Overview

A growing body of research shows that social, economic, and physical environments play a significant role in people's health. Decisions about policies, programs, and projects in sectors such as housing, transportation, and education can affect the health of individuals and communities. However, decision-makers often do not understand or adequately account for the relationship between the choices they make in these and other sectors and public health outcomes.
Health impact assessments (HIAs) are one way to bring health evidence to decisions. HIA is a tool that can help communities and decision-makers collaborate to identify the potential health effects of decisions in multiple sectors; how those impacts might disproportionately affect different racial, income, geographic, and other groups; and how that distribution can influence health outcomes. HIAs then use those findings to develop recommendations that can help maximize health benefits and minimize preventable risks, such as chronic disease and injuries.

Several evaluations that have examined HIAs’ effectiveness have found that in the near-term they can illuminate the potential health effects of policy and program choices on communities, influence decision-making, demonstrate the connection between health and a range of sectors, and raise the profile of health impacts among decision-makers. However, their long-term impact has not been well studied.

To begin addressing that gap, in 2016 the Health Impact Project, a collaboration of the Robert Wood Johnson Foundation and The Pew Charitable Trusts, contracted with Harder+Company Community Research to study a sample of HIAs. The research team used an online questionnaire and phone interviews with HIA practitioners, community members, and decision-makers to explore how the HIAs affected social determinants of health—the social, economic, and environmental factors, such as income and housing, that shape health. The study also examined HIAs’ impact on two key drivers of health equity: resource allocation and community participation in decision-making. Health equity is the guiding principle that disparities in health outcomes caused by factors such as race, income, or geography should be addressed and prevented, providing opportunities for all people to be as healthy as possible.

Specifically, this study found that HIAs can:

- Build trust and strengthen relationships between decision-makers and community residents.
- Contribute to more equitable access to health-promoting resources such as healthy foods, safe places for physical activity, transit, and health care.
- Protect vulnerable communities from disproportionate exposure to environmental hazards.
What Is a Health Impact Assessment?

HIAs evaluate the potential positive and negative effects on the health and well-being of a community of proposed policies, programs, and projects. They employ a variety of data methods, including qualitative and quantitative analyses and input from stakeholders, to determine how a proposal could affect environmental, social, and economic factors that shape health and how those impacts are likely to be distributed among the population, especially high-risk groups such as seniors, children, and low-income families. HIAs also provide pragmatic, evidence-based recommendations for reducing risks, promoting benefits, and monitoring health effects after a decision is made and implemented.

HIAs involve six steps. Engagement with the communities and individuals that may be affected, policymakers, and other stakeholders occurs throughout the steps.

Step 1: Screening. The HIA team and stakeholders determine whether an HIA is needed, can be accomplished in a timely manner, and would add value to the decision-making process.

Step 2: Scoping. The HIA team and stakeholders identify the potential health effects that will be considered and develop a plan for completing the assessment, including specifying their respective roles and responsibilities.

Step 3: Assessment. The HIA team evaluates the proposed project, program, policy, or plan and identifies its most likely health effects using a range of data sources, analytic methods, and stakeholder input to answer the research questions developed during scoping.

Step 4: Recommendations. The team and stakeholders develop practical solutions that can be implemented within the political, economic, or technical limitations of the project or policy to minimize identified health risks and to maximize potential health benefits.

Step 5: Reporting. The team disseminates information including the HIA’s purpose, process, findings, and recommendations to a wide range of stakeholders.

Step 6: Monitoring and evaluation. The team and stakeholders evaluate the HIA according to accepted standards of practice. They also propose a plan for monitoring and measuring the HIA’s impact on decision-making and the effects of the implemented decision on health.
**Methodology**

With input from the Health Impact Project and a 13-member expert panel, Harder+Company conducted a mixed-methods study using an online questionnaire and semi-structured interviews. The researchers examined a sample of HIAs from the 388 assessments that were in the Health Impact Project database as of August 2016. The final sample set was 126 HIAs representing all available sectors. The analysis included an examination of the final reports and other available documents, such as monitoring and evaluation plans, for each HIA included in Harder+Company’s research as well as a literature review to identify prior studies that explored the outcomes of HIAs.

