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Connecting Public Health and Planning Professionals: Health Impact Assessment [To Rally Discussion]

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Connecting Public Health and Planning Professionals: Health Impact Assessment

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Over the last few years there has been a resurgence of interest in how the built environment affects people's health. One potential tool for moving beyond theory in this area is health impact assessment (HIA). HIA can be used to evaluate the public-health impacts of a policy or project before it is implemented or built.

One interesting aspect of the 2004 EDRA/*Places* award-winning project "Incremental Urbanism: The Auto and Pedestrian Reconsidered in Greyfield Reclamation" (Michael Gamble and W. Jude LeBlanc, *Places*, Vol. 16, No. 3, pp. 18-21) was its advocacy of public health as a salient reason to initiate redevelopment planning for a bypassed area of suburban Atlanta, Georgia — the Buford Highway Corridor. Taking this work a step further, the Centers for Disease Control and Prevention (CDC), along with the University of California at Los Angeles, the Robert Wood Johnson Foundation, and the Center for Quality Growth and Regional Development at the Georgia Institute of Technology, have begun a health impact assessment of the plan's proposals.

Among other things, the Buford Highway HIA aims to produce quantitative estimates of expected increases in physical activity and decreases in injury as a result of redevelopment, as well as qualitative estimates of its effects on air and noise pollution, traffic, social capital, crime, safety, economic development, and gentrification. A cost-effectiveness analysis of redeveloping Buford Highway from a societal perspective is also being conducted by CDC and an actuarial firm.[1]

Developments in the Field

Recently, there has been a growing interest in the use of HIA in the U.S. The Robert Wood Johnson Foundation along with the CDC held an international conference in October 2004 to advance development of HIA methods.[2] In 2003, special issues of the *American Journal of Public Health* and the *American Journal of Health Promotion* were dedicated to exploring the interaction between the built environment and health. The American Planning Association and the National Association of County and City Health Officials have also held a number of symposia and conferences on improving collaboration between their respective disciplines. Finally, the National Institutes of Health and the CDC have launched a major research funding initiative on obesity and the built environment.[3]

One potential benefit of HIA is to bring public-health issues to the attention of decision-makers in areas where they may not have been considered before. For instance, HIA could be incorporated during plan review for new developments; public-health officials evaluating traditional water and sewer concerns might make recommendations, such as for increased walkability, that could lead to increased physical activity and reductions in chronic diseases.[4]

HIA also has the potential to involve community members in decisions concerning proposed projects and policies, and thus gain their support and help reduce the NIMBY (not-in-my-backyard) phenomenon.

Similar to an EIA

HIA is commonly defined as "a combination of procedures, methods, and tools by which a policy, program, or project may be judged as to its potential effects on the health of a population, and the distribution of those effects within the population."[5]

In some ways, HIA may be thought of as similar to environmental impact assessment (EIA). However, EIA reports are mandated, and focus on defined outcomes such as air and water quality. By contrast, HIAs can be voluntary and focus on more wide-ranging concerns such as obesity, physical inactivity, asthma, injuries, and social equity.[6]

Numerous HIAs have been performed in Europe, Canada and elsewhere. Several countries' experiences with HIA have been documented in a new book, *Health Impact Assessment*.[7] Additional resources are available at the Health Impact Assessment Gateway.[8]

So far, research indicates that HIAs can succeed in promoting health-related change to the built environment. Successful efforts include HIAs for the Finningley Airport, and for Edinburgh's urban transportation strategy (reducing air and noise pollution; reducing health disparities).[9] However, other HIAs, such as the "Health of Londoners Transportation Strategy," have had little or no impact.[10] Several factors may influence the success of an HIA. Among these are involvement and interest of responsible decision-makers; involvement and political will of affected communities; timeliness; congruence between the health impacts examined and prevailing social and political concerns; and credibility and scientific objectivity of those completing the HIA.

Applicability in the U.S.

If HIAs are to become useful in the U.S., various challenges will need to be addressed. Among the technical difficulties that may arise is a lack of data to make quantitative estimates and barriers to communicating across disciplines.[11] HIAs may also encounter political resistance if they are presented late in the planning process, or if important decision-makers are unaware of them. There can also

be significant logistical challenges, such as identifying all stakeholders, finding the best way to engage them, and handling differing opinions among them. Few Americans have experience with HIAs, and training programs will also be needed.

