our model from its predecessors is the recognition that residents of low-income neighborhoods are not simply passive victims of the effects of their neighborhood environment, though they may indeed be victimized by it. Instead, individuals are understood to exert agency in two distinct ways—*within* and *upon* the environment in which they live. In this model, individual agency is applied within the constraints and opportunities existing in the environment, and the interaction moves the individual/family along a health trajectory—good or bad—that reaches into the future. The choices individuals make help shape their attitudes, feelings, and understandings about their neighborhood and the possibilities for their future there. The cumulative stress of living in a low-income neighborhood also influences residents' behaviors; and those behaviors in turn help perpetuate or reduce the experience of stress. When residents individually and collectively exert agency, their potential to transform the surrounding physical and social environment, for better or worse, emerges.

Over time, these behaviors and decisions have contributed to the development of the health conditions typically associated with low-SES, but also have the potential to derail these negative health conditions and begin to alter the future health trajectory of individuals and the community. It is toward this potential we think interventions that target both the physical and social contexts for health via the mechanism of human agency have the most potential for success. Engaging residents in altering the conditions in which they make choices can produce a "snowball effect" in which more involvement and action produces more confidence to change the future, and more confidence produces behaviors and decisions that are more likely to promote health. Given that the social determinants of health are primarily structural in nature, this engagement is a critical aspect of communities' ability to ultimately confront the systems and policies that have contributed to the development of an unhealthy context to begin with.

Place-based Strategies for Health Improvement

Despite growing substantiation for health inequalities, little measurable reduction in health disparity measures has been demonstrated at the national level in the United States. Healthy People 2010, the Centers for Disease Control and Prevention strategy to create a healthy nation for all, failed to demonstrate progress in 84% of targeted health disparities between racial and ethnic groups over 10 years (Centers for Disease Control and Prevention, n.d.). In addition, "health disparities among income groups, as well as by geographic location and disability status did not change, with the exception of a few objectives" (p. ES-22). Interventions designed to impact health disparities usually emerge from health provider organizations or academic medical institutions and strive to apply or create evidence-based interventions for established disease-specific disparities (e.g., asthma, heart disease). Many programs of this sort frame themselves as community based interventions, but the community referred to is often vastly larger than a neighborhood, and while interventions may be delivered within neighborhoods, an overarching focus on the place as the context for health is rarely evident (e.g., Carleton, Lasater, Assaf, Feldman, & McKinlay, 1995; Morgan et al., 2004).

Other initiatives considered to be place based do not focus explicitly on health, but frame their interventions around improvements in the community that could potentially foster better health outcomes via enhancements to systems in the neighborhood environment. These include such strategies as Promise Neighborhoods (Jean-Louis, Farrow, Schorr, Bell, & Fernandez,

2010; Lester, 2009) and community schools (Bookmyer, & Niebuhr, 2011), both of which engage an array of community-based nonprofits and agencies to wrap programs and services around community residents in ways that attempt to transform the educational, economic, and/or other outcomes of individuals and families. This type of strategy often attempts to engage residents in some part of the process, but residents' main role in these initiatives tends to be as the recipients of the programs and services offered, rather than agents of community change.

Some interventions offer both a community orientation and a focus on improving health. Increasing children's play and physical activity in the face of an obesity epidemic has become the focus of many programs, for example KaBOOM! a national non-profit that advocates for school recess and assists communities to build their own playgrounds. Others, such as Healthy in a Hurry corner stores in Louisville, KY work to increase the accessibility and availability of healthy food in neighborhoods considered to be food deserts. Still others combine approaches, for example Healthi Kids, a Monroe County, NY community-based coalition promotes policies that support healthy food in schools and childcare centers, more physical activity and safe play areas, and breastfeeding for a healthy start in life (Healthi Kids, 2010).

A somewhat different array of programs target improving neighborhood environments through the development of policies that support safer, more livable environments. One example is Complete Streets, in which urban planners use ordinances designed to ensure safe and attractive access to and through communities to individuals of all abilities and ages (McCann, B., & Rynne, S., 2010). A more comprehensive example is the Port Towns Community Health Partnership in Maryland that works to change community conditions associated with health disparities "by encouraging sustainable practices, policies and neighborhood conditions that enable a healthy and active environment" (Port Towns Community Health Partnership, 2011). This multi-sector approach includes targeting obesity through creating opportunities for healthy eating and supporting policies that help improve the larger environment for active living.

