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Research Insights

Research Informing Policy: The Potential of Health Impact Assessments

Introduction

Population health status is affected by a variety of factors, including economic, environmental, and social determinants. Thus, while governmental public health agencies are often the primary organizations tasked with improving population health, many other organizations and industries influence health status. Coupled with escalating health care costs and a disease burden that is shifting toward illnesses and injuries more directly linked to other sectors, it is becoming increasingly important for health to be regularly factored into policy and program decisions in sectors that do not traditionally focus on health outcomes.

The growing field of health impact assessment (HIA) is showing promise as a wholistic approach to mitigating the potential health consequences of new projects and policies by addressing the relationship between these projects and health outcomes. By identifying unanticipated health issues and costs, translating data into practical information to inform policymakers, working with a broad range of stakeholders, and offering concrete recommendations, HIA promotes practical policy alternatives or project modifications that are responsive to health concerns and contribute to community health benefits.

The Robert Wood Johnson Foundation, in collaboration with The Pew Charitable Trusts, is investing in the development of HIA, with the goal of promoting and supporting the use of HIA as a tool to ensure that decisions in non-health sectors, whether at the local, state, tribal, or federal level, are made with health impacts in mind.

What is an HIA?

HIA is a structured, yet flexible, process that translates data into practical information that decision makers can use to anticipate and address the health effects of proposed programs, policies, or projects.[1] HIA uses a broad framework to consider multiple determinants and dimensions of health and their impact on health outcomes. As defined by the International Association for Impact Assessment (IAIA), HIA is a combination of procedures, methods, and tools that systematically judge the potential effects of a policy, program, or project on the health of a population and the distribution of those effects within the population. HIA identifies appropriate actions to manage those effects.[2]

Genesis of This Brief: AcademyHealth's Annual Research Meeting 2010

The Robert Wood Johnson Foundation funded an invited panel at the 2010 AcademyHealth Annual Research Meeting to discuss the growing field of Health Impact Assessment (HIA), and ways in which the field of Public Health Systems and Services Research (PHSSR) might contribute to HIA. The panel, *Research Informing Policy: The Potential of Health Impact Assessments*, featured presentations from Aaron Wernham, M.D., project director of the Health Impact Project, a collaboration of the Robert Wood Johnson Foundation and The Pew Charitable Trusts, Arthur Wendel, M.D., medical officer for the Healthy Community Design Initiative at the Centers for Disease Control and Prevention, and Dolores Acevedo-Garcia, Ph.D., associate professor in the Institute on Urban Health Research at Northeastern University. This issue brief is based largely on the panel's presentations.

HIA is characterized by several key elements. It seeks to inform decision making through a forward-looking, cross-disciplinary, and participatory approach. It focuses on vulnerable populations and equity by maintaining a broad definition of health and considering social, economic, and environmental influences. It follows a step-by-step process that allows for public input at each stage, and involves understanding the value and scope of the HIA, carrying out the assessment, disseminating the findings, and evaluating the process (see text box).[3]

HIA Success Stories

While the field of health impact assessment is relatively new to the United States, an increasing number of organizations and communities are using HIA to address a wide range of issues, including housing policies, labor standards, natural resource use, education, transportation, and land use.

Healthy Families Act: Paid Sick Days

An HIA performed by the San Francisco Department of Public Health and the nonprofit HIA group Human Impact Partners examined the impact of the Healthy Families Act—proposed federal legislation mandating seven sick days a year for companies with 15 or more employees—on community health. The HIA included a review of available peer-reviewed and empirical research, analyses of statistics on the availability and utilization of sick days, data on communicable disease outbreaks and burden of illness, and analyses of data from the 2007 National Health Interview Survey Focus groups. The HIA predicted that the Healthy Families Act would reduce the spread of illness, help prevent pandemics, and even save lives. It found that paid sick days would enable more people to comply with public health advice for controlling seasonal influenza and the large-scale spread of a new influenza strain, that ill restaurant workers would be less likely to spread food-borne disease in restaurants, and that paid sick days would reduce income loss and the threat of job loss for low-income workers during periods of illness, helping to prevent hunger and housing insecurity.[4] The HIA received national attention, successfully expanding the policy discussion from a focus on labor rights to the inclusion of the important public health implications of the Healthy Families Act.

Atlanta's BeltLine

The Georgia Institute of Technology completed an HIA to better understand the implications of the Atlanta BeltLine project—a project proposing the creation of a light-rail system and major redevelopment along a corridor of abandoned railways around the city center. The results of the HIA suggested the project would have a favorable impact on community health by providing green spaces, and increasing access to healthy food and opportunities for physical activity. It also recommended how developers could strategically place parks, residential areas, schools, transit routes, and grocery stores to support residents' well being and decrease potential health risks. As a result of the HIA, the BeltLine board of directors now includes health experts, and ongoing project planning decisions will take health into account.

