LETTER FROM THE EDITOR

Welcome to the inaugural issue of the Chronicles of Health Impact Assessment (CHIA)! It has been quite a journey to launch this journal, but we are happy to present the first edition. The motivation behind the creation of CHIA was the difficulty experienced when seeking publishing sources for health impact assessment studies. We continually received feedback that our articles were interesting, however the journals "did not publish these types of articles". The idea to create an avenue for dissemination of health impact literature was born when we learned the Indiana University Library had the capability to publish online open access journals. In this issue you will find an update on the Society of Practitioners of Health Impact Assessment (SOPHIA), the history of the work on health impact assessment in the United States, and the support that has been provided and will be necessary to continue to expand the field. You will also find an article about the advocacy needed to further address health equity and democracy.

At the 2015 National HIA meeting we met to ask what types of questions the CHIA journal could help answer. It was suggested we discuss successful monitoring and evaluation efforts and highlight more predictive outcomes modeling. People wanted to have access to evidenced based criteria for community engagement and lessons learned. Finally, they wanted articles about practical tips from the field, case studies and more methodology focused articles. Please consider this first issue as a call for articles addressing these and similar issues. We hope as we move forward to publish two issues a year and eventually include issues with a specific focus, such as HIAs that address: transportation, land use, or food access and procurement concerns. Please begin to submit your articles to chia@iu.edu.

In, conclusion I want to thank the Society of Practitioners of Health Impact Assessment (SOPHIA) Board and Human Impact Partners (HIP) for agreeing to work on the journal. I also want to thank the IU Richard M. Fairbanks School of Public Health Dean, Dr. Paul Halverson, my chair Dr. Nir Menachemi, and the faculty and staff for their support and encouragement. I also want to thank the other members of the editorial board who assisted in so many ways in the launching this first issue, especially Lyndy Kouns.

Best wishes,
Cynthia Stone DrPH, RN
Chronicles of Health Impact Assessment Editor-In-Chief

LETTER FROM THE SOCIETY OF PRACTITIONERS OF HEALTH IMPACT ASSESSMENT

Welcome to the first issue of CHIA! SOPHIA is thrilled to partner with Indiana University (IU) to produce this important resource for the Health Impact Assessment (HIA) field. CHIA was created in response to an important need identified by HIA practitioners to have a platform to both share their work in a new way and learn. As the HIA field continues to grow and reinvent itself, CHIA will serve as a compendium of evidence-based approaches to conducting HIAs.

The publication of CHIA provides an excellent opportunity for SOPHIA to further our mission of providing leadership and promoting excellence in the field of HIA. IU has been working hard for almost two years to produce this resource, and SOPHIA has been supporting IU by recruiting our members to serve as editorial board members and reviewers. Like many HIA field endeavors, the result is a product that reflects the current state of the field, and provides yet another opportunity for the HIA community to come together into the future. We encourage all SOPHIA members to take advantage of this incredible opportunity and contribute to the HIA community of practice.

Tatiana Lin, SOPHIA President

Nancy Goff, SOPHIA Director

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THE SOCIETY OF
PRACTITIONERS OF
HEALTH IMPACT ASSESSMENT
SOPHIA

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A BRIEF HISTORY OF HEALTH IMPACT ASSESSMENT IN THE UNITED STATES

Andrew L. Dannenberg, MD, MPH

Background

In recent decades, several factors have contributed to the increasing use of health impact assessment (HIA) in the United States. Initially in California and subsequently in other states, communities that have been traditionally disenfranchised began seeing HIA as an opportunity to address the issues impacting their lives and to increase their ability to participate in decision-making processes about those issues. Second, public health professionals began to better understand the links between health and the natural and built environments, and to use HIA as a tool to improve cross-disciplinary communication. Third, public health professionals recognized that HIA could be valuable to address economic and social issues, such as educational and wage policies, in addition to built environment issues, such as land use and transportation. Some of the major milestones in the growth of the use of HIA in the United States are listed in Figure 1.

The National Environmental Policy Act in 1969 (NEPA, 1969) required evaluation of the environmental effects of any "major federal action significantly affecting the quality of the human environment." In recognizing of the interdependence of environmental quality and human health, NEPA was designed "to promote efforts which will prevent or eliminate damage to the environment and biosphere and stimulate the health and welfare of man" (NEPA, 1969 §4321) and to "assure for all Americans safe, healthful, productive and aesthetically and culturally pleasing surroundings" (NEPA ,1969 §4331; Bhatia, 2008).

While NEPA could be used to examine health impacts of projects and policies routinely, in practice, health has received relatively little attention in most environmental impact assessments (EIAs). For example, EIAs commonly estimate the change in air quality (an environmental impact) resulting from a proposed project or policy, but do not estimate the associated change in respiratory disease rates (a health impact) that could be expected from that change in air quality. The inclusion of health in the EIA process has been encouraged by the National Research Council report on HIA (NRC, 2011) and discussed in several reviews (Cole, 2004; Bhatia, 2008).Examples in which health issues have been incorporated into the EIA process include the Lake Oswego to Portland Transit Project HIA in Oregon (http://www.pewtrusts.org/hip/portland-to-lake-oswego-transit-project.html) and the HIA of oil and gas leasing in the National Petroleum Reserve in Alaska's North Slope Borough (Wernham, 2007).

In 1986, the World Health Organization's (WHO) *Ottawa Charter for Health Promotion* was a major step toward the development of HIA. The charter recognized that achieving health requires working across multiple sectors to fulfill basic human needs including: peace, shelter, education, food, income, a stable eco-system, sustainable resources, social justice, and equity (http://www.who.int/healthpromotion/conferences/previous/ottawa/en/). In 1997, the WHO *Jakarta Declaration on Leading Health Promotion into the 21st Century* specifically called for the use of "equity-focused health impact assessments as an integral part of policy development" (http://www.who.int/healthpromotion/conferences/previous/jakarta/declaration/en/index2.html). Substantial work on HIA in the 1990s, primarily in Europe, led to the publication of the WHO Gothenburg Consensus Paper that delineated the core principles of HIA practice including democracy, equity, sustainable development, and ethical use of evidence (WHO, 1999).

Figure 1. Selected milestones in the development of health impact assessment in the US. Adapted from Ross 2014 and Harris-Roxas 2012

1969	National Environmental Policy Act passes that included among its purposes to "promote efforts … [to] stimulate the health and welfare of man"
1986	World Health Organization's Ottawa Charter for Health Promotion recognizes that achieving health requires working across multiple sectors
1997	WHO Jakarta Declaration calls for the use of "equity-focused health impact assessments as an integral part of policy development"
1999	WHO releases the Gothenburg consensus paper on HIA
2001	San Francisco Department of Public Health publishes a paper on the health benefits of a living wage ordinance, the first HIA in the US (Bhatia 2001)
2004	First book on HIA published, primarily with European contributors (Kemm 2004)
2006	CDC documents steps to advance HIA in the US, based on 2004 CDC/RWJF workshop (Dannenberg 2006)
2006	University of California Berkeley teaches first graduate school course on HIA in the US
2008	CDC documents first 27 HIAs conducted in the US (Dannenberg 2008)
2008	North American HIA Practice Standards Working Group releases version 1 of practice standards for HIAs
2008	Washington state requires an HIA for State Route 520 bridge replacement, the first HIA required in the US
2008	First HIA of the Americas workshop held in Oakland, CA
2009	Massachusetts Healthy Transportation Compact requires HIAs for transportation projects
2011	National Research Council publishes *Improving Health in the United States: The Role of Health Impact Assessment* to guide future of HIA in the US (NRC 2011)
2011	Society of Practitioners of Health Impact Assessment (SOPHIA) established
2012	First National HIA conference held in Washington, DC, sponsored by RWJF
2014	First textbook on HIA in the US published (Ross 2014)
2014	First sector-specific review of HIAs in the US published (Dannenberg 2014)
2015	Evaluation of the impact of HIAs in the US published (Bourcier 2015)
2016	Over 380 HIAs completed or in progress in the US
2016	First issue of *Chronicles of Health Impact Assessment* published

