Public Health: Seattle and King County's Push for the Built Environment

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Introduction

In Seattle and King County, Washington, and nationwide, evidence shows that decisions about how we use land and build our environment have significant impacts on individual and population health, safety, and well-being. Land use and built environments also impact community networks, economic growth, environmental sustainability, and social justice. In the past century, awareness of the negative health effects and disparities due to impacts from the built environment has grown, but a lack of knowledge, recognition, and viable data remains about the connection between the built environment and health (Jackson, 2003).

Background

People ask why health professionals are increasingly getting involved in land use planning and smart growth issues. Data from a King County study makes the answer clear: residents of "walkable" communities are more physically active and less overweight, breathe cleaner air, and lead healthier lifestyles (Frank, 2005). But long before this study was completed, the Environmental Health Division of Public Health Seattle and King County (PHSKC) was already focused on the issue. Specifically, in 2004, PHSKC chose land use, built environment, and health (LUBEH) as one of its top three strategic directions. Currently, this project involves educating staff about land use planning, building relationships with planners, engaging in policy development, and planning local land use-related projects. This case study presents a four-phase process (see Figure 1) used by PHSKC, Washington, to promote and integrate public health issues into community planning and land use decisions.

The Built Environment

Broadly defined, the built environment is the human-made space in which people live, work, and recreate on a day-to-day basis. It includes the buildings and spaces we create or modify. It can extend overhead in the form of electric transmission lines and underground in the form of landfills (Department of Health and Human Services [HHS], 2004). The design of our built environment affects the possibility of injury related to pedestrian and vehicular accidents, and it also influences the possibility of exercise and healthy lifestyles. Lack of physical activity causes overweight problems in adults and children, increases the risk for serious illnesses, and contributes to premature death (Frank, Engelke, & Schmid, 2003). Given the clear relationship between exercise and chronic diseases such as diabetes, asthma, and obesity, building relationships between planners and health officials is both timely and essential. Environmental health professionals can provide added value by giving planners strong health data to support "smart growth" designs and zoning and initiatives that promote a healthier environment and improved quality of life for all. Their involvement also can help make the case for effective street and trail connectivity and design, allowing the public to move around smoothly and safely, breathe cleaner air, drink clean water, and interact in quieter, more cohesive neighborhoods. Conversely, planners can provide health professionals with knowledge of zoning and other planning practices and opportunities and options for engagement in the planning process.

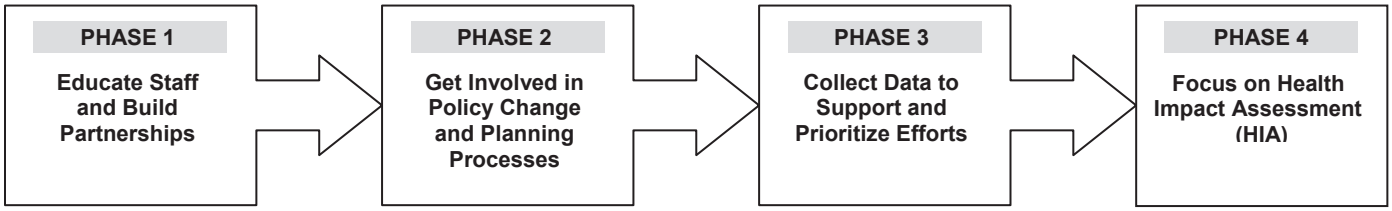
Historically, environmental health and planning professionals had closer ties. In the early 1900s, some land use planners championed health as a key issue for the planning profession. This social planning movement was expressly interested in tenement housing issues, public health, and industrial abuse conditions. The planners were also concerned about how planning decisions could not only control but prevent diseases such as tuberculosis (Wirka, 1996). Similarly, prominent planners as late as the 1930s reiterated that good planning was truly efficacious in creating social harmony, but only if it "embodied a genuine rationality and justice in the structure of society (Fishman, 1977)." But by the 1940s, with the postwar population and infrastructure needs, "social" planners' voices faded and traditional town planning gave way to a mass housing boom that created new suburbs and vastly different lifestyles (Kelly, 2000). This was especially true in new communities built around driving rather than around walking and biking.

Seattle and King County Population and Obesity

In King County, by 2004, 54% of the 1.8 million residents were overweight or obese compared to 37% in 1987; similar increases in obesity and overweight occurred nationally. King County is the largest county (by population) in Washington and the twelfth largest in the U.S. King County is approximately the size of Delaware, with 39 cities and unincorporated areas. Between 1960 and 2000, the population more than doubled, adding to transportation deficiencies

FIGURE 1

Seattle and King County's Process for Integrating Health into Community Planning and Land Use Decisions



and poor air quality. The county's southern region and metropolitan Seattle have higher populations of low income residents and people of color. The south region also has a significantly higher average rate of obesity (60.8%) than the rest of the county. Obesity and overweight rates, diabetes and heart disease are highest among certain ethnic groups, such as African Americans, American Indians, and Alaska natives (King County, 2006). These inequities in overall health status are based on race, education, and economic status (Communities Count, 2005). Regrettably, negative impacts from land use decisions are not fairly distribued through all communities, thereby resulting in health inequity for populations of color and persons with disabilities.

