Ounces of Prevention: Health Impact Assessments Can Help Improve Public Policy, Health Outcomes

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When I was a resident, I cared for an asthmatic boy who had been in and out of the hospital 3 times in 8 weeks. Each time, we sent him home with an escalating regimen of medications, and each time, his symptoms only worsened. After his mother told me that they lived in a run-down apartment with dusty carpeting and mold-ridden walls, I remember asking the attending physician, only half joking, whether there was a way to write a prescription for a new apartment.

A continuously learning health system considers all the factors that shape health. This experience illustrates the reality behind many of the most prevalent and costly illnesses threatening our nation today. Asthma, obesity, heart disease, and injury often are affected by conditions in places where people live and work. If we can bring prevention and wellness concerns into the decisions that shape those places, we can leverage one of the most promising opportunities to improve health.

Health impact assessments, also known as HIAs, offer a way to consider health when making decisions in other sectors. HIAs take a systematic look at a proposed policy or plan to find the often unforeseen health impacts. They offer recommendations to maximize benefits and minimize risks. And they can serve as a way to address community concerns about a project or as a means for decision makers to balance trade-offs.

Most current health care reform initiatives, such as accountable care organizations and the patient-centered medical home model, which seeks to coordinate care across the team of providers, reflect a focus on improving health outcomes while reducing costs. But if we’re going to do this successfully, it will require thinking about living conditions outside the clinic. HIAs offer a way to do this, and they’ve already shown promise as a way to prevent illness and, ultimately, save money. Below are just two examples.

Not long ago, an HIA of a proposed low-income senior housing complex in Oakland, California, identified air pollution and noise from a nearby highway as real health risks for the older, vulnerable residents. Air pollution is an important risk factor for a number of problems in this population, including asthma and heart attacks. The assessment pointed to several solutions that were ultimately adopted, including relocating the building’s air intake, installing better air filtration and creating a noise-buffered court-
yard as the main entryway for the building.\textsuperscript{2} According to one recent estimate, caring for a single patient with very poorly-controlled asthma can cost as much as $8,880 per year—roughly half the price of conducting this HIA.\textsuperscript{3}

In Massachusetts, an HIA of the state’s Low Income Home Energy Assistance Program found that families burdened by high heating costs often crowd into a single room with space heaters or ovens to stay warm, increasing the risk of fire, burns, carbon monoxide poisoning, and respiratory infections. Based on the findings, the Massachusetts State Auditor recognized that such dangers created the potential for increased Medicaid costs. Ultimately, the study contributed to the state legislature’s decision to increase funding for the energy assistance program.\textsuperscript{4}

With outcomes like these, it’s no wonder that local health departments, community-based organizations, urban planners, and other policy makers are beginning to recognize the power of HIAs. From the demolition of a lead-painted bridge near a residential area in Cincinnati to oil and gas development in Alaska and the state budget process in New Hampshire, HIAs are being applied to a wide variety of public policy decisions. In 2007, the field of HIAs was new in the United States, with only 27 completed assessments. Today, more than 200 HIAs have been completed or are in progress. Some states, including Alaska, Massachusetts, and Oregon, are beginning to make HIAs a routine part of decision making, each according to their needs and capacity.

Physicians cannot write prescriptions to remove dusty carpeting or moldy drywall, but HIAs are a powerful tool to identify and address the root causes of illnesses in the United States. This innovative approach can augment efforts to improve the health care delivery system, boost patient outcomes, and reduce medical costs.

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References
4. Confirmed via e-mail with HIA practitioner.
Note: Authored commentaries in this IOM Series draw on the experience and expertise of field leaders to highlight health and health care innovations they feel have the potential, if engaged at scale, to foster transformative progress toward the continuously improving and learning health system envisioned by the IOM. Statements are personal, and are not those of the IOM or the National Academies.

In this commentary, Aaron Wernham, director of the Health Impact Project of the Robert Wood Johnson Foundation and The Pew Charitable Trusts, describes the promise offered by health impact assessments (HIAs) for identifying and engaging the broader societal and environmental causes of illnesses. His discussion touches on several concepts central to continuously improving care, including the importance of:

- Increasing focus on resolving problematic living conditions outside the clinical setting that often shape individuals’ experiences with illness;
- Partnership with public policy decision makers in order to fully integrate discussion of health impacts as a routine component of the decision-making process; and
- Harmonization among HIAs and related health initiatives in order to coordinate improvement efforts across the clinical and community settings.

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