A prominent example in 2012 is First Lady Michelle Obama's Let's Move program, which explicitly targets childhood obesity through multifaceted interventions. While neighborhoods are not the primary focus for Let's Move, several of its strategies for taking action target groups of people in neighborhoods acting together, e.g., community and faith organizations. Let's Move offers an array of ideas and numerous how-to guides for such health-promoting activities as planting a community garden and creating opportunities for physical exercise. Let's Move also includes ideas for elected officials related to policy change that can support healthy behaviors, e.g., enhancing public safety near parks and other public spaces where children are likely to be. The program has supported legislation at the national level, including the Healthy, Hunger Free Kids Act, that contributes to the future success of Let's Move by providing guidance and funding to school-based feeding programs (Healthy Hunger Free Kids Act of 2010, 2010). Let's Move is partnered with the President's Task Force on Childhood Obesity, and represents a framework for addressing this issue across a variety of domains, including families, schools, and communities. The materials provided through the program bring together an impressive number of ideas for action as well as resources community groups and organizations can use to implement their plan. Interestingly, while the research undergirding the findings of the Task Force clearly associates the issue of obesity with the social determinants of health (White House Task Force on Childhood Obesity, 2010), this connection is much less visible in the Let's Move toolkit or on the website, which suggests that "just a few lifestyle

changes" will help children lead healthier lives. It remains to be seen whether Let's Move will provoke the kinds of broad change in families and communities it hopes to achieve.

Community Engagement and Organizing

How people are engaged in these interventions matters a great deal, as the literature on community engagement and health demonstrates. Community engagement and organizing strategies represent a general approach to community building, and have been used to engage people on myriad issues at the global, national, regional, local, and neighborhood levels. The manner of engagement, or the ways that specific people are encouraged to participate, looks very different depending on the level at which the organizing takes place and the purposes of the entity deploying the strategy. For example, community engagement can occur at the grassroots (among residents of a place), or at the organizational or institutional level (among professionals serving a place). Much of the literature that describes engaging the community to improve physical and social health refers to building coalitions with agency and institutional membership, while very little attention has been paid to grassroots, neighborhood-based coalitions (Kegler & Wyatt, 2003). In addition, the community change addressed by these coalitions is usually explored through the lens of service delivery such as new programs, services, or practices for needy community members as opposed to grassroots efforts to engage community members in changing the physical, social, and economic environments of a neighborhood. Additionally, when coalitions of professionals attempt to engage and mobilize residents at the neighborhood level, it is often in a top-down manner around the health interests of institutional leaders. For example, Kegler and Wyatt (2003) explored factors integral to mobilizing neighborhoods around teen pregnancy prevention. Both the specific health focus and the formation of a neighborhood coalition were driven by grant funding from the Centers for Disease Control and Prevention, as opposed to representing a health concern and action plan identified by neighborhood residents. Their findings address why top-down approaches to engaging community members often fail, and are therefore pertinent to agencies considering health interventions at the neighborhood level. In particular, the authors note that "sitting in meetings, reviewing data, and developing action plans may represent a professional approach to addressing problems that has little relevance to low-income families trying to make ends meet" (Kegler & Wyatt, 2003, p. 167).

Stokols, Grzywacz, McMahan, and Phillips (2003) identify three key elements to creating community capacity to improve health. The first is the engagement and mobilization of assets, including individuals as assets, towards action to improve health. Next, assets must be expanded and diversified as time passes, bringing new energy and resources to bear. Third, community efforts must be sustained over time to allow for improvements in health status. Underscoring the success of community engagement and mobilization is the privileging of health concerns most important to neighborhood residents over those of medical experts or institutional partners.

Organizing efforts with demonstrated success in engaging residents to improve neighborhood and community environments are, for the most part, not explicitly oriented to the goal of reducing health disparities. However, since they do produce results on some of Macintrye and Ellaway's (2003) five health promoting neighborhood characteristics (in particular, healthy environments, social and cultural aspects, and resident/stakeholders' perception of the neighborhood) they are worthy of consideration. If improvements in these areas function as foundational changes that support larger individual and community change,

community engagement and organizing strategies may be a critical starting place for place-based strategies for health improvement. And indeed, authentic engagement of the people most impacted by health disparities is the one variable that has been consistently ignored in health improvement programs.

Horowitz and Lawlor (2008) cite a number of reasons why public health efforts have failed to embrace community development processes. First, engaging neighborhood residents involves a sometimes lengthy process of relationship development, forming partnerships, and helping people develop the power to envision and craft their own course of action. This is often at odds with intent to intervene on a disparity related to a particular health outcome. In fact, the health disparities of greatest concern to public health professionals may be of little interest to neighborhood residents. Resident action to improve such neighborhood characteristics as safety, education, or income may not directly impact the health concern of top priority for medical experts. Rather, the connection may be less direct, or at least comprise more intermediate steps than direct interventions involve.

Where Do We Go From Here?

With very little improvement in health disparities at the national level after years of investment in reducing them, it is clear that more innovation is required. Since innovative strategies have been less likely to gain the attention of researchers interested in SES disparities (Horowitz & Lawlor, 2008), research on approaches and policies that address the social determinants of health are quite limited (Horowitz & Lawlor, 2008; Roussos & Fawcett, 2000). But we can explore the possibilities another way: by looking at efforts underway which, though they may not have demonstrated results on specific disease indicators or actual health disparities, do show positive movement on some of the foundational changes we think necessary to achieve larger health objectives.