Early HIA work in the US

Early work on HIA in the US was led by the San Francisco Department of Public Health, the UCLA School of Public Health, and Partnership for Prevention (http://www.prevent.org; Cole, 2008). In 1999, the first HIA conducted in the US described the health impacts of a living wage ordinance in San Francisco; however, it was not called an HIA at that time (Bhatia, 2001). In 2004, Cole discussed the potential for expanded use of HIA in the US and identified a number of reports on health impacts of various issues outside of the health sector, such as gambling and building codes. However, many of these reports did not focus prospectively on a specific policy or project and should not be considered HIAs (Cole, 2004). The fact that one can assess the health impacts of any topic (such as air pollution or sea level rise), yet not be doing a health impact assessment, leads to confusion of terminology that persists now. Most HIAs are conducted prospectively on a proposed policy or project in which decision-makers are willing to consider

recommendations to promote health or mitigate adverse health impacts. HIAs that are not timely or in which decision-makers have little receptiveness to recommendations are of less value, although they may still facilitate community engagement.

Community engagement has long been a central component of HIA work (Wright, 2005; Tamburrini, 2011; CCHE, 2015). Much of the early work in the San Francisco Bay area focused on efforts with local community partners to address health equity issues. Initial work to shape HIA practice to be relevant to communities included sessions in which public health and community partners worked to identify the scope of hypothetical HIAs. After trust between public health professionals and community constituencies was established, these local partners began to call on public health to use HIA to help with their project and policy struggles. In one early success, an HIA by the San Francisco Department of Public Health contributed to the building of affordable replacement housing for low income

residents in Trinity Plaza Apartments who were being displaced by the development of market rate condominiums (Bhatia, 2007). The creation of the non-profit organization Human Impact Partners (http://www.humanimpact.org/) in 2006 in Oakland added to the field's capacity to conduct HIAs. Similar progress in the mid-2000's was made in Alaska, where work on the health impacts of resource extraction on native Alaskan communities led to substantial expansion in the use of HIA by the Alaska state health department (Wernham, 2007; Anderson, 2013).

In 2002, the Centers for Disease Control and Prevention (CDC) hosted a multi-disciplinary workshop in Atlanta to develop a research agenda to advance the field of the relation between health and the built environment (Dannenberg, 2003). The resulting research agenda listed health impact assessment as one of the recommended approaches worthy of further research. As a result, in 2004, the Robert Wood Johnson Foundation (RWJF) and CDC hosted a second multi-disciplinary workshop, including HIA experts from Europe and Canada, to explore approaches to further develop the use of HIA in the US (Dannenberg, 2006). This workshop suggested next steps including conducting pilot HIAs, creating a database of completed HIAs, building capacity to train HIA practitioners, evaluating the impacts of HIAs, and identifying more resources to expand the field. The results of this workshop, as well as the early HIA successes in California and Alaska, contributed to the expanded involvement of both RWJF and CDC in HIA activities in subsequent years. As described below, progress has been made in each of the workshop's recommended next steps.

Academic research

In addition to the conduct of numerous HIAs, the field of HIA has grown in the United States and internationally over the past 15 years as an area of academic research. Two books (NRC, 2011; Ross, 2014) and approximately 85 peer-reviewed articles (Figure 2) with U.S. authors have been published since 2001. Some articles focused on HIA methods, such as challenges in conducting HIAs (Krieger, 2003), use of quantitative methods in HIA (Bhatia, 2011), use of stakeholder consultation in HIAs (Tamburrini, 2011), and modeling of traffic noise exposures (Seto, 2007). Other articles have focused on the effectiveness of HIAs (Bourcier, 2015), teaching HIA courses in universities (Pollack 2015), and a review of HIA guidelines (Hebert, 2012). Papers focused on the use of HIA in specific sectors include: transportation (Dannenberg, 2014), housing (Morley, in preparation), and education (Gase, in preparation). A few articles focused on the conduct and results of a single HIA, such as local speed limits in Massachusetts (James, 2014), zoning revisions in Baltimore (Johnson Thornton, 2013), and the Atlanta Beltline transit and redevelopment project (Ross, 2012). Now containing over 380 HIAs, the HIA database created by the Health Impact Project has been a valuable resource for identifying relevant HIAs for research and practice (The Pew Charitable Trusts, 2016).

Figure 2. Number of articles with US authors related to
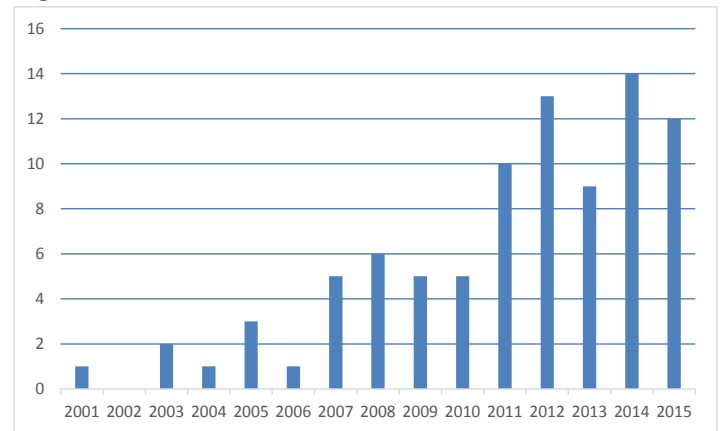
Source: http://www.cdc.gov/healthyplaces/docs/hiaarticles_usauthors_29february2016.pdf

Teaching and training

As the demand for conducting HIAs has grown over the past decade, there has been a parallel increase in the demand for training professionals to conduct HIAs. For several years, HIA workshops were organized by the CDC, the National Association of County and City Health Officials, and the American Planning Association with local public health and planning officials in the same classroom to increase their cross-disciplinary collaboration. From 2006 to 2012, over 2200 people in 29 states were trained in at least 75 in-person short courses on HIA by four organizations: CDC, the San Francisco Department of Public Health, the non-profit Human Impact Partners, and the University of California, Berkeley (Schuchter, 2015). Based on interviews of a sample of trainees, Schuchter reported that many trainees had met their training objectives, established new collaborations at the trainings, and disseminated what they learned.

In about 2008, the American Planning Association and the National Association of County and City Health Officials developed a free six-hour on-line training course on HIA that has since attracted several thousand users (http://advance.captus.com/planning/hia2/home.aspx). At least five universities teach graduate level courses focused on HIA; a number of students in these courses have subsequently taken jobs that involve the use of HIA skills (Pollack, 2015). National capacity to conduct HIAs has been strengthened by the founding of the Society of Practitioners of Health Impact Assessment (SOPHIA) (http://hiasociety.org/) in 2011 and the development of a network of HIA professionals who provide technical assistance to new HIA practitioners with support from the Health Impact Project and others.