Harder+Company sent a questionnaire to the contact person designated in the database for each of the initial 388 HIAs—typically a practitioner who conducted the assessment—asking about the HIA’s impact on policies, social determinants of health, and health equity. Those initial contacts, in turn, identified another 133 stakeholders involved in the HIAs. The Harder+Company team emailed those people and invited them to participate. In total, 521 individuals were given an opportunity to complete the questionnaire between August and September 2016. Ultimately, 149 respondents involved with the final sample of 126 HIAs completed the questionnaire (32 percent response rate at the HIA level; 29 percent response rate among solicited respondents).

The team also interviewed 46 individuals, including practitioners, community members, and decision-makers, out of an invited sample of 80 HIA stakeholders (58 percent response rate). The interview respondents represented 27 of the 126 HIAs. Those 27 assessments were exclusively from built environment sectors, including housing, physical activity promotion, and transportation, among other topics. The study team chose to focus the interviews on the built environment because HIA has been widely used, studied, and accepted in that area and to ensure the collection of comparable data. The questionnaire and interview guide are available in the companion methodological supplement, which can be downloaded from the issue brief webpage.

**Build trust and better relationships**

“The Minimum Elements and Practice Standards for Health Impact Assessment” describes the essential components of assessments; provides guidance for effective HIA practice; and encourages practitioners to gather input from multiple perspectives, understand stakeholder concerns to help identify local health risks, and use feedback from stakeholders to prioritize recommendations. For example, practitioners might involve decision-makers, business owners, and community members in an HIA by inviting them to participate in data collection, interviews or focus groups, an advisory committee guiding the assessment, or in developing the scope and recommendations.

Harder+Company’s study found that this type of community engagement through the HIA process can contribute to increased trust and improved relationships between decision-makers and residents and make community engagement a more standard part of decision-making broadly. Although the specific engagement strategies varied across the studied HIAs, close to three-quarters of questionnaire respondents (74 percent) indicated that their HIAs positively influenced community engagement in local decision-making, including 45 percent who said it had a strong positive impact on community engagement. Among the 74 percent of respondents who reported an effect on community engagement, 93 percent felt that the HIA process, including bringing stakeholders together and encouraging the participation of underrepresented populations, increased the level of community engagement in decision-making more than HIA outputs, such as the final report.
Interviewees indicated that community engagement during the process helped repair historically strained relationships between residents and decision-makers in nearly a third of HIAs in the interview sample. For instance, one practitioner in Florida said, “[The process] really helped the Health Department become more relatable and get their messages out to residents of the community. It’s really very interesting to see the increase in people’s acceptance of the Health Department. They are not suspicious anymore. You drive around in a Health Department car and people come over and they talk to you.”

**Implications for health and health equity**

Increased community engagement and strengthened relationships with decision-makers may yield health benefits. Research shows that excluding community members from decision-making or failing to consider the impacts of a policy change on residents can lead to uncertainty and a perceived loss of control, cultural identity, and sense of belonging among affected populations. The resulting distrust can decrease the effectiveness of health promotion campaigns and reduce participation in treatment and prevention services, which in turn can negatively affect health outcomes and increase inequities, especially among historically disadvantaged communities. Therefore, boosting trust and building stronger relationships between decision-makers and community members, particularly those with greater distrust of government agencies and researchers, may enhance social connectedness, civic agency, and health and well-being.