The most promising approaches appear to be those that take a multi-dimensional approach to reducing health disparities, in particular (1) focusing on one or more of the social determinants of health *within a specific place*, with an understanding that altering the conditions associated with the determinants can ultimately have an impact on intermediate health conditions, and eventually, health status itself, (b) keeping health status—as measured by specific disease indicators—in the frame as a long-term objective while evaluating progress on intermediate outcomes along the way, and (c) recognizing individual and collective human agency as important intermediaries between neighborhood context and health outcomes, and including residents of the place in question as authentic actors in the design and implementation of health improvement strategies.

Health and Place—Promising Comprehensive Health Improvement Strategies

In this section we shift our focus to a much more targeted exploration of a small number of programs designed in a way we believe carries promise for reducing health disparities and which, once evaluated, may prove to be effective models for other communities and funders. These examples reflect the categories incorporated in the comprehensive framework for understanding and addressing health disparities illustrated in Figure 1 (indeed, they represent much of the basis on which the framework was developed). They emphasize changing how

people engage and interact around a particular issue or opportunity within the place in question. For each, the place tends to be relatively small and to have a meaning more closely associated with the relationships existing—or potentially existing—there. They also define people living in the place as actors/agents on their own behalf, unlike more traditional approaches in which residents are viewed as recipients of professional knowledge and services, exerting agency only in their choice to follow or disregard the advice they are given.

Neighbourhood Renewal, Australia

A place-based model to improve the health of Australians is currently taking place in struggling low-income neighborhoods across the country. Neighbourhood Renewal (NR), a government-sponsored project, views citizen action as a key component of addressing health through improvements in housing, education, social connections and access to jobs (Klein, 2004). This project considers a healthy neighborhood to be a place where there are opportunities for health for all, where a sense of trust exists among neighbors, the physical conditions support health, and where needed services are available to families (Kelaher, Warr, & Tacticos, 2010). Emphasized in this effort is the validation of the voice and viewpoint of neighborhood residents and shared control over decisions that directly affect them. "Neighbourhood Renewal goes beyond the traditional corporate approach of consulting people as if they were passive consumers of services, and moves towards an approach that builds the capacity of individuals as decision-making citizens" (Klein, 2004, p. 117). Shifting from a paradigm of service provision, this project focuses government resources on improving the social determinants of health in order to foster future health improvements, acknowledging the time commitment involved. Initial outcomes included measures of neighborhood change as necessary prerequisites to changes in health outcomes. These included a decrease in property crime in 60% of project sites, upgrades in over 2,500 housing units with 130 new constructions across sites, and surveys indicating a 35% improvement in housing conditions in neighborhoods (Klein, 2004).

Kelaher et al. (2010) investigated project outcomes using a pre-post design with a comparison group of like neighborhoods not involved in Neighbourhood Renewal. Their study supported a pattern of geographic distribution of health, with individuals residing in NR areas demonstrating poorer health status, socioeconomic status, and life satisfaction than those in better-resourced areas. They further found improvements in health status and life satisfaction among those individuals actively contributing to the NR project. Neighborhood-level measures of health status were not improved, primarily due to lack of health benefit for those not participating in NR (Kelaher et al., 2010). These results are somewhat surprising, as improvements in housing or other physical environment changes should provide some health enhancement for all who experience the environment and not just those involved in achieving the change, though these may accrue gradually over time. These results do, however, speak to the role of power and control experienced in taking ownership of and contributing to the improvement of both neighborhood and individual health.

Building Healthy Communities, *California*

Through its Building Healthy Communities program, the California Endowment has engaged with residents and organizations in 14 communities to undertake 10 years of work toward improving health outcomes. After significant investment in research on health disparities

(e.g., Bell, J., & Lee. M., 2011; Healthy Eating Active Communities, 2007) the Endowment has undertaken a set of long-term strategic investments across the state to support the creation of healthy communities. The Building Healthy Communities program has identified ten outcomes for community health that include (a) place-based items, e.g., "residents live in communities with health-promoting land use, transportation and community development," (b) health services items, e.g., "all children have health coverage," and attitude items, e.g., "California has a shared vision of community health" (California Endowment, n.d.). The 14 communities completed a one-year planning process that brought together multi-sector alliances to define a vision for community health for 2020 and craft a plan for getting there. From among the Endowment's 10 key outcomes, the communities have been especially interested in three areas of action: (1) kids require safe peaceful communities in which they can be contributors, (2) kids need access to quality health care, and (3) everyone needs to live in places that promote good health. The planning year was the first of ten years of support the Endowment has committed to, and the 14 partnerships are expected to innovate and create new strategies for change as they move through the process. The Endowment has a strong orientation to asset-based community development (see Kretzmann & McKnight, 1993), and those project activities that utilize an asset-based approach—that is, focused on positives and possibilities, engaging residents as assets—and which are resident driven will have a high priority for additional funding. The design of these grants encourages changes in the physical context of the neighborhood, sees residents as essential actors in the process, and focuses on specific health improvements over the long term. The Endowment provides extensive capacity building support to all of the communities involved in this program.