National and international conferences

The growth of HIA conferences over the past decade has helped advance the field by facilitating interactions among HIA practitioners. Six national HIA workshops have been held in Oakland, California, beginning in 2008 (http://hiasociety.org/?page_id=833). These workshops include 75-

100 experienced HIA practitioners and focus on advancing HIA practices. Three national HIA conferences have been held in Washington, DC, beginning in 2012 (http://www.pewtrusts.org/en/projects/health-impact-project/research-and-analysis/presentations-and-webinars). These conferences each attracted 400-500 participants ranging from novices to experienced HIA practitioners, and have been primarily sponsored by the Robert Wood Johnson Foundation. In addition, HIA practitioners from the US have participated in some of the thirteen international HIA conferences during 1998-2013, held primarily in Europe except for the 2012 conference in Quebec (http://www.apho.org.uk/resource/browse.aspx?RID=93284).

HIA guidelines and standards

Early work on developing guidelines and standards for HIA was associated with creating structured reports for HIA projects conducted by the HIA class taught at UC Berkeley that began in 2006. This work was furthered by activities associated with the HIA workshops in Oakland and led to the most recent version entitled *Minimum elements and practice standards for health impact assessment* (Bhatia, 2014). While this document recommends standards for HIA conduct, the actual practice of HIA in the US varies widely on issues such as engaging stakeholders, formulating actionable recommendations, and providing an implementation plan for follow-up.

Evaluation

The need to evaluate the impact of HIAs on subsequent decisions and health outcomes was evident from early in the growth of the field (Dannenberg, 2006). Several process evaluations have examined whether specific HIAs followed recommended methods (Schuchter, 2014; US EPA, 2013). The largest impact evaluation conducted in the US included detail case studies of 23 HIAs and concluded that "HIAs are a useful tool to promote public health because they can influence decisions in non-health-related sectors, strengthen cross-sector collaborations, and raise awareness of health issues among decision makers" (Bourcier, 2015). Findings from this study were similar to those from HIA evaluations conducted in Europe (Davenport, 2006; Wismar, 2007) and in Australia (Haigh, 2013). Several studies have specifically documented facilitators and barriers to successful HIAs (Davenport, 2006; Bourcier, 2015: Haigh, 2015; Dannenberg, 2016).

Funding

No consistent source of funding has been routinely available to conduct HIAs in the US. Many HIAs have been conducted with support from the Health Impact Project (a collaboration of RWJF and The Pew Charitable Trusts, http://www.pewtrusts.org/en/projects/health-impact-project) [*see related HIA article from Health Impact Project in this issue of CHIA*]. A number of HIAs have been supported by The California Endowment, Blue Cross and Blue Shield of

Minnesota Foundation, Kansas Health Institute, RWJF's Active Living Research program, and other foundations. Other HIAs have been funded by the CDC's Healthy Community Design Initiative, either directly or through partners such as the National Association of County and City Health Officials and the National Network of Public Health Institutes. Some HIAs have been conducted by health departments within the scope of their existing resources or by students enrolled in graduate school HIA courses (Pollack, 2015).

Institutionalization

The National Research Council report on HIA stated "HIA is a particularly promising approach for integrating health implications into decision-making" (National Research Council, 2011). In recent years, there has been increasing interest in multisectoral approaches to health promotion, often called Health in All Policies (HiAP). An executive order by the governor of California in 2010 set up a task force to advance the use of HiAP in the state (http://sgc.ca.gov/s_hiap.php). HIA is a tool that can be used to further the HiAP approach (Collins, 2009; Gase, 2013).

The National Prevention Council (which includes 17 primarily non-health agencies) in its National Prevention Strategy states that "opportunities for prevention increase when those working in housing, transportation, education, and other sectors incorporate health and wellness into their decision making" (p. 2) and that HIA "can be used to help decision makers evaluate project or policy choices to increase positive health outcomes and minimize adverse health outcomes and health inequities" (National Prevention Council, 2011, p. 15). Other national reports that encourage the use of HIA include the White House Task Force on Childhood Obesity (White House Task Force, 2010), the Department of Health and Human Services Healthy People 2020 report (US DHHS, 2012), and the CDC's transportation and health policy statement (CDC, 2011).

State legislators have proposed or adopted a number of bills that include certain elements of an HIA. The National Conference of State Legislatures (Farquhar, 2014) reported that 55 bills in 17 states supportive of HIA or its components were introduced during 2009-2014, but few passed into law. Among successful HIA-related bills, a bill in Washington state mandated an HIA as part of funding for the State Route 520 bridge replacement in Seattle (Seattle King County Public Health, 2008), and the Massachusetts Healthy Transportation Compact mandated HIAs in transportation-related projects (Massachusetts Department of Transportation, 2009). In Alaska, the use of HIA has been institutionalized with funding support from the state's natural resources permitting process (http://dhss.alaska.gov/dph/Epi/hia/Pages/default.aspx; Anderson, 2013). In Washington state, "health impact reviews" are conducted on proposed legislation by the State Board of Health when requested by the governor or a state legislator (http://sboh.wa.gov/OurWork/HealthImpactReviews).

Conclusion

The use of HIA has grown substantially over the past 15 years since it was first introduced in the US. Familiarity with HIA has greatly increased both among public health professionals and decision-makers in other sectors and among many community groups. HIA is proving valuable as a tool to facilitate community engagement and empowerment, even in cases where changes in a decision explicitly due to that HIA may be difficult to document. HIAs have been useful in sectors well beyond the built environment, including topics such as incarceration, gambling, living wages, after school programs, and climate change policies.

Little is known about the impact of policies that encourage or require the use of HIAs; further research on this topic would be valuable. Challenges to the further expansion of HIA use include the need for reliable funding sources and the potential for pushback in an anti-regulatory environment. In the long term, as the awareness of health impacts increases in other sectors, it may be possible to achieve healthy outcomes without needing to conduct a formal HIA on every proposed individual project and policy. Should it occur, such an accomplishment would be due in large part to the success of the hundreds of HIAs that have been and are being done now.

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SOCIAL LEARNING THROUGH STAKEHOLDER ENGAGEMENT: NEW PATHWAYS FROM PARTICIPATION TO HEALTH EQUITY IN U.S. WEST COAST HIAS

Nicole Iroz-Elardo, PhD; Moriah McSharry McGrath, PhD, MPH, MSUP

While some contend that extensive public engagement activities are necessary to meet Health Impact Assessment (HIA) practice standards, other work suggests that an HIA of any type has the potential to inform decision-making in ways that embody HIA's value of democracy (Cole & Fielding, 2007; Harris-Roxas et al., 2012; Negev, 2012). These divergent perspectives on how to realize democracy through public participation represents an area of evolving debate in the ongoing development of HIA practice in the US. Looking to the relatively diverse HIA practice on the west coast of the US, we explore the interplay between engagement strategies and HIA values in completed HIAs. We locate each HIA on Harris-Roxas's (2011) typology of HIAs – mandated, decision-support, advocacy, and community-led – and assess the type(s) and extent of participation activities conducted. This sample incorporates a variety of both HIA types, target policy/program decisions in different sectors, and HIAs conducted by seasoned and novice practitioners.