Phase One: Educate Staff and Build Partnerships

PHSKC's environmental health (EH) division began focusing on the issue of health, land use planning, and the built environment in December 2003. Discussions began with an internal interdisciplinary team called the environmental health community assessment team (EHCAT). The team consisted of the EH director, deputy director, health educator, and the section manager, all from the EH division. Other members include staff from the community-based public health practice unit (regional health officers and health educators), epidemiology, planning and evaluation unit, and the prevention division. EHCAT was convened to facilitate the integration and visibility of EH issues in the day-to-day activities throughout the department. One team priority was to develop a list of areas of concern of adverse health effects due to the built environment, including ambient and indoor air quality, water quality, toxic exposure, safety, injury prevention, environmental and social injustice, physical inactivity, obesity and overweight, mental health, and social cohesion.

Several opportunities were then provided to all staff to become more familiar and engaged in the LUBEH issue. For example, the health department hosted presentations by local and national speakers, including current and former leaders at the Centers for Disease Control and Prevention National Center for Environmental Health (CDC/NCEH): Dr. Andrew Dannenberg, Dr. Howard Frumkin, and Dr. Richard Jackson. Additionally, the 2005 environmental health education conference was dedicated solely to LUBEH and featured several local public health, planning, and transportation practitioners and experts.

The next task for PHSKC after initiating internal capacity building was to reach out to planners across the region. PHSKC made great progress developing partnerships with planning agencies, including the Puget Sound Regional Council (PSRC), planning agencies of King County, city of Seattle, and a number of suburban cities. PHSKC currently consults with planners from these organizations on a routine basis, not only about individual development plans, but also for jointly conducting outreach and advocacy activities. For example, PHSKC participated in planning meetings for the Seattle neighborhood business district strategy and the Seattle street design manual. The planning agencies continue to participate in PHSKC's overweight prevention forum and environmental health annual education conference. EH staff make joint presentations with planners to state and local associations with decision-making power, such as the Washington State Association of County Commissioners, King County planning directors, and a variety of regional council policy boards.

Phase Two: Get Involved in Policy Change and Planning Processes

PHSKC next began to focus on policy change by incorporating health language into regional and local land use plans. The health department was successful in advocating for the inclusion of public health considerations into regional, county, and city planning documents, including the PSRC Vision 2020 plan, a countywide resolution, and the King County comprehensive plan.

Puget Sound Regional Council—Vision 2020 Plan

In 2004, PHSKC learned that the four-county regional plan for the Puget Sound region—Vision 2020—was going to be updated. PHSKC provided a list of health issues and comments on those issues for consideration. PHSKC also met with PSRC to offer support and expertise. PHSKC convened the other local health directors in the region to discuss the importance of land use policies, and the need for local health jurisdictions to be at the table and advocate for a chapter on health in the Vision 2020 plan update. The regional council invited the regional health departments to draft a health issue paper titled, "What's Health Got to Do with Growth Management, Economic Development, and Transportation? (Puget Sound Regional Council, 2004)" that was jointly presented in 2005 to PSRC's growth management policy board by PHSKC's health director, King County's board of health chair, and PSRC staff.

The issue paper included items such as guidance for addressing health issues,

A community offering sidewalks and street connections encourages healthy physical activity, such as biking and walking, for both children and adults.

preliminary implementation actions and strategies, and guidance for measurable objectives to monitor health considerations. Some of the guidance recommended in the issue paper included identifying public health benefits in urban growth and transportation provisions, incorporating provisions for health and well-being into local comprehensive plans, establishing goals to increase bicycle and pedestrian travel, and improving access to health facilities. The council's board agreed to incorporate health concerns into all chapters in the Vision 2020 plan. This is a dramatic achievement and is extremely unusual nationwide. Information on the plan is at PSRC's Web site, www.psrc.org.

County-Wide Resolution

PHSKC was also instrumental in the development of a 2005 resolution that was adopted by King County's board of health titled, "Recommending a Comprehensive Strategy to Promote Healthy Eating and Active Living in King County." The resolution was created and adopted as part of the department's focus on the obesity epidemic and its goal of decreasing the prevalence of this public health problem. Among the action steps in the resolution are assisting school districts' development and implementation of nutrition and physical activity policies, enhancing employers' efforts to promote nutrition and physical activity through work site wellness programs (starting with King County employees as model work sites), supporting the implementation of "safe and active routes to schools and transit" program, supporting the completion of deficient pedestrian and bicycle links in King County, and partnering with academia and our communities to promote evidence-based practices and evaluate and disseminate results regularly. To see this resolution, go to: http://www.metrokc.gov/health/Boh/res0508.pdf. For an updated 2007 version, go to: http://www.metrokc.gov/health/Boh/res0703.pdf.