Neighborhood Health Status Improvement Initiative, *New York*

Through its Neighborhood Health Status Improvement Initiative (NHSII) the Greater Rochester Health Foundation is supporting local groups to design and implement community-based interventions to improve the health status of people living in neighborhoods challenged by poverty and health disparities (Zappia & Puntenney, 2010). The program is grounded in the idea that place matters, and emphasizes the need for community stakeholders to identify and mobilize local assets to deploy toward community health improvement. Through the program, residents and organizations are expected to work together to improve an array of environmental conditions, create public spaces and places where healthy behaviors are an option, and help ensure that residents' healthcare needs are met. Each of the four grantees has created mechanisms for residents to take a central role in mapping and mobilizing assets, defining local health priorities, and designing and implementing activities that will alter one or more of the social determinants of health.

There is ample evidence that when communities organize around their assets rather than their needs, neighborhood improvements can result in numerous areas, including the physical, environmental, social, and economic contexts (e.g., Blejwas, 2010; Green, 2010; Kretzmann & McKnight, 1993; Kretzmann & Puntenney, 2010; McKnight & Block, 2010; Puntenney & Moore, 1998; Snow, 2001). As a result, the foundation provides technical support to its grantees through the Asset-Based Community Development Institute (ABCD) at Northwestern University.

Each project in this grant program is uniquely configured, including different types of local partners and different staffing arrangements. At this juncture, all of the grantees are

implementing the resident-driven plans they launched in 2010, and continue to revise annually based on the progress they have made, ideas that emerge in the process, and new opportunities that arise.

The foundation views improving neighborhood health status as a long-term investment. In order to assess the value of this investment and accumulate knowledge at every step along the way, the foundation supports a program evaluation that is examining an array of short-, medium-, and long-term outputs and outcomes. While there are some differences in the progress made by individual grantees, some reasons to be optimistic are emerging from the evaluation. Examples from two of the projects illustrate accomplishments to date.

Our first example is an inner-city neighborhood with about 2,247 residents, more than half living below the Federal Poverty Line (Project HOPE, n.d.). Groups of residents in this community identified (a) drugs and alcohol, (b) youth development, (c) public safety, and (d) personal lifestyle and healthy opportunities as their four focus areas for work under the NHSII grant. While their activities in these categories are too numerous to mention, a few basic facts help illustrate the group's progress:

- Six community gardens and a local produce stand developed; a community playground built (literally) by residents and partners; locally created public art installed on streets throughout the neighborhood; 40 neighborhood walks against local drug trade undertaken; three block clubs formed and 60 resident meetings held; 15 neighborhood events held, including a neighborhood summit.
- More than 380 residents actively participating in some aspect of the project; more than 1,100 attending project activities.
- Eight active partnerships with local non-profits in place; strong partnerships with the local government agencies (e.g., police, district attorney, city departments) developing.
- In their fourth year of the project, 41% of residents say that the relationship between residents and the police has improved; 70% are proud to live on their street; 70% say they believe they have at least some ability to make a positive difference in their neighborhood; 61% expect things to improve in their community. All indicators are moving in a positive direction.

This project has started to alter the neighborhood context for health, and has actively moved into the realm of policy change to support its work, particularly in the area of eliminating open-air drug markets within its boundaries. Residents are actively involved and are increasing their collective capacity to undertake work at the local level, and to partner with all sorts of agencies and entities interested in working with them on their health objectives.

Our second example is a rural community with about 5,041 residents, almost 20% living below the Federal Poverty Line (Our Town Rocks, n.d.). Groups of residents in this community identified (a) improving personal health behaviors such as eating healthier and increasing exercise, (b) adding healthy activities and foods to community events, (c) increasing economic health and stimulating small business growth, (d) improving the look of the main street in the central village, and (e) boosting available services and access to services as their five health

improvement priorities under the NHSII grant. Again, while the group's activities are too extensive to mention, some basic facts illustrate their progress:

- Small business grant/loan program established; new store featuring resident arts and crafts in its third year; farmer's market serving an average of 70 people per week in its third season; walking and exercise programs, a pet therapy program, an alcohol-free high school graduation program, a K-6 reading program all ongoing.
- More than 100 residents actively participating in some aspect of the project; many more attending project events; monthly community meetings attended by 30-35 residents; 15 resident Champions coordinating project activities.
- Active partnerships established with local non-profits, municipalities, housing organizations, media outlets, and local associations (e.g., Rotary).
- In the fourth year of the project, 83% of residents say that their quality of life in the community is good or better; 85% say they have visited the main street once a week or more; 50% engaged in physical exercise on five or more days of the past week; 41% ate four or more fruits and vegetables on the previous day. All indicators are moving in a positive direction.