This analysis reveals gains in health equity resulting from all types of HIAs and engagement strategies. We argue that in addition to the empowerment of affected groups that occur through direct participation, social learning (Bandura, 1977) is a mechanism for advancing health equity through the moral development of the participating stakeholders. Additionally, we found that HIAs which employed direct participation and benefited from vibrant leadership by community organizations did not necessarily realize HIA's health equity goals. Just as analytical strategies vary given different purposes, engagement strategies vary depending on the goals of an HIA. We argue that overly rigid definitions of participation elide the contributions made by HIAs that take a different form than the archetypal community-led HIA. This elision is problematic given the institutional infrastructure that can be built through more technocratic decision-support HIAs and the relative dearth of truly community-led HIAs. We propose eschewing a singular "optimal" participation paradigm as a way to both acknowledge the potential of all types of HIA to contribute to health-supporting policy and to maintain the idealistic frame for HIA to advance health equity.

Introduction

Given the flexibility of the HIA technique and the rapid growth in its application in the US (see Figure 1), the practice community is in a dynamic phase of establishing standards and norms. A significant area of concern for many HIA practitioners is the importance of stakeholder participation for fostering health equity, defined as "attainment of the highest level of health for all people" in the federal government's Healthy People 2020 benchmarking program (Office of Disease Prevention and Health Promotion, n.d.). Public health practitioners adopting HIA in an effort to influence policy and programs in the US have cited the values of the Gothenburg Consensus (European Centre for Health Policy, 1999) – democracy, equity, sustainable development, ethical use of evidence, and a comprehensive approach to health – as guiding principles. Yet there has been little critical evaluation of whether HIAs routinely support democracy, which is defined in the Gothenburg document as "the right of people to participate in a transparent process for the

formulation, implementation, and evaluation of policies that affect their life, both directly and through the elected political decision makers."

Figure 1. Since the completion of the first US HIA by the San Francisco Department of Public Health in 1999, the use of HIA has rapidly increased.

Cumulative total of HIAs completed in the U.S., based on published estimates
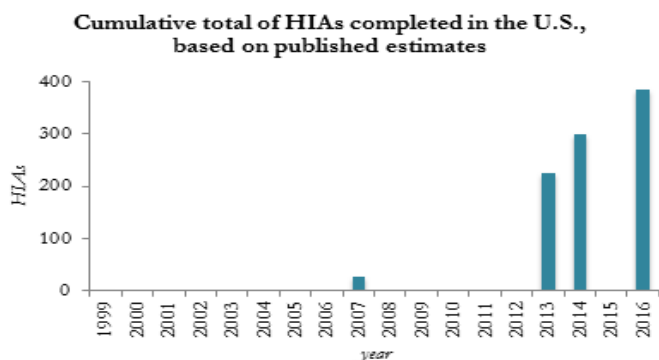
Sources: Bourcier, Charbonneau, Cahill, & Dannenberg (2015); Health Impact Project (2016); Rhodus, Fulk, Autrey, O'Shea, & Roth (2013).

The practical challenges of engaging stakeholders (the time and resources necessary to build trust and capacity) coexist with aspirational notions of social change through direct participation; yet the choice of engagement strategies in a given HIA are often driven by expediency (Heller, Malekafzali, Todman, & Wier, 2013) and resource limitations. In reality, many HIAs use engagement strategies that follow a stakeholder engagement paradigm – inviting diverse interests to deliberate together – rather than direct participation that "centers the margins" by foregrounding the experience and leadership of directly affected and historically marginalized groups. So while the value of democracy explicitly adopted by HIA practitioners has generally been interpreted to mean facilitating engagement in decision-making through direct participation of affected parties (Baker et al., 2012; Kemm, 2005), the US experience to date does not provide clear evidence this relationship is operational (Iroz-Elardo, 2014a).

We aim to enrich the conversation about democracy and equity by exploring participation (i.e., how HIA practitioners operationalize democracy) and health equity impacts of HIAs in the context of the relatively diverse practice on the west coast of the US. Our analysis shows the dominance of a stakeholder engagement paradigm for participation despite a wide range of engagement strategies (i.e., ways of participating). Further, we demonstrate that HIAs which entail little direct participation are still able to foster social learning (Bandura, 1977) – the generation of new knowledge through intergroup interaction - that directly contribute to advancing health equity through moral development and improved policy decisions. Consequently, we argue that the emphasis

on direct participation may be unnecessary to, and may even in some cases detract from, realizing other HIA values such as equity. Applying these perspectives to HIA practice, we suggest that practitioners expand our conception of pathways to equity and more clearly articulate our visions for advancing health equity, given the diversity of participation paradigms and engagement strategies employed in the field.

Background

Concern for health equity is a distinguishing characteristic of HIA (Harris-Roxas & Harris, 2011) and the connection between democracy and equity comes from the notion, as articulated by the World Health Organization (n.d.), that "to be effective and sustainable, interventions that aim to redress inequities must typically go beyond remedying a particular health inequality and also help empower the group in question." Current Adopted Minimum Elements for HIA (Bhatia et al., 2014) also establish that HIAs should involve and engage "stakeholders affected by the proposal, particularly vulnerable populations." This operationalizes the value of democracy and shows how HIA anticipates a higher level of participation than generally occurs under the environmental impact assessment (EIA) procedures conducted under the U.S. federal National Environmental Protection Act (NEPA).[1]

Many leading US HIA practitioners (e.g., Heller et al., 2013) interpret the equity value as a call to use the HIA process to empower historically disadvantaged populations through the decision-making process, as mapped in Figure 2. This interpretation suggests that HIAs should privilege participatory strategies that shift power to citizens most likely to be affected by the target decision, lifting up voices that have not been heard in previous decades of decision-making.

Figure 2: Presumed pathway from participation to health equity
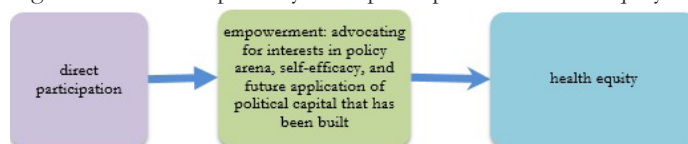
Participation, which is generally understood as the mechanics or expression of democracy, is universally seen as desirable but can be difficult to define (Glucker, Driessen, Kolhoff, & Runhaar, 2013; Mahoney, Potter, & Marsh, 2007).[2] *Engagement strategies* is a term for the techniques used by a facilitator (in this case, the HIA practitioner) to solicit information from participants. Some engagement strategies provide more power and control over the analytical process than others; thus the engagement strategies shape the type of participation – or democracy – that occurs within an HIA. Accordingly, we use the term participa*tion* to signify

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[1] While NEPA's implementation varies across federal agencies, public input generally comes in the form of comments submitted to and then rebutted by the federal agency (or their consultants).

[2] Glucker et al. (2013) discuss the challenges of defining participation within EIA while Mahoney et al (2007) suggest the lack of rigor and clarity in defining "community participation" is a significant barrier to understanding its appropriate role in HIA.

general involvement in an HIA and *participatory* to describe the use of engagement strategies that provide more direct roles for and control by affected community members, such as collecting data and making decisions.

We distinguish two paradigms for participation: direct participation and stakeholder engagement. Where possible, these terms are qualified with descriptors that signify *who* is participating. For example, we distinguish between a *directly affected community* (understood as a smaller subset of people, often members of socially marginalized groups, who stand to bear the likely negative impacts of a decision) and *stakeholders* more generally, which would include the directly affected community alongside other parties with a vested interest in the outcome (e.g., businesses, landowners, neighboring communities) (Kahane, Loptson, Herriman, & Hardy, 2013). Depending on the type of engagement strategies used, participation can be bureaucratic (e.g., commenting on administrative documents) or participatory (e.g., conducting the assessment and interpreting the results). These distinctions are illustrated by the schematic in Figure 3.