Defining success

The success of HIA is defined primarily by if and how the HIA informs the decision-making process and, ultimately, if the policy decision leads to improved health and reduced health inequalities. There are a variety of levels of effectiveness, which vary from changes being made as a result of an HIA, reinforcing decisions that were already being made, and raising health awareness regardless of whether or not a change is made.[5]

For example, in the case of the Healthy Families Act, the HIA may not have led to passage of the legislation, but it significantly shifted the dialogue around paid sick days from a labor rights issue to a health issue that affects everyone in some way. The HIA that investigated potential effects of the Atlanta BeltLine project reinforced the proposal and factored into the strategic planning. Additional benefits commonly noted by HIA practitioners include building lasting partnerships between health and other sectors that lead to more routine consideration of health, and providing stakeholders with information about risks and benefits, and enabling them to participate in the decision-making process.

The HIA Process

1. Screening—Determines whether the HIA is feasible, and if it is likely to succeed and add value.
2. Scoping—Creates an outline for the HIA by determining what health effects the HIA should address and identifying concerns from stakeholders about pending decisions, and who will be impacted by the policy or project.
3. Assessment—Describes the baseline health of people and groups affected by the decision and performs an impact assessment that predicts the potential health effects of the decision.
4. Recommendations—Provides recommendations for protecting and promoting health. The strategies and actions required to facilitate adoption of recommendations into the final decision will vary.
5. Reporting—Disseminates the findings to decision makers, affected communities, and other stakeholders.
6. Monitoring and Evaluation—Identifies indicators to track the outcomes of any implemented recommendations. This monitoring information serves as the basis of evaluating the impact of the HIA and also helps shape future policy and management decisions.

Despite expectations that HIAs will inform decision-making, challenges remain in formally evaluating their success. Little evidence from evaluating HIAs is available to demonstrate if and how the HIA approach informs the decision-making process and, in particular, if it improves health outcomes and reduces health inequalities. The CDC conducted research into best practices of HIA, and while it found many HIAs to be effective, certain limitations were recognized, including that effectiveness was based on self-reporting from practitioners. One part of the study conducted interviews to gather reported effectiveness of 35 HIAs. Preliminary findings found that 25 of the HIAs had direct effect, causing a change in the project. Nine demonstrated general effectiveness by educating decision makers, and one had no effect. Further research identified characteristics of effectiveness, which included: decision makers that supported the HIA, community involvement, addressing vulnerable populations, collecting new data, and quantification of any health impact.[6]

HIA and Evidence-Based Research

HIA uses a flexible, data-driven approach that identifies the health consequences, positive or negative, of new policies and develops practical strategies to enhance their health benefits and minimize adverse effects. Because HIA is intended to affect policy change, clear evidence is needed to make the case to decision makers. Such evidence may include simple review of existing evidence, public input and qualitative analysis, or more complex methods such as cost/benefit analyses, expected reduction or prevention of a disease burden, improvements in quality adjusted life years (QALYs), reductions in mortality, and other quantifiable health effects. Also, because HIA often involves multiple research questions and multiple stakeholders, a diversity of evidence is required across disciplines, study designs, and data sources.

Evidence-based approaches—those explicitly linked to the best available scientific evidence and reflecting community preferences and feasibility—are increasingly used to inform health policy decision-making on the burden of a disease attributable to particular causes.[7] These approaches also inform interventions and policies that might work to confront those causes, and issues of community fit and feasibility. As opposed to traditional health care research, which tends to focus more on evidence from studies with an experimental design, HIA draws on multiple sources, including community testimony, grey literature, and expert opinion. The interdisciplinary nature of HIA would suggest that there may be opportunities for a more systematic approach to integrating different types of evidence through methods such as systematic reviews, simulations, surveys and focus groups, and field observations.

HIA, which often involves rapid investigation and dissemination of results in order to meet the timeline of an active decision-making process, usually with limited resources, has sometimes been critiqued for its inconsistent approach to reviewing and analyzing data. HIA proponents point out that decisions with important health effects are made every day without any considerations of health, and that uncertainty and incomplete data are not justifications to prevent predictions and actions that can improve health. However, critics argue the value of predicting health impact and outcomes is limited without empirical data to substantiate findings. The growing field of Public Health Systems and Services Research (PHSSR) has the potential to support HIA by contributing such evidence.

