

Translating Research to Policy Through Health Impact Assessment in Clark County, Washington: a Commentary to Accompany the Active Living Research Supplement to *Annals of Behavioral Medicine*

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Published online: 19 January 2013
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Introduction

As elsewhere in the US, Clark County, Washington has experienced an obesity epidemic, with two thirds of adults overweight or obese [1]. Youth are a particular concern, as 25 % of tenth graders are overweight or obese [2]. To address the obesity epidemic, we will need a comprehensive approach, and accumulating scientific evidence regarding environmental influences on physical activity suggests that urban development policies relating to transportation and land use are likely to be part of this approach [3]. Consequently, Clark County Public Health officials and policy makers are focusing on creating opportunities for physical activity through active transportation and parks.

One emerging tool health jurisdictions can use to translate research into built environment policy is Health Impact Assessment (HIA) [4, 5]. The National Research Council defines HIA as “a systematic process that uses an array of data sources and analytic methods and considers input from stakeholders to determine the potential effects of a proposed policy, plan,

Active Living Research awarded the fifth annual Translating Research to Policy Award to Clark County Public Health, Center for Community Health. The purpose of the award is to recognize innovative teams or individuals representing research, policy, or advocacy who have had success in catalyzing policy or environmental change of relevance to youth physical activity, sedentary behavior, and obesity prevention. The goal is to celebrate achievements, understand how success occurs, and share these stories so others will be inspired to improve the use of research in policy making. The commentary that follows describes the work that is recognized by the Award. Active Living Research commends the awardees on their successful participation in the policy process, and we recommend their approach as a model to others.

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program, or project on the health of a population and the distribution of those effects within the population. HIA provides recommendations on monitoring and managing those effects.”[6] Health officials can use HIA to move towards a health-in-all-policies approach, which advocates considering health consequences of all public decisions, especially those relating to health equity [7]. HIA is used to initiate dialogue about how to include health goals in policies based in multiple sectors and government agencies and to introduce research findings into policy discussions [6]. The 2010 HIA on Clark County’s Bicycle and Pedestrian Master Plan evaluated and mapped demographics and health outcomes, built environment variables, and overlaid them with proposed bicycle and pedestrian infrastructure improvement projects. The HIA also reviewed proposed education programs and policies established to prioritize active transportation and create linkages with land use. This analysis, combined with a review of research on physical activity and the built environment, allowed Clark County health officials to estimate impacts and make concomitant policy recommendations to planners and elected officials. These decision makers ultimately adopted a plan designed to maximize the health benefits of physical activity from active transportation, formalized by allocating a 20 % weight to health considerations. In this commentary, we describe how we used research to perform the HIA, and how the HIA, in turn, led to improved policy. By describing our experience, we hope to provide a model for other practitioners and insights for researchers offering their findings as a basis for policy or environmental change.

Research to Health Impact Assessment

We understand that every policy option cannot be quantitatively modeled due to resources and the limits of our knowledge. Therefore, we acted on associations established in research,

including associations between environmental variables such as residential density and outcomes such as physical activity. This approach is illustrated by three examples of how research formed the basis of HIA recommendations:

Example 1: Implement a variety of bikeway facility types

Suburban jurisdictions like Clark County frequently stripe bikeways on major arterials, expecting that these facilities would provide sufficient safety and comfort for users. However, research suggests that for many would-be cyclists, speed and exposure to traffic are barriers to active transportation and that a greater degree of separation from high-speed traffic is more likely to generate bicycle trips from new cyclists [8–10]. Consequently, our HIA recommended that planners include several bikeway facility types and designs for cyclists of all abilities. Planners operationalized this by awarding additional points to “low-stress” facilities such as bicycle boulevards, cycle tracks, and off-street paths.

Example 2: Prioritize projects and adopt policies that increase the following measures of walkability: connectivity, pedestrian-oriented urban design, land use mix, and residential density

Research demonstrates connections between the built environment and physical activity [11, 12]. We used the walkability index, associated with physical activity in many studies [13, 14], to measure existing conditions, identify priorities, and as a foundation for this recommendation. This index combines four built environment variables: street network connectivity, retail floor area ratio, land use mix, and residential density. Mapping walkability helped planning committee members visualize differences between neighborhoods, linking these differences to other social determinants such as income, age, race, and ethnicity. Planners prioritized projects in areas with high walkability potential, where conditions favor greater use of new infrastructure. In neighborhoods with low walkability, planners targeted new connections that will improve walkability.