Figure 3: Conceptual framework
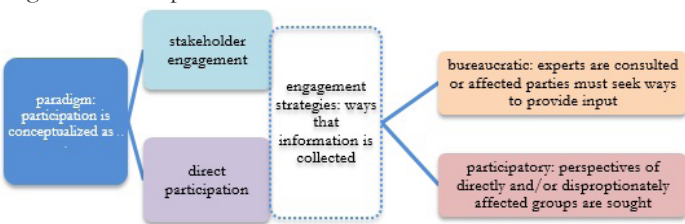
Relationships among participation, democracy, and equity

At least four rationales for citizen participation are found within scholarly literature. First, philosophers argue that citizen participation is intrinsically valuable because it develops human capacity (à la Aristotle) and forces individuals to be socially responsible for the collective well-being (per Rousseau and Mill) (Day, 1997). Another argument is that citizen participation in public decisions develops a more responsive government because citizen needs are more likely to be articulated well and early; urban planning theorists suggest that such participation is more likely to accurately identify the public interest and minimize implementation delays (Day, 1997). Others view participation as a means for those without power to exercise strength and change the social order (Arnstein, 1969/2005). Specific to impact assessment, Glucker and colleagues (2013) suggest that the various rationales classify participation as *normative*ly desirable, *substantive* in terms of gathering information, or *instrumental* in reducing conflict or generating legitimacy.

The prevailing consensus in contemporary urban planning theory (Forester, 1999; Healey, 1996/2003; Innes & Booher, 2010) points toward collaborative, deliberative participation processes – i.e., stakeholder engagement – as the way to pursue these rationales. This consensus has arisen as a result of the "communicative turn" in planning, which is

based on the idea that participation should incorporate direct identification of interests "under conditions of rational deliberation and choice (Connolly) . . . [and] relative personal autonomy (Lukes)" – a decidedly more social approach to participation (Taylor, 1998, p. 68). Yet in HIA practice, democracy has generally been understood to suggest direct participation, reflecting the normative value within public health that views community engagement, organizing, and empowerment as essential in promoting individual and community health (Kemm, 2013).

In the context of HIA, equity is generally understood to mean reducing health inequities, or disparate and avoidable health burdens among social groups. In the US, these groupings are often based on racialized categories and socioeconomic status. Mechanisms for reducing health inequities include preventing the implementation of policies that will produce disparate burdens (Minkler, Wallerstein, & Wilson, 2008) as well as broader deliberation over "social constructionist or structuralist" understandings of health inequity through the HIA process (Harris-Roxas et al., 2012).

Operating practices in U.S. HIA

Consequently, direct participation and participatory engagement strategies are highly prized in US HIA practice. For example, a recent white paper by prominent innovators in the field (Heller et al., 2013) outlines eight principles for promoting equity in HIA practice, the first two of which emphasize direct participation and participatory engagement strategies (see Table 1). The operating assumption seems to be that adherence to democracy necessitates direct participation, which leads to empowerment of members of the most affected community, which in turn leads to equity gains when these empowered community members pursue their interests in the policy arena (as diagrammed in Figure 2).

Table 1: Strategies for promoting equity in HIA (from Heller et al., 2013)

A. Ensure community leadership, ownership, oversight, and participation early and throughout an HIA
B. Support authentic participation of vulnerable populations in the decision-making process
C. Target the practice of HIA towards proposals that are identified by, or relevant to, vulnerable populations
D. Ensure that a central goal of the HIA is to identify and understand the health implications for populations most vulnerable
E. Ensure the HIA assesses the distribution of health impacts across populations wherever data are available
F. Identify recommendations that yield an equitable distribution of health benefits
G. Ensure that findings and recommendations of the HIA are well communicated to vulnerable populations most likely to be impacted
H. Ensure that the actual impacts of the decision are monitored

However, just as different types of HIAs are appropriate to different decision-making contexts, certain participation paradigms and engagement strategies may align with different HIA types. Harris-Roxas and Harris' (2011) typology of HIAs is especially valuable as we interrogate the role of participation in realizing HIA values. They argue that engagement strategies generally match the purpose of the HIA, as summarized in Table 2.

Table 2: HIA typology and typical participation format

HIA type	Purpose	Participation
Mandated	meet statutory requirement	limited - consultants may do outreach
Voluntary decision-support	minimize health harms and maximize health benefits	stakeholder engagement, generally with bureaucratic engagement strategies
Advocacy	promote group values to decision-making body	direct participation, often with bureaucratic engagement strategies
Community-led	increase community power through participating in an HIA that bring health concerns into a decision-making process	direct participation, with participatory engagement strategies

A rigid interpretation of their typology might suggest that it is difficult to achieve health equity through less participatory HIAs. Further, the extent of deliberation and/or stakeholder power and control in HIA practice overall are unclear (UCLA School of Public Health, 2014), particularly since these aspects of the process are not always well documented in HIA reports. For example, only a small proportion of HIAs – 18.5 percent in a recent study by the U.S. Environmental Protection Agency (Rhodus, Fulk, Autrey, O'Shea, & Roth, 2013) – robustly engage stakeholders through an advisory committee. Further, the same study also found that only one-quarter of stakeholder advisory committees "actually oversaw or guided the HIA process and were engaged as decision-makers in equal partnership with the HIA team or as the primary decision-makers" (Rhodus et al., 2013).

One potential explanation for the shortcomings in direct participation in US HIAs is that participatory processes are difficult to sustain. Stakeholder engagement has become the alternative to direct participation in the urban planning world because it ostensibly is efficient at surfacing a variety interests with minimal resources invested. While advisory committees may be considered "second-best" to direct ownership of an assessment or decision-making process, they are a pragmatic and heavily used engagement strategy. Thus, understanding their capacity to further health equity is critical for advancing HIA practice.

Methods/approach

This paper analyzes 12 recent HIAs from the US west coast in terms of HIA purpose, participation paradigm, engagement strategies, and health equity outcomes. We use this diverse, geographically bounded subset to elucidate how the participation paradigm of a given HIA affects its contributions to health equity, with the purpose of informing the challenging and resource-intensive fulfillment of HIA's democracy value. This analysis extends Iroz-Elardo's (2014b) study of three[3] comprehensive HIAs that varied in general nature, specific objectives and goals, and scale of the project. In the present paper, those cases are augmented by three comprehensive HIAs completed by Oregon Health Authority (OHA) and five rapid HIAs conducted in Oregon by county health departments with OHA pass-through funding from the Centers for Disease Control and Prevention. The comprehensive OHA HIAs related to climate planning; the first author was the technical lead for two (Iroz-Elardo, Hamberg, Main, Early-Alberts, & Douglas, 2014; Iroz-Elardo, Hamberg, Main, Haggerty et al., 2014). The rapid HIAs addressed a variety of locally identified issues.

For each case, we identified HIA type, participation paradigm, and engagement strategies. We analyzed how democracy and equity were understood by the project participants – as represented in project documents and our personal knowledge of the HIA. We also interviewed a former HIA Program Coordinator at Oregon Health Authority on two different occasions, asking her to discuss the 15 different HIAs (five of which are mentioned below) that were initiated at the county level between 2009-2015. For this paper, we paid particular attention to including discrepant cases, or situations where the HIA produced unexpected results, following the qualitative research tradition (Maxwell, 2005) that seeks to explicate phenomena through exploring perceived outliers. An overview of the study cases is presented in Table 3.