This project has also started to alter the neighborhood landscape in ways that promote health. Residents are actively involved and regularly contribute to, as well as manage, many of the activities the project is implementing. The project is now considered the "go to" entity for all sorts of local agencies for both input and action on community improvement activities.

Conclusion

We have attempted to present a compelling argument for the importance of a new approach to eliminating health disparities. Decades of public investment in population health, including the reduction of disparities, have failed to yield the desired results. In spite of what we know about the treatment of specific diseases, we actually know relatively little about how to effectively untangle the complex and interconnected causes of poor health, in particular those related to place. In narrowly targeting our interventions, we may have missed the opportunity to actually alter the outcomes we seek to improve. We have suggested that more comprehensive approaches to improving health disparities are necessary. These approaches must be place based and focused the social determinants of health in order to ensure that the environments in which people live provide the possibility of, and supports for, healthy living. These approaches must keep health status, and improvements on specific disease indicators in focus as long-term objectives, but also define and assess progress on intermediate outcomes along the way. These approaches must recognize that individual and collective human agency are important intermediaries between neighborhood context and health outcomes, and include residents as authentic actors in the design and implementation of health improvement strategies.

References

Adler, N. E., Boys, W. T., Chesney, M. A., Folkman, S., & Syme, S. L. (1993). Socioeconomic inequalities in health. *JAMA*, 269(31), 3140-3145.

Altschuler, A., Somkin, C. P., & Adler, N. E. (2004). Local services and amenities, neighborhood social capital, and health. *Social Science & Medicine*, 59, 1219-1229. doi: 10.1016/j.socscimed.2004.01.008

Becker, M. H. (1993). A medical sociologist looks at health promotion. *Journal of Health and Social Behavior*, 34(1), 1-6.

Bell, J., & Lee. M. (2011). *Why race and place matter*. Oakland, CA: Policy Link.

Bernard, P., Charafeddine, R., Frohlich, K. L., Daniel, M., Kestens, Y., & Potvin, L. (2007). Health inequalities and place: A theoretical conception of neighbourhood. *Social Science & Medicine*, 65(9), 1839-1852. doi: 10.1016/j.socscimed.2007.05.037

Blejwas, E. (2010). Asset-based community development in Alabama's black belt: Seven strategies for building a diverse community movement. In G. Green & A. Goetting (Eds.), *Mobilizing Communities: Asset Building as a Community Development Strategy* (48-67). Philadelphia: Temple University Press.

Bookmyer, J., & Niebuhr, D., (2011). *California healthy start*. (Available from *http://partnerforchildren.org/press-room#publications)*.

Bovell-Benjamin, A. C., Hathorn, C. S., Ibrahim, S., Gichuhi, P. N., & Bromfield, E. M. (2009). Healthy food choices and physical activity opportunities in two contrasting Alabama cities. *Health & Place*, 15(2), 429-438. doi: 10.1016/j.healthplace.2008.08.001

Braveman, P. A., & Egerter, S. (2008). Overcoming obstacles to health: Report from the Robert Wood Johnson Foundation to the commission to build a healthier America. Princeton, NJ: Robert Wood Johnson Foundation.

California Endowment. (n.d.). *Building healthy communities: Ten outcomes for community health*. [Brochure]. Los Angeles, CA: Author.

Carleton, R. A., Lasater, T. M., Assaf, A. R., Feldman, H. A., & McKinlay, S. (1995). The Pawtucket Heart Health Program: community changes in cardiovascular risk factors and projected disease risk. *American Journal of Public Health*, 85(6), 777-785. doi: 10.2105/ajph.85.6.777

Cattell, V. (2001). Poor people, poor places, and poor health: The mediating role of social networks and social capital. *Social Science & Medicine*, 52(10), 1501-1516. doi: Doi: 10.1016/s0277-9536(00)00259-8

Centers for Disease Control and Prevention. (n.d.). Healthy People 2010: Final Review, Executive Summary. Retrieved May 10, 2012, from http://www.cdc.gov/nchs/healthy_people/hp2010/hp2010_final_review.htm

Cohen, D., Finch, B. K., Bower, A., & Sastry, N. (2006). Collective efficacy and obesity: The potential influence of social factors on health. *Social Science & Medicine*, 62(3), 769-778. doi: 10.1016/j.socscimed.2005.06.033

Cummins, S., Curtis, S., Diez Roux, A. V., & Macintyre, S. (2007). Understanding and representing 'place' in health research: A relational approach. *Social Science & Medicine*, 65(9), 1825-1838.

Cummins, S., & Macintyre, S. (2006). Food environments and obesity: neighborhoods or nation? *International Journal of Epidemiology*, 35, 100-104.