**Increase equitable access to resources**

Through the data collected during an HIA, practitioners can highlight how a proposed policy, project, or program might disproportionately affect specific populations and develop recommendations to help policymakers mitigate potential inequitable harms and maximize health-promoting solutions. This study found that HIAs can lead to more equitable access to health-promoting resources such as safe water, affordable transit, and quality housing. Half of interview participants said their HIAs led decision-makers to change how they select projects or distribute resources in communities. For example, an HIA on a comprehensive plan for a midwestern city determined that large areas of the city lacked a sidewalk network or bicycle infrastructure, particularly in low-income communities, and though plans to increase active transportation infrastructure, such as multi-use trails, were already in place, those findings influenced the locations of new sidewalks and sidewalk repair projects. The city also created a sidewalk allocation system that prioritized historically isolated and under-resourced communities. A community stakeholder explained the impact:
“[The HIA] did identify disparities between neighborhoods and between groups that had never been identified before in this area. We now know that things that may have seemed intuitive before are backed up with data. The Hispanic community and the African American community in [this city] are functionally very isolated. We didn’t really know that before.”

Questionnaire respondents also indicated that, by raising awareness of and providing recommendations to address community concerns, their HIAs contributed to more equitable access to health-promoting resources. For example, one HIA on the potential impacts of proposed water and sanitation improvement projects in a predominantly Hispanic and low-income town found that the community’s water did not meet drinking standards and that a third of residents suffered from ailments often associated with water systems contaminants such as arsenic and fecal matter. The HIA team and recommendations played an integral role in helping the town receive a multimillion-dollar grant for design and development of a new water system and a commitment for an additional $27 million for implementation.

Another HIA examined proposed changes to a city’s transit system and found that low-income residents and those without private transportation would be most affected by the changes. The recommendations contributed to changes in the proposed project, including the elimination of a two-bag limit on buses to encourage the use of transit for grocery shopping. More broadly, the HIA helped boost support among city council members for incorporation of health considerations into transit-related decisions.
Implications for health and health equity

Resources such as transportation, housing, parks and recreational facilities, and schools are critical to individual and community health. For example, the concentration of socially and economically disadvantaged families in neighborhoods with few amenities, struggling schools, and limited business or job opportunities is associated with higher rates of disease, injury, disability, and early death.

By helping decision-makers consider evidence about differences in the allocation of affordable, quality resources across communities, especially those most at risk for poor health outcomes, HIAs can encourage local officials to prioritize investments that promote health and reduce inequities.

Reduce environmental hazard exposure

Information gathered through the HIA process can help communities, practitioners, and decision-makers anticipate many health consequences of proposed decisions and identify opportunities to address existing health risks.

Harder+Company’s study found that HIAs can help reduce exposure to adverse environmental conditions, such as air pollution and hazardous waste. Interviewees representing nearly a third of the HIAs in the interview sample reported that recommendations from their assessments helped address disproportionately high contact with environmental risks and associated negative health outcomes in the target communities. One interviewee said:

“This housing project is built in the inside of a curve of a freeway [and] there were a number of environmental concerns that were raised. The children, and probably the adults, had asthma at higher rates than the population as a whole. The recommendations were very specific around the housing units themselves [and included putting] in air conditioning units which are designed differently so they don’t create that same propensity for mold, sealing the windows, and redesigning the doors.”
Questionnaire respondents also shared ways in which HIA recommendations led to more equitable protections from environmental risks. For example, an HIA conducted in the Pacific Northwest to determine how a river cleanup might affect tribal communities and others living or working nearby found that some important hazards and that communities most at risk for poor health outcomes had not been adequately considered in the initial plan. Because of the HIA, the city council passed a resolution that, in part, requested that city officials join representatives from affected communities on an advisory group to guide the cleanup and allocated $250,000 to implement recommendations identified in the HIA.

A separate HIA done in the South to inform a U.S. Environmental Protection Agency decision in a predominantly low-income black community helped residents win removal by the city of hazardous dumped tires from their neighborhood. The HIA was conducted to inform decisions on water quality and revitalization improvement efforts, and it found that tire waste was contributing to water contamination in the community. Through the HIA process, the city and community organizers built a stronger relationship and their collaboration led not only to the tire cleanup but also to increased enforcement of illegal dumping ordinances.