Example 3: Include health equity in project prioritization criteria

Research on health disparities and the social determinants of health has shown that certain populations are at higher risk for poor health outcomes, including racial and ethnic minorities and populations of low socioeconomic status [15]. Consequently, the broadest and potentially most effective recommendation we made was to include health equity among the project prioritization criteria. The planning committee followed this recommendation, allocating 20 % of the possible prioritization points to health outcomes.

Relying on research demonstrating associations between environmental variables and health outcomes is critical, but it must be done in a manner consistent with the ethical use of evidence. As HIA practice guidance documents note, practitioners must be transparent about the nature and strength of the evidence they use for recommendations and estimates [16]. We created a simple system to characterize the strength of evidence cited for each recommendation, with four categories describing a continuum of evidentiary support ranging from “limited” to “strong.” A brief description of each category guided the characterization. For example, limited evidence was defined as “few case studies, theoretically supported,” whereas strong evidence was described as “multiple, rigorous, peer-reviewed research studies with similar findings.” This allowed us to cite promising ideas or emerging best practices as well as thoroughly validated research, adhering to the HIA ideal of relying on broad input. By attaching a symbol to each category, readers can rapidly apprehend the strength of evidence for a given policy recommendation.

From Health Impact Assessment to Policy

It is one thing to integrate research findings into a report; ensuring that they make their way into policy is perhaps the bigger challenge. We were able to meet this challenge by tying the HIA to the Bicycle and Pedestrian Master Plan process, through which a series of public meetings, surveys, consultant reports, and official hearings informed the final decision. As part of the HIA, public health staff participated in the Bicycle and Pedestrian Advisory Committee, the group of community stakeholders charged with developing the plan. We also collaborated with urban planners to develop the HIA scope and recommendations.

As a result, we helped set the agenda for committee discussions, which in turn allowed us to present and reference health data repeatedly. By introducing key ideas from research literature early and at critical moments in the evolution of the plan, we were able to have lasting impacts. Some concepts remained a part of deliberations throughout the decision making process, such as the extent and cost of the obesity epidemic among youth, disparities in health outcomes, and the nature of built environment influences on physical activity. Establishing these broad ideas as an area of concern early gave us time to drill down to how decision makers could apply specific research findings to policy objectives and project selection. Exposing committee members extensively to research findings spurred the inclusion of health and equity as decision making criteria and helped committee members establish clear policy goals based on evidence. They adopted many of the HIA recommendations verbatim and forwarded the final plan to elected officials for formal adoption. In key informant interviews following the plan’s adoption, decision makers remarked that the HIA re-framed the discussion about the plan,

helped them communicate about it, and in some cases helped them defend it. By relying on the HIA, these decision makers based their actions and statements on research and data.

The process of integrating HIA findings into policy was not without pitfalls. Decision makers pushed us to quantify estimated outcomes in economic terms, a challenge beyond our resources, data inputs, and methodological capabilities. In these cases, we responded to the best of our ability by citing national-level economic research or findings from other jurisdictions. Throughout the HIA, the data and research we used are subject to uncertainty and have many limitations. Therefore, communicating with skeptical stakeholders became an additional challenge. Some stakeholders felt that health data were not objective or quantitative, and some questioned the influence of the built environment on physical activity. As in many disciplines, concisely summarizing research findings into actionable recommendations without losing the essence and context of the findings is a perennial challenge in public health, and it remains so.

Lessons Learned and Next Steps

Those of us who deal with data frequently tend to rely on highly specific language and an array of caveats when explaining our findings. This can be especially detrimental when communicating findings to decision makers. This is not a new challenge, but it is one reconfirmed by our experience. When communicating findings, practitioners should make every effort to be concise. When possible, prepare for requests to monetize impacts by citing figures from elsewhere or explaining the limitations of data. We found it helpful to abstract essential ideas from research to the point of collapsing entire articles into a single statement, such as “well-connected street networks encourage active transportation.” As one of our elected officials put it, “give me a paragraph, not a page.”

Practitioners should introduce research findings early and often, using them to frame the conversation. This allows decision makers to internalize findings and draw connections to health research on a routine basis. It is a sign of success when stakeholders and decision makers refer to research without prompts.

We conclude with a challenge to researchers and the community of professionals striving to achieve health in all policies. We must continue the work of organizations such as the Trust for America’s Health, the Robert Wood Johnson Foundation, and others, by articulating the actionable findings emerging from research literature and making them accessible. The research briefs published by Active Living Research are an excellent example of this practice [17]. Furthermore, instead of ending journal articles by calling for further study, we might state the extent to which decision makers can rely on existing research to make policy. We will know we have been successful when we truly shorten the pathway from research

to policy, and when the act of translating research evolves into a consistent and reliable application of findings.

Conflict of interest The authors have no conflict of interest to disclose.

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