Some countries such as Australia, Canada and Germany have mandated HIAs as part of regulatory processes; others such as Scotland, Sweden and Wales have used them on a voluntary basis.[12] Both mandated and voluntary HIAs have their advantages. However, until we can determine whether HIAs can contribute significantly to improving health in the U.S., we feel they should be voluntary.

As a pilot effort in the U.S., various local and national groups have shown an interest in the Buford Highway HIA. These include the Federal Highway Administration, the DeKalb County Board of Health, the Atlanta Regional Commission, and the Atlanta Regional Health Forum.

Need for Coordination

In the wake of the Buford Corridor redevelopment plan, the Federal Highway Administration-Georgia Division now plans to add sidewalks and other pedestrian amenities (refuge islands and in-pavement flashing lights) to a section of the highway just north of the area selected for the pilot HIA study. This decision came before the administration was made aware of the Buford Highway HIA, however — demonstrating the importance of timing and involving all potential stakeholders.

Nonetheless, it is likely the southern portion of Buford Highway, which includes the HIA study area, will eventually also be redeveloped. At that point it is unclear what the impact of the Buford Highway HIA will be. But even if it has little effect, it will increase awareness of how health is affected by the design of the places in which we live, work, travel and recreate. It will also contribute to the development and refinement of HIA methodology in the U.S.

While more data are needed on how the built environment influences health, the Task Force for Community Preventive Services has concluded that sufficient evidence exists for targeted modifications of the built environment to increase physical activity.[13]

Ideally, future health impact estimations will be made from longitudinal databases that include both health outcomes and built environment characteristics. But these types of databases do not exist, and it does not seem feasible to wait a decade or more for them. In their absence, HIA offers a promising new approach to appropriately factor health impacts into complex policy decisions.

Notes

1. The actuarial firm (Milliman) is located in Denver.
2. National Institute of Environmental Health Sciences (2004), "Obesity and the Built Environment: Improving Public Health through Community Design. Retrieved Jan. 15, 2004 from http://www.niehs.nih.gov/drcpt/beoconf/oberfa.htm.
3. A. Dannenberg et al., "Growing the Field of Health Impact Assessment in the United States: An Agenda for Research and Practice" (in preparation).
4. Increased connectivity, increased land-use. See B.E. Saelens, J.F. Sallis, J.B. Balck, and D. Chen, "Neighborhood-Based Differences in Physical Activity: An Environmental Scale Evaluation," *American Journal of Public Health* 93 (2003), pp. 1552-58.
5. Gothenburg consensus paper. "Health Impact Assessment: Main Concepts and Suggested Approach" (Brussels: European Centre for Health Policy, WHO Regional Office for Europe, 1999).
6. HIA encompasses a heterogeneous array of qualitative and quantitative methods and tools, from rapid HIAs that can be completed in a few days or weeks to full HIAs that may require months to complete. The decision to complete rapid or full HIAs is often determined by the available time and resources.
7. J. Kemm, J. Parry, and S. Palmer, eds., *Health Impact Assessment: Concepts, Theory, Techniques, and Applications* (New York: Oxford University Press, 2003).
8. Health Development Agency, "Heath Impact Assessment Gateway" (2004). Retrieved Dec. 1, 2004, from www.hiagateway.org.uk.
9. D. Gorman, M.J. Douglas, L. Conway, P. Noble, and P. Hanlon, "Transport Policy and Health Inequalities: A Health Impact Assessment of Edinburgh's Transport Policy," *Public Health* 117 (2003), pp. 15-24.
10. Transportation and Health Study Group and the Faculty of Public Health Medicine, "Carrying Out Health Impact Assessment of a Transportation Policy: Guidance from the Transport and Health Study Group" (2004). Retrieved Dec. 1, 2004, from http://www.phel.gov.uk/hiadocs/hia_transport_policy_and_guidance.pdf
11. N. Kreiger, M. Northridge, S. Gruskin, M. Quinn, D. Kriebel, G.D. Smith, et al., "Assessing Health Impact Assessment: Multidisciplinary and International Perspectives," *Journal of Epidemiology and Community Health* 57 (2003), pp. 659-62.
12. Kemm et al., *Health Impact Assessment*.
13. Http://www.thecommunityguide.org/pa/default.htm.