Because the community members were working with us on the HIA, they had more of a connection to EPA folks. During the course of the HIA, they were actually able to get some action on the removal of these tires ... [that] had been illegally dumped.”

HIA practitioner

Implications for health and health equity

Strong evidence shows that exposure to environmental risks such as air pollution, water contamination, hazardous waste, and toxins in soil can have substantial, negative effects on health. Lower-income communities and those with large proportions of residents of color are disproportionately exposed to these environmental risks. When decision-making takes disparities in health risks into account, policymakers can better protect communities from environmental hazards and potentially help mitigate negative health outcomes.

Limitations and implications for future research

Understanding how HIAs affect determinants of health and health equity can help practitioners refine the process to maximize its potential benefits for communities and health outcomes. However, studying the impact of HIAs is challenging because social changes can take years to manifest and may be difficult to attribute directly to HIAs given other economic, political, or social influences.

Harder+Company’s study faced the additional limitation of relying mainly on self-reported data, which can introduce bias related to the accuracy or objectivity of respondents’ recollections or their understanding and interpretation of questions. Additionally, most respondents were HIA practitioners despite efforts to recruit more community members and decision-makers.

To address these limitations, Harder+Company will conduct a second study using additional data sources and methods to validate the findings of this study, quantify the extent to which HIAs are associated with changes in determinants of health and health equity, explore the effects of factors such as the sector or geographic focus.
of an HIA on its impacts, and identify ways to strengthen HIA practice. That research will examine groups of HIAs classified by completion date (2009-2013, 2014-2015, and since 2016 or currently underway) and by three determinants of health: access to healthy foods; safe, affordable, and healthy housing; and employment.

**Conclusion**

Findings from this study suggest that health impact assessment can be an influential tool for strengthening community engagement, building trust between residents and decision-makers, and enhancing the decision-making process. The study also suggests that HIAs can contribute to more equitable access to health-promoting resources and protection from environmental risks.

By engaging community members in the process and identifying their concerns, HIAs help uncover health risks to residents that may otherwise be masked. Similarly, by sorting the collected data by geographic area, socioeconomic status, and racial or ethnic groups, HIAs can identify opportunities to increase equity and help practitioners develop evidence-based recommendations to address differences in distribution of health risks.

These findings are consistent with prior research showing that HIAs can boost communities’ participation in the decisions that most affect them, illuminate the connection between health and decisions in a range of sectors, and raise the profile of health impacts among decision-makers for the long term. The forthcoming second study from Harder+Company will delve further into the specific opportunities HIAs may present to improve decision-making and advance public health.
**Expert Panel**

This study benefited from the insight and expertise of an expert panel that offered guidance and feedback on the research methods and approach. Although the study team placed substantial weight on input and advice from the group, the Health Impact Project and Harder+Company had final authority and responsibility for the study design, methods, and findings.

The panel members were:

**Theresa Chapple**, de Beaumont Foundation

**Diana Charbonneau**, formerly of the Center for Community Health and Evaluation, Group Health Research Institute

**Julia Coffman**, Center for Evaluation Innovation

**Darcy Freedman**, Department of Population and Quantitative Health Sciences, Case Western Reserve University

**Maggie Germano**, formerly of The Pew Charitable Trusts, Planning and Evaluation

**Kim Gilhuly**, Human Impact Partners

**Fiona Haigh**, Centre for Health Equity Training, Research, and Evaluation, University of New South Wales Sydney

**Ben Harris-Roxas**, Harris-Roxas Health

**James Macinko**, UCLA, Department of Community Health Sciences and Department of Health Policy and Management

**Carlos Martin**, Urban Institute

**Stacey Millett**, project director of the Health Impact Project, worked for the North Carolina Center for Health & Wellness while participating on the expert panel

**William Nicholas**, Health Impact Evaluation Center, Los Angeles County Department of Public Health

**Keshia Pollack Porter**, Johns Hopkins University Bloomberg School of Public Health

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**Expert reviewers**

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Endnotes