Dannefer, D. (2003). Cumulative advantage/disadvantage and the life course: Cross-fertilizing the age and social science theory. *Journal of Gerontology*, 58B(6), S327-S 337.

Diez Roux, A. V., & Mair, C. (2010). Neighborhoods and health. *Annals of the New York Academy of Sciences*, 1186(1), 125-145. doi: 10.1111/j.1749-6632.2009.05333.x

Elder, G. H. (1985). *Life course dynamics: Trajectories and transitions*, 1968-1980. Ithaca, New York: Cornell University Press.

Elder, G. H., Johnson, M. K., & Crosnoe, R. (2004). The emergence and development of life course theory. In J. T. Mortimer & M. J. Shanahan (Eds.), *Handbook of the Life Course*. New York: Springer.

Ellaway, A., Macintyre, S., & Bonnefoy, X. (2005). Graffiti, greenery, and obesity in adults: Secondary analysis of European cross sectional survey. *British Medical Journal*, 331(7517), 611. doi: 10.1136/bmj.38575.664549.F7

Franco, M., Diez Roux, A. V., Glass, T. A., Caballero, B., & Brancati, F. L. (2008). Neighborhood characteristics and the availability of healthy food in Baltimore. *American Journal of Preventive Medicine*, 36(6), 561-567. doi:dx.doi.org/10.1016/j.amepre.2008.07.003

Galster, G. (2001). On the nature of neighborhood. *Urban Studies*, 38, 2111-2124. doi: 10.1080/00420980120087072

Geis, K. J., & Ross, C. E. (1998). A new look at urban alienation: The effect of neighbourhood disorder on perceived powerlessness. *Social Psychology Quarterly*, 61(3), 232-246.

Glanz, K., & Bishop, D. B. (2010). The role of behavioral science theory in development and implementation of public health interventions. *Annual Review of Public Health*, 31, 399-418. doi: 10.1146/annurev.publhealth.012809.103604

Graham, H. (2002). Building an inter-disciplinary science of health inequalities: the example of lifecourse research. *Social Science & Medicine*, 55(11), 2005-2016. doi: Doi: 10.1016/s0277-9536(01)00343-4

Green, G. (2010). Natural amenities and asset-based development in rural communities. In G. Green & A. Goetting (Eds.), *Mobilizing Communities: Asset Building as a Community Development Strategy* (pp. 130-45). Philadelphia: Temple University Press.

Haan, M., Kaplan, G. A., & Camacho, T. (1987). Poverty and health: Prospective evidence from the Alameda County study. *American Journal of Epidemiology*, 125(6), 989-998.

Healthi Kids (2010, December). *Recess report 2010.* Rochester, NY: Author.

Healthy Eating Active Communities. (2007). *Key lessons from California schools working to change school food environments*. Los Angeles, CA: Author.

Healthy Hunger Free Kids Act of 2010, Pub. L. no. 111-296, 124 Stat. 3183 (2010). Print.

Horowitz, C., & Lawlor, E. F. (2008). Community approaches to addressing health disparities. In J. A. Cohen (Ed.), *Challenges and successes in reducing health disparities: Workshop summary*. Washington, DC: National Academies Press.

Institute of Medicine. (2004). *The future of the public's health in the 21st century*. Washington, DC: The National Academies Press.

Isaacs, S. L., & Schroeder, S. A. (2004). Class-The ignored determinant of the nation's health. *The New England Journal of Medicine*, 351(11), 1137-1142.

Jean-Louis, B., Farrow, F., Schorr, L., Bell, J., & Fernandez, K. (2010). *Focusing on results in Promise Neighborhoods*. New York: Harlem Children's Zone, The Center for the Study of Social Policy, and PolicyLink.

Johnson, R. C., Schoeni, R. F., & Rogowski, J. A. (2011). Health disparities in mid-to-late life: The role of earlier life family and neighoborhood socioeconomic conditions. *Social Science & Medicine*, 74, 625-636. doi: 10.1016/j.socscimed.2011.10.021

Kawachi, I., Kennedy, B. P., & Glass, R. (1999). Social capital and self-rated health: A contextual analysis. *American Journal of Public Health*, 89(8), 1187-1193.