This sample represents a wide breadth of participation paradigms and engagement strategies as well as a large proportion of HIAs completed on the US west coast, where the presence of early adopters and training patterns resulted in a spatially clustered and regionally distinct HIA practice. We selected only cases with which we had sufficient information to comment on the analytical processes that are not always captured in HIA reports. The sample includes no fully community-led HIAs, as we are not aware of any such projects taking place during our study period. Our interpretation of the data occurs through the lens of our personal experiences in many different roles within the professional community we are discussing. For the past five years or so, both authors have been active participants in the HIA community – within Portland, Oregon, as well as at the regional and national levels. The first author of this paper conducted dissertation research on HIA (Iroz-Elardo, 2014a, 2014b), teaches graduate-level HIA courses,

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[3] One of the three in-depth HIA evaluations looked at a two-part project, presented as two HIAs in the table accompanying this article.

and is an HIA practitioner. The second author developed a graduate-level HIA course and worked for five years as an HIA analyst at a large urban health department where she collaborated on HIAs and other "HIA-inspired" analyses (Clapp & McGrath, 2012; McGrath, Clapp, Maher, Oxman, & Manhas, 2013; McGrath & Lyons-Eubanks, 2011;

White & McGrath, 2012). Both have served on steering committees, planning committees, and workgroups for the Northwest Regional HIA Network, HIA of the Americas, and Society of Practitioners of Health Impact Assessment. These experiences both enrich and bias our interpretation of the information presented in this paper.

Table 3: Overview of cases

Project	Lead organization	HIA type	Participation paradigm	Engagement strategies
Clark County Bike/Ped Plan HIAs	Clark County Public Health (WA)			
Rapid HIA: Clark County Bicycle and Pedestrian Master Plan (Haggerty, 2010)		Decision-support	None	None
Comprehensive HIA: Clark County Bicycle and Pedestrian Master Plan (Haggerty, et al., 2010)		Decision-support	Stakeholder engagement	Consulted existing target plan's advisory group
Climate HIAs	Oregon Health Authority			
Climate Smart Communities Scenarios (Green, et al., 2013)		Decision-support	Stakeholder engagement	Several large (37-person) meetings
Community Climate Choices (Iroz-Elardo, Hamberg, Main, Early-Alberts, et al., 2014)		Decision-support	Stakeholder engagement	Several large meetings augmented by small topic meetings
Climate Smart Strategy (Iroz-Elardo, Hamberg, Main, Haggerty, et al., 2014)		Decision-support	Stakeholder engagement	Several large meetings augmented by small topic meetings
County HIAs – funded by Oregon Health Authority				
Augusta Lane Bike-Pedestrian Bridge (Washington County Public Health Division, 2014)	Washington County	Decision-support	Stakeholder engagement with selected direct participation activities	Public meetings, partnering with culturally-specific organizations
Barrett Park (Mejia, 2011)	Hood River County	Decision-support	Stakeholder engagement	Public meetings, partnering with culturally-specific organizations
Tumalo Community Plan (Madrigal & Wells, 2010)	Deschutes County	Decision-support	Stakeholder engagement	Informal outreach to stakeholders
McLoughlin Blvd. Road Safety Audit (White & Thorstenson, 2014)	Clackamas County/ Oregon Public Health Institute	Decision-support	Stakeholder engagement	Informal outreach to stakeholders including joint data collection
Housing Supply Upgrade Initiative (Klinefelter, 2013)	Curry County	Decision-support	Stakeholder engagement with selected direct participation activities	Consulted advisory group created for different purposes, conducted interviews with directly affected community
I-710 Corridor (Human Impact Partners, 2011)	Human Impact Partners	Mandated	Stakeholder engagement	External technical experts on advisory committee; HIA author not in control of advisory committee composition
Lake Merritt BART Station Area Plan (Harris, Purciel-Hill, Gilhuly, & Babka, 2012)	Human Impact Partners	Advocacy	Stakeholder engagement with strong leadership by directly affected populations	Participatory in that CBO controlled most aspects of HIA

Cases

Overall, we found that the participatory nature, robust community outreach, and significant community control seen in some early HIAs (e.g., the Eastern Neighborhoods Community HIA in San Francisco, as discussed in Corburn, 2009) is an exception rather than a rule. As illustrated in the vignettes below, the HIAs provided limited opportunities for citizens to directly participate in the assessments or target decisions, and in only one HIA did community representatives control the scope and content of the HIA. Engagement strategies varied widely, including: a community-led advisory committee that had control over nearly every decision in the HIA (Lake Merritt); consulting stakeholder groups established as part of the targeted planning decisions rather than creation of their own advisory committee (Clark County, Curry County); a highly technical stakeholder advisory committee of which the HIA facilitator had little control (I-710 Corridor); and ad hoc informal outreach (multiple county health department HIAs). A small number of HIAs engaged non-English speaking communities directly, using a public meeting format and partnering with other organizations well positioned to engage such communities (Washington and Hood River counties), and one HIA used interviews with residents to collect data (Curry County). We present these cases below, in the groupings described above, discussing relationships between participation and health equity.

Clark County, Washington Bicycle-Pedestrian HIAs

In early 2009 in response to a state mandate, Clark County, Washington initiated an update of its Bicycle and Pedestrian Master Plan governing unincorporated areas (Clark County Community Planning, 2010). Planning in this quickly suburbanizing community is challenging due to relatively conservative social ideology combined with large geographic gaps in municipal services. Clark County planners were pleased to partner with Clark County Public Health in support of the Bike-Ped Plan in 2010. Public Health professionals first performed a rapid HIA (Haggerty, 2010) to provide input on the concept plan; this was followed by a full HIA with more detailed analysis of impacts and greater stakeholder input (Haggerty, Melnick, Hyde, & Lebowsky, 2010). While this HIA did not maintain a separate community or stakeholder engagement strategy, it *was* able to influence the stakeholder engagement process of the larger plan, primarily through the technical contributions of the HIA's lead author, who used his knowledge of the active transportation literature to advocate for the equity advances.

The rapid HIA was produced on a short timeline with no input from potentially affected parties. However, the document was shared with Clark County planning staff and the plan's Bike-Ped Advisory Committee – the membership of which was split between government bureaucrats and "self-selected and old-school, mainly male, Caucasian, older" residents who initially focused on recreational cycling. The rapid HIA sparked a social learning (Bandura, 1977) process,

where the Bike-Ped Advisory Committee and county planning staff showed increased awareness of how the general public experienced active transportation and the health equity implications of bike and pedestrian infrastructure. These perspectives were integrated into the comprehensive HIA. Comparison of the final Plan with the preliminary Plan shows broader consideration of all road and path users (e.g., utilitarian cyclists and pedestrians, groups more likely to be living in poverty, recent immigrants, children and older adults, and people with disabilities).

The final Plan prioritized access to health-supporting resources such as healthy food and addressed concerns about dangers to children using active transportation by emphasizing the health benefits. The most tangible evidence of HIA effectiveness was the incorporation of 20 public health points in a 100-point scoring criteria used to select locations to add sidewalks. The points system identified areas where walking rates could be increased and where amenities would benefit residents of lower socioeconomic status.