King County Comprehensive Plan

In 2004, PHSKC also was involved to a lesser extent in the update and adoption of the King County comprehensive plan. King County developed one of the first comprehensive plans in the nation that prioritizes public health, outlines several health-related goals, and uses health as a rationale for creating livable communities. The following is taken from the comprehensive plan: "Focusing development in urban areas can have a positive effect on public health. The percentage of King County residents who are overweight or obese has risen rapidly since the late 1980s. With obesity comes an increased risk for diabetes and heart disease. Evidence demonstrates one major reason for rising obesity is the lack of physical activity. Growth patterns in suburban areas, which discourage walking and promote a reliance on private auto use, have contributed to this public health problem. Communities that feature many land uses, higher housing density, sidewalks and street connections and nearby services encourage physical activity such as walking and bicycling (King County Comprehensive Plan Update, 2004)." (See photo at left). To view the entire King County comprehensive plan, go to: http://www.metrokc.gov/ddes/COMPPLAN/2004/index.htm; see chapters on "Urban Communities" and "Transportation."

Phase Three: Collect Data to Support and Prioritize Efforts

PHSKC played a key role by providing data in scoping the "Land Use, Transportation, Air Quality, and Health" (LUTAQH) study that was commissioned by the King County executive and supports the health goals of the comprehensive plan. The findings support an aggressive and collaborative approach to built-environment challenges with strong engagement from political leaders. While the initial goals of the study were to look at ways of improving integration between land use and transportation planning, the significance and relevance of public health issues led the county executive to expand the study to explore the health implications and potential strategies for integrating health, land use, and transportation planning. Among the findings of this groundbreaking study (Frank, 2005) are the following:

- Residents of the most pedestrian-friendly areas of King County were more physically active and less overweight than those in areas with fewer pedestrian-friendly amenities.
- Transit and walking go together—people choose to walk more when transit choices are near.
- Greater amounts of interconnectivity in an area translates into fewer miles driven in cars.
- Individuals in the most pedestrian-friendly neighborhoods are 2.4 times more likely to get 30 minutes of exercise a day.

For summary of this study, visit: http://www.metrokc.gov/exec/news/2006/pdf/LUTAQHupdated.pdf.

Phase Four: Focus on Health Impact Assessment

Health Impact Assessment (HIA) is a tool that uses qualitative or quantitative data to assess the public health consequences of a policy, project, or program with a special focus on social equity. This includes identifying and assessing potential positive and negative health impacts due to various development projects and plans.

With funding from the HHS Steps to a HealthierUS initiative, PHSKC began to examine how the use of an HIA could create more opportunities to consider health in land use projects and policies. PHSKC convened an internal steering group to review the methodology and invited experts from around the country to speak on their experiences with HIA.

PHSKC has been involved in a pilot HIA project looking at health factors related to neighborhood development near a future rail transit stop. The HIA has included reviewing the potential relationship of changes to health promoting factors, such as physical activity, safety, social connectedness, and equal access. The HIA process has increased PHSKC's presence in city planning efforts and allowed for continued discussions and involvement.

Wisdom from Experience

- Don't center all discussions around the "popular" obesity issue, because at some point that will be out of the headlines. The built-environment and health issue is much more comprehensive—encompassing air, water, land, food, and social justice.
- Engage staff in understanding "institutional racism" and how to undo it. Addressing racism is critical for a shared understanding of the root causes of health inequity embedded in land use and built-environment decisions and in meaningfully engaging the community and ensuring health equity and social justice. PHSKC sends staff to the "Undoing Institutional Racism" workshop. For more information, visit: http://cityofseattle.net/humanservices/uir/Fact_Sheet.htm.
- A broad definition of environmental health is needed to ensure sustainability of funding, programmatic momentum, and support. For example, the definition needs to encompass how the built environment affects chronic diseases. This argument should be used to acquire funding for environmental health and land use planning issues, particularly disease prevention.
- Planning professionals welcome health agencies at the table when these agencies can be seen as another advocate for good community design. Also, the ability to provide evidence-based information on the connection between the built environment and health is powerful.

Successes and Looking Ahead

PHSKC chose land use and the built environment as a priority within the health department and has made great strides in quickly advancing this effort; they also are seen as a leader on this issue throughout the state and nationally. This has been achieved mainly through educating agency staff, building strong relationships and credibility with planners, and actively and effectively engaging in policy development and in land use planning projects. The creation of the multidisciplinary team early on in the process was key to their past and to their future success. The continued diverse viewpoints and expertise will help shape agendas, planning documents, priorities, and outcomes. After laying this foundation, PHSKC, specifically the environmental health division, is now poised to take the next important steps. This entails focusing primarily on education and engaging the community more in partnerships; developing a literature library of research and case study information; identifying future collaborative planning activities; involving the business community; and building more partnerships locally, statewide, and nationally. Additionally, PHSKC wants to include developers as partners in future initiatives and to educate state-level officials about health concerns, so that they become vested contributors in creating healthier communities by building safer environments and supporting policy decisions.

Due to the degree that land use decisions influence underlying determinants of environmental and community health, it is of the utmost importance that local governments develop coherent strategies and purposefully continue to integrate health considerations into land use planning. Today, most regions like Seattle and King County must diligently ensure that more efficacious planning, policies, and collaboration are attained for healthier and more just communities.

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