Kawachi, I., Kennedy, B. P., Lochner, K., & Prothrow-Stith, D. (1997). Social capital, income inequality, and mortality. *American Journal of Public Health*, 87(9), 1491. doi: 10.2105/AJPH.87.9.1491

Kegler, M. C., & Wyatt, V. H. (2003). A multiple case study of neighborhood partnerships for positive youth development. *American Journal of Health Behavior*, 27(2), 156-156. doi: dx.doi.org/10.5993/AJHB.27.2.7

Kelaher, M., Warr, D. J., & Tacticos, T. (2010). Evaluating health impacts: Results from the neighbourhood renewal strategy in Victoria, Australia. *Health & Place*, 16, 861-867. doi: 10.1016/j.healthplace.2010.04.011

Kim, D., Subramanian, S. V., & Kawachi, I. (2006). Bonding versus bridging social capital and their associations with self rated health: A multilevel analysis of 40 U.S. communities. *Journal of Epidemiology and Community Health*, 60(2), 116-122. doi: 10.1136/jech.2005.038281

Klein, H. (2004). Health inequality, social exclusion and neighbourhood renewal: Can place-based renewal improve the health of disadvantaged communities? *Australian Journal of Primary Health*, 10(3), 110-119. doi: 10.1071/PY04054

Kretzmann, J., & McKnight, J. (1993). *Building Communities From the Inside Out*. Evanston, IL: Northwestern University.

Kretzmann, J., & Puntenney, D. (2010). Neighborhood approaches to asset mobilization: Building Chicago's West side. In A. Goetting and G. P. Green (Eds.), *Mobilizing Communities: Asset Building as a Community Development Strategy*, pp. 112-29. Philadelphia: Temple University Press.

Lester, P. (2009. *Tipping Neighborhoods to Success*. Alliance for Children and Families and United Neighborhood Centers of America.

Leyden, K. M. (2003). Social capital and the built environment: The importance of walkable neighborhoods. *American Journal of Public Health*, 93(9), 1456-1558.

Link, B. G., & Phelan, J. (1995). Social conditions as fundamental causes of disease. *Journal of Health and Social Behavior*, 80-94.

Lochner, K. A., Kawachi, I., Brennan, R. T., & Buka, S. L. (2003). Social capital and neighborhood mortality rates in Chicago. *Social Science & Medicine*, 56, 1797-1805. doi: dx.doi.org/10.1016/S0277-9536(02)00177-6

Ludwig, J., Sanbonmatsu, L., Gennetian, L., Adam, E., Duncan, G., Katz, L., . . . McDade, T. (2011). Neighborhoods, obesity, and diabetes-A randomized social experiment. *The New England Journal of Medicine*, 365(16), 1509-1519. doi: 10.1056/NEJMsa1103216

Lumeng, J. C., Appugliese, D., Cabral, H. J., Bradley, R. H., & Zuckerman, B. (2006). Neighborhood safety and overweight status in children. *Archives of Pediatrics & Adolescent Medicine*, 160(1), 25-31. doi: 10.1001/archpedi.160.1.25

Macera, C. A., Jones, D. A., Ham, S. A., Kohl, H. W., & Buchner, D. (2003). *Prevalence of physical activity, including lifestyle activities among adults--United States, 2000--2001*. Centers for Disease Control and Prevention MMWR Weekly.

Macintye, S. (2000). The social patterning of exercise behaviors: The role of personal and local resources. *British Journal of Sports Medicine*, 34(6).

Macintyre, S., & Ellaway, A. (2003). Neighborhoods and health: An overview. In I. Kawachi & L. F. Berkman (Eds.), *Neighborhoods and health* (pp. 20-42). New York: Oxford University Press, Inc.

Marmot, M. (2005). Social determinants of health inequalities. *The Lancet*, 365(9464), 1099-1104. doi: http://dx.doi.org/10.1016/S0140-6736(05)71146-6

Mathews, T. J., & MacDorman, M. F. (2007). Infant mortality statistics from the 2004 period linked birth/infant death dataset. (Vol. 55). Hyattsville, MD: National Center for Health Statistics.

McCann, B., & Rynne, S. (2010). *Complete streets: Best policy and implementation practices. American Planning Association Advisory Service*. (Available from http://www.planning.org/apastore/search/Default.aspx?p=4060)

McCormack, G. R., Rock, M., Toohey, A. M., & Hignell, D. (2010). Characteristics of urban parks associated with park use and physical activity: A review of qualitative research. *Health & Place*, 16, 712-726.

McDonough, P., Duncan, G. J., Williams, D., & House, J. (1997). Income dynamics and adult mortality in the United States, 1972 through 1989. *American Journal of Public Health*, 87(9), 1476-1483. doi: 10.2105/ajph.87.9.1476

McKnight, J., & Block, P. (2010). *The Abundant Community*. San Francisco: Berrett-Koehler Publishers.