Oregon Health Authority Climate HIAs

The climate HIAs conducted by the Oregon Health Authority (OHA) were a suite of decision-support HIAs completed as part of a climate planning process convened by Metro – Portland, Oregon's metropolitan planning organization. A response to a state legislative mandate, the HIAs were named the Climate Smart Communities Scenarios HIA (April 2013), the Community Climate Choices HIA (March 2014), and the Climate Smart Strategy HIA (September 2014). To account for social co-benefits of climate action planning, the HIAs used the quantitative Integrated Transport Health Impact Model (Centre for Diet and Activity Research, 2013) to analyze pathways between transportation and health impacts. The model was refined with the input of a 37-person stakeholder advisory committee made up largely of public employees, supplemented with a few academics, a couple of HIA practitioners from the local non-profit sector, and several elected officials from the region; notably, there was no direct community representation. An OHA HIA Program staff member convened the committee, on average, twice per HIA – generally for scoping and to review the results of the analysis. Topic-specific subcommittees met for work sessions on a few occasions, a handful of advisory members served as peer reviewers of HIA report drafts, and all committee members evaluated the HIA process and the report recommendations via online surveys.

The work sessions – which arose when some stakeholders had serious reservations about the analytical strategy – created a venue for social learning. Largely attended by a subset of members most interested in the topic at hand, these meetings brought together members from different agencies and sectors. This helped improve understanding of various agencies' needs and responsibilities as well as different stakeholders' health equity concerns, fostering intersectoral understanding through interpersonal interaction. These

conversations and relationships proved transformative for some; for example, an agency staffer reported a transition within her agency in thinking about how health intersects with their regulatory approach to air quality. These fledgling relationships led to the formation of the Transportation and Health Subcommittee of the Oregon Modeling Steering Committee, institutionalizing consideration of environmental justice and health equity by the state's transportation modeling community.

Oregon Health Authority HIA Program-funded HIAs – "county HIAs"

Starting in 2009, the Oregon Health Authority's Public Health Division provided mini-grants[4] to county health departments in an effort to increase local HIA capacity; fifteen rapid HIAs in eleven different counties were completed. Because local governments author them and public employees cannot engage in political advocacy, these HIAs were by necessity decision-support HIAs. The small dollar value of the grants ($10,000-15,000) also limited the extent of possible engagement strategies. However, OHA required that grantees invite stakeholders to scoping training sessions and encouraged ongoing involvement through the assessment and recommendation stage. Most grantees chose a stakeholder engagement paradigm and used bureaucratic engagement strategies – literally inviting representatives of government bureaus to comment on their work. For example, the McLoughlin Blvd. Road Safety Audit HIA (White & Thorstenson, 2014) convened representatives of public health, planning, state and local departments of transportation, and a neighborhood organization. They then added a one-day evaluation of social determinants of health metrics to a traditional road safety audit (Federal Highway Administration, n.d.) along the roadway corridor. In Curry County, the health department took the approach of Clark County, WA (above) and worked closely in parallel with an Oregon Solutions[5] project that was engaging local, state (Oregon Housing), and federal (HUD) stakeholders and decision-makers.

Other counties recognized a need for direct participation by citizens who might be affected by the local decisions. For example, Deschutes County asked citizens in a public meeting for the Tumalo Community Plan to draw what a healthy, happy community would look like. This information led to an HIA that focused on "sense of place" in addition to physical activity and traffic safety in the rural context. Counties that directly engaged members of vulnerable populations conducted limited, but effective, outreach by partnering closely with community-based organization, particularly when trying to reach linguistically isolated populations. For example, leaders of Hood River County's Barrett Park HIA subcontracted with a Latino-focused organization

to host listening sessions associated with their HIA. Similarly, the Center for Intercultural Organizing helped to engage the geographic community most affected by the proposed Augusta Lane Bridge in Washington County.

These strategies led to HIAs that produced health equity benefits by advancing the needs of vulnerable populations. For example, Washington County's targeted public meetings helped the HIA authors advocate for the Augusta Lane Bridge, with its the obvious health benefits of connecting a spatially isolated area to health-promoting resources such as an elementary school, two transit lines, and a green space in the face of concerns about interpersonal safety for children walking to school.

The Curry County HIA (Klinefelter, 2013), which addressed state funding rules about repair and replacement of manufactured housing, eschewed an advisory committee in favor of small contracts with one topic area expert and one HIA expert. The HIA author also worked closely with housing inspectors to gain entrance to sub-standard housing units, where she was able to interview residents and observe housing environments.

Interstate 710 Corridor expansion

In California, the I-710 Corridor HIA was initiated with significant support from a coalition of local, community-based, environmental justice organizations. Approximately 40 percent of US imports travel this highway, which connects the ports of Long Beach and Los Angeles to the greater Los Angeles region. A proposed expansion would increase the freeway from eight to up to 14 lanes. The coalition successfully lobbied the California Department of Transportation (Caltrans) for an HIA to be integrated into the environmental impact assessment (EIR) process.

Though the HIA was community-initiated, the scale of the planning process and the politics and funding structure of the EIR resulted in the HIA being produced with very little input from affected communities. Additionally, the HIA report was unavailable for many months, and then was only released as a "work-product" separate from the Draft Environmental Impact Review (DEIR) report. This tactic by expansion advocates prevented the HIA from obtaining the same legally binding status as EIR documents produced under state and federal statute. Even though area residents had limited involvement while the HIA was being written, the report still reflects residents' concerns; the scope addressed health concerns beyond typical EIR pathways of air pollution and noise. HIA findings appear prominently in public comments, suggesting that area residents and advocacy organizations have found the report to be a useful tool to advocate for health equity despite the publication delays. Further, the Coalition for Environmental Health and Justice used the HIA to bolster their legal assertion that the DEIR

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is inadequate. The EPA also cited the HIA as a factor in their recommendation that Caltrans reject the DEIR/EIS. As a result, Caltrans has instructed that the plan and DEIR be reworked to incorporate elements of a community-defined alternative plan.

Lake Merritt BART

The Lake Merritt HIA was initiated and controlled by six allied advocacy organizations highly committed to social justice in the Oakland Chinatown community. The case, an exemplar of advocacy HIA practice, illustrates how a robust stakeholder advisory committee with complete control over HIA decisions can pursue community interests, even in a planning process where significant competing cultural and economic interests were present. This case also illustrates how social learning can happen with small advisory committees from diverse advocacy backgrounds.

The scoping phase of the HIA took much longer than expected or budgeted because each organization was accustomed to advocating for social justice in vastly different arenas: housing, health services, policy work, transportation, and environmental justice. The group identified health equity as an expression of social justice, a shared value, and used the social determinants of health as a common language to understand each other's interests. Some stakeholders expressed dismay that the HIA did not facilitate more data collection or community organizing yet the final HIA makes a clear case for protecting the current community's concerns, protecting open space, and adopting affordable housing strategies to prevent gentrification.

Discussion

The state of HIA practice on the US west coast shows that direct participation does not have a one-to-one relationship with health equity and that stakeholder engagement can lead to health equity gains through social learning. As illustrated in the cases above, we found that different types of HIAs advanced health equity despite variation in participation paradigms and engagement strategies. Our three main findings about the current state of democracy and equity in this practice are:

- Stakeholder engagement predominates as a participation paradigm, and community-led or -initiated HIAs are few; direct community participation does not automatically lead to empowerment and equity.
- Stakeholder engagement and technical decision-making by public health professionals can be successful in advancing health equity.
- Equity advances can be achieved through social learning that identifies ways to narrow gaps in health-supporting resources among population groups.

Taken together, these findings suggest an expanded view of pathways between participation and equity in HIA.