PHSSR is a field of study that examines the organization, financing, and delivery of public health services within communities, and the impact of these services on public health.[8] While still a young field, its researchers aim to advance the field by applying more innovative and flexible research designs, along with rigorous analytic approaches that draw on multiple disciplinary and methodologic perspectives.[9] As a multidisciplinary field, PHSSR explores all players influencing public health. The term "services" broadly includes programs, direct services, policies, laws, and regulations designed to protect and promote the public's health and prevent disease and disability at the population level.[10] The similar interdisciplinary nature of HIA suggests that PHSSR can play a role in adding to the body of evidence available for HIAs to inform policy decisions that influence health.

Challenges and Opportunities

As a growing field, there are challenges that HIA faces. The strategy for HIA must resolve competing political priorities and address projects and health concerns that cross geographic boundaries. Additionally, the field must work to improve access to and specificity of data, especially at the jurisdiction level often required to perform an HIA, particularly the community level where HIAs are most common. As a field, HIA challenges include establishing more political and financial support, developing training and capacity, and determining where HIA fits as an interdisciplinary field.

Political and financial support for HIA, and HIA-like activities, may be garnered by demonstrating that health is inextricably linked to the decisions made by multiple sectors, and that completing these assessments is beneficial to everyone. While doing so, HIA must also continue to develop methods, draw upon available data, and use evidence-based approaches to produce reliable results. A balance must be achieved between rigorous data collection and methods, and the utility of reasoned judgments that are based on

the best-available evidence while still timely enough to inform policy decisions.

Moving forward, it will be important to grow capacity and training to increase the use of HIA. For the HIA process to be successful across a variety of locations and stakeholders, it will have to continue to be both adaptable and accessible. As HIA practice expands and develops, there is an opportunity to integrate the use of evidence and formalize the methods that are used in all steps of the HIA process. The field of PHSSR can play a useful role both in the development of data and methods for HIA, as well as in research translation. As the field of PHSSR continues to develop both methods and data sources, there will be opportunities to provide resources and information that support and contribute to the development of the HIA field.

Moving Forward

Given the interdisciplinary nature of HIA, there is a great opportunity to promote a broad, cross-sector understanding of health impacts. Translation of research into policy and practice is a vital part of the HIA process. Mandates, challenges, data sources, stakeholders, and desired outcomes may differ across sectors, so collaboration and communication between organizations will be another key element to the future of HIA. The value of HIA and its findings must be disseminated to a variety of stakeholders, encouraging the integration of health into public decision-making, and building support for the field.

Endnotes

1 Health Impact Project, A Collaboration of the Robert Wood Johnson Foundation and the Pew Charitable Trusts. "One Page Overview of HIA and the Project." Accessed August 6, 2010 from http://www.healthimpactproject.org/admin/documents/files/Health-Impact-Project-One-Pager_FINAL_10-15-09_to-ArtMan.pdf.

2 International Association for Impact Assessment, IAIA Wiki. "Health Impact Assessment," modified May 13, 2010. Accessed August 6, 2010 from http://www.iaia.org/iaiawiki/hia.ashx.

3 Health Impact Project, A Collaboration of the Robert Wood Johnson Foundation and the Pew Charitable Trusts. "About Health Impact Assessment." Accessed August 6, 2010 from http://www.healthimpactproject.org/hia.

4 Human Impact Partners. "A Health Impact Assessment of the Health Families Act of 2009, Summary of Findings." June 11, 2009. Accessed September 20, 2010 from http://www.humanimpact.org/component/jdownloads/finish/5/77.

5 Wendel, A. "HIA: A tool to achieve public health goals." Presentation at the AcademyHealth Annual Research Meeting, Boston, June 29, 2010.

6 Ibid.

7 Acevedo-Garcia, D. "The Use of Evidence in Health Impact Assessment." Presentation at AcademyHealth Annual Research Meeting, Boston, June 29, 2010.

8 Mays, G.P., P.K. Halverson and F.D. Scutchfield. "Behind the Curve? What we know and need to learn from public health systems research," *J Public Health Management and Practice.* 2003;9(3)179-182.

9 Mays, G.P. et al. "Public health delivery systems: evidence, uncertainty, and emerging research needs." *American Journal of Preventive Medicine,* 2009: 36(3) pp. 256-265.

10 AcademyHealth's Public Health Systems Research Interest Group (IG) recently adopted an expanded definition of public health systems research that further defines public health services. The IG's statement states: "'services' broadly includes programs, direct services, policies, laws, and regulations designed to protect and promote the public's health and prevent diseases and disability at the population level." See http://www.academyhealth.org/files/interestgroups/phsr/PHSR%20Definition%20for%20Web%20site.pdf.