McNeill, L. H., Krueter, M. W., & Subramanian, S. V. (2006). Social environment and physical activity: A review of concepts and evidence. *Social Science & Medicine*, 63, 101-1022. doi: dx.doi.org/10.1016/j.socscimed.2006.03.012

Morgan, W. J., Crain, E. F., Gruchalla, R. S., O'Connor, G. T., Kattan, M., Evans, R., . . . Mitchell, H. (2004). Results of a home-based environmental intervention among urban children with asthma. *New England Journal of Medicine*, 351(11), 1068-1080. doi: doi:10.1056/NEJMoa032097

Morland, K., & Evenson, K. (2009). Obesity prevalence and the local food environment. *Health & Place*, 15(2), 491-495. doi: dx.doi.org/10.1016/j.healthplace.2008.09.004

Morland, K., Wing, S., Diez Roux, A. V., & Poole, C. (2002). Neighborhood characteristics associated with the location of food stores and food service places. *American Journal of Preventive Medicine*, 22(1), 23-29. doi: http://dx.doi.org/10.1016/S0749-3797(01)00403-2

Mustard, C. A., Derksen, S., Berthelot, J. M., Wolfson, M., & Roos, L. L. (1997). Age-specific education and income gradients in morbidity and mortality in a Canadian province. *Social Science & Medicine*, 45, 383-397. doi: dx.doi.org/10.1016/S0277-9536(96)00354-1

Our Town Rocks. (n.d.). Bringing country neighbors together for good: *A rural area builds on its strengths and inspires healthy action*. [Brochure]. Dundee, NY: Author.

Pearce, N., & McKinlay, J. (1998). Back to the future in epidemiology and public health: Response to Dr. Gori. *Journal of Clinical Epidemiology*, 51(8), 643-646.

Port Towns Community Health Partnership. (2011, March). *Port Towns Community Health Partnership community action plan*. Maryland: Author.

Project HOPE. (n.d.). *Helping people lead with their strengths: The new way forward for a healthier neighborhood*. [Brochure]. Rochester, NY: Author.

Puntenney, D., & Moore, H. (1998). *City-sponsored community building: Savannah's Grants for Blocks story*. Evanston: IL: Northwestern University.

Putnam, R. D. (1995). Bowling alone: America's declining social capital. *Journal of Democracy*, 6(1), 65-78.

Rose, D. J. (2010). Captive audience? Strategies for acquiring food in two Detroit neighborhoods. *Qualitative Health Research*. Advance online publication. doi: 10.1177/1049732310387159

Ross, C. E. (2000). Walking, exercising, and smoking: Does neighborhood matter? *Social Science & Medicine*, 51, 265-274. doi: dx.doi.org/10.1016/S0277-9536(99)00451-7

Roussos, S. T., & Fawcett, S. B. (2000). A review of collaborative partnerships as a strategy for improving community health. *Annual Review of Public Health*, 21, 369-342. doi: 10.1146/annurev.publhealth.21.1.369

Sampson, R. J. (2003). Neighborhood-level context and health: Lessons from sociology. In I. Kawachi & L. F. Berkman (Eds.), *Neighborhoods and Health* (pp. 132-146). New York: Oxford University Press.

Sampson, R. J., & Morenoff, J. D. (2000). Public health and safety in context: Lessons from community-level theory on social capital. In B. D. Smedley & S. L. Syme (Eds.), *Promoting health: Intervention strategies from social and behavioral research* (pp. 366-389). Washington, D.C.: National Academies Press.

Sampson, R. J., Raudenbush, S. W., & Earls, F. (1997). Neighborhoods and violent crime: A multilevel study of collective efficacy. *Science*, 277(5328), 918-924.

Schulz, A. J., & Lempert, L. B. (2004). Being part of the world: Detroit women's perceptions of health and the social environment. *Journal of Contemporary Ethnography*, 33, 437-465. doi: 10.1177/0891241604265979

Sherwood, N., & Jeffery, R. W. (2000). The behavioral determinants of exercise: Implications for physical activity interventions. *Annual Review of Nutrition*, 20, 21. doi: 10.1146/annurev.nutr.20.1.21

Snow, L. (2001). *The organization of hope: A workbook for rural asset-based community development*. Evanston, IL: Northwestern University.

Steptoe, A., & Feldman, P. J. (2001). Neighborhood problems as sources of chronic stress: Development of a measure of neighborhood problems, and associations with socioeconomic status and health. *Annals of Behavioral Medicine*, 23, 177-185. doi: 10.1207/S15324796ABM2303_5

Stokols, D., Grzywacz, J. G., McMahan, S., & Phillips, K. (2003). Increasing the health promotive capacity of human environments. *American Journal of Health Promotion*, 18(1), 4-13.

U.S. Department of Health and Human Services. (2006). *Child health USA 2006*. Retrieved from http://www.mchb.hrsa.gov/chusa_06/index.htm.

White House Task Force on Childhood Obesity. (2010). *Solving the problem of childhood obesity within a generation.* Retrieved May 10, 2012 from http://www.letsmove.gov/white-house-task-force-childhood-obesity-report-president.

Wilkinson, R., & Marmot, M. (Eds.). (2003). *Social determinants of health: The solid facts* (second ed.): World Health Organization. Retrieved January 12, 2007 from http://www.euro.who.int/document/e81384.pdf.

Zappia, B., & Puntenney, D. (2010, August). *Grassroots Activism and Community Health Improvement*. Paper presented at the meeting of the Society for the Study of Social Problems, Atlanta, GA.