Revisiting direct participation

Despite HIA practitioners' widespread desire to use participatory methods to directly engage and empower citizens in vulnerable communities, it is difficult to find such strategies in broad use in HIA practice. HIAs, particularly those initiated and/or authored by government agencies, generally adopt a stakeholder participation paradigm with some variation in engagement strategies. Despite the lack of direct participation and participatory engagement strategies, these decision-supported HIAs show evidence of gains in health equity. It appears that social learning fostered by multi-party collaboration assists bureaucratic decision-making which supports narrowing health disparities.

A major strength of HIA is its capacity to assemble and frame a broad array of perspectives on health; yet the mechanics of participation in the HIA process are challenged by the very diversity of knowledge, data, interests, and languages held by various stakeholders (Glucker et al., 2013). Finding common ground between these stakeholders can be generally difficult to impossible (Negev, 2012). However, HIA stakeholder advisory committees of all sizes are potentially democratizing in a number of ways: identifying new health-related information; providing an additional participation opportunity for community representatives to engage the process; supporting the growth of interdisciplinary relationships; and influencing public decisions (Negev, 2012).

While many HIAs encourage social learning, the I-710 Corridor HIA is a very interesting example where empowerment and even social learning were *prevented* in the HIA process, despite the strenuous advocacy for the HIA by seasoned local activists. While community groups whose constituencies would be affected by the port expansion successfully advocated for an HIA with the I-710 Project Committee, that same committee delegated the completion of the HIA to another governing body under a completely separate plan. This was done to save resources. However, the shift of oversight resulted in a loss of control and became a barrier to community input.

For example, the contrast between the Lake Merritt and I-710 cases demonstrate the variety of outcomes that may result from HIAs that strive for direct participation. The Lake Merritt BART HIA clearly shows that community representatives – distinct from members of the general public – can control the HIA via an advisory committee, leading to a community-centered report and recommendations. Yet the I-710 case – an HIA requested by activist citizens and community representatives, but then carried out in large part divorced from those who requested it – suggests that initial community control of the HIA process does not neatly equate to empowerment or health equity. The decision-support HIAs show that stakeholder engagement can support health equity even in the case of limited use of participatory engagement strategies. Consistent with greater planning

theory, stakeholder engagement in HIA elevates the importance of health in policy decisions as a result of deliberation among stakeholders.

Less dramatic examples of this phenomenon include the Hood River and Washington County HIAs. In Hood River County, engaging the Latino community was a response to professional knowledge that Latinos had the least park access in the region. The engagement helped ground the HIA in community concerns. It also offered a population, many undocumented with few official rights to democracy in the US, a way to participate in public decisions. However, engaging the Latino community did not result in a power shift; the community did not control the HIA analysis. A similar assessment can be made of Washington County's direct engagement of citizens who live near the proposed Augusta Lane Bridge. This suggests direct engagement in the form of one or two public meetings dovetails with a broader stakeholder engagement paradigm in HIA by providing additional information to HIA authors. However, public meetings are not enough to shift control of the HIA, much less the target plan, to the community.

Bureaucratic decision-making can contribute to health equity

Finally, HIAs can foster health equity by expanding the issues considered in the decision. Use of a broad, comprehensive definition of determinants of health expanded the interests considered in the Clark County Bike-Ped and McLoughlin Road Safety cases. HIA can be used to more fully understand plans and policies with multiple and often inadvertent disparate impacts. For example, in Curry County, Oregon, housing policies were preventing low-wealth households from improving their housing due to restrictions placed on financing manufactured housing; the HIA advocated for a more healthy approach to managing this important contribution of affordable housing stock in the region. Many of the health equity gains from HIAs can be linked to the role that professional knowledge and discretion of HIA practitioners played in pursuing equitable impacts. The six-step process and core values of HIA explicitly require analysis of the disproportionately impacted populations and vulnerable populations. This prompts HIA practitioners to actively seek information that will elucidate potential disparate even if there is no opportunity to collect new primary data about the affected populations. As professionals, individual actors can articulate health equity concerns through spatial analysis, focus on vulnerable populations, and use the social determinants of health to expand the concerns considered under the target plan.

Social learning creates pathways to health equity

While intersectoral collaboration has long been viewed as a benefit of HIA (Corburn & Bhatia, 2007), our analysis of participation connects this collaboration more directly to health equity by theorizing that social learning provides the pathway for achieving equity. The value of social

learning, understood as a process of "cognitive enhancement" and "moral development" (Bandura, 1977) has long been recognized by theorists of negotiation and urban planning (Forester, 1999; Healey, 1996/2003; Innes & Booher, 2010), and social learning has been a documented outcome of engagement strategies in impact assessment projects (Webler, Kastenholz, & Renn, 1995).

The present findings demonstrate that cognitive enhancement – learning about the problem and solutions from both your own and other's perspectives – occurs across HIAs with a broad range of participation methods and strategies. Under the stakeholder engagement paradigm, interdisciplinary learning occurs as members of cities or regions health and planning departments serve on an advisory committee and realize the complementary skill sets of their departments. In the Bike-Ped Plan HIA, public health was able to articulate why urban planners should consider and include access to health-promoting resources within an active transportation plan. As an example from an advocacy HIA, cognitive enhancement occurred in the Lake Merritt HIA when the six community-based organization representatives extended the scoping phase to better understand how their individual advocacy positions fit with the HIA. In the McLoughlin Road Safety HIA, discussion of social determinants of health allowed public health professionals to explain to transportation engineers why an engineering solution did not fully protect, much less maximize, health.

While cognitive enhancement results in better understanding of a problem, moral development is the process of moving toward a more collective approach to problem-solving by setting aside one's narrow personal (or agency) interests. The OHA climate HIA illustrate moral development as sister agencies (Oregon Health Authority and the Oregon Department of Environmental Quality, or DEQ) moved from initial antipathy to shared understanding; OHA's choice of transportation-related air pollution indicators shifted how the DEQ conceptualized the health consequences of airborne particulate matter.

Conclusion

The HIA community's avowal of equity as a guiding value has led to calls for HIA to empower historically disadvantaged populations through participation in public decision-making. When interpreted narrowly, this conception suggests that the ideal HIA is one where disenfranchised citizens initiate and control an HIA in order to articulate and advance community health interests, thereby increasing health equity. However, a growing body of evidence shows that HIA in the US may not be as participatory or empowering as some practitioners wish it might be. At the same time, the evidence presented here suggests that direct participation may not be the only route to realize the democracy and equity in HIA.

While some articulations of equity in HIA (Heller et al., 2013) may view less participatory engagement strategies as undercutting community power, our findings are

consonant with broader literature on public engagement. For example, Quick and Feldman (2011) distinguish *participation*, or increasing the input (or information) for the decision, as distinct from *inclusion,* which increases connections among people and issues. Thus engagement strategies can be highly participatory with many citizens providing information but do little to expand the ability of that community to engage each other or the decision. This distinction is important to HIA practice because poor or misleading participation and engagement quickly becomes tokenism (Arnstein, 1969/2005) and may
actually harm the very communities the project hopes to engage (Quick & Feldman, 2011).

In this way, HIA practice today seems reminiscent of the era of advocacy planning (Davidoff, 1965/2003) equity planning (Krumholz & Forester, 1990) in US cities through the 1960s and 1970s. Just as advocate planners provided technical assistance to groups who had been excluded from the "rational planning" process and had little capacity to shift power relations, HIA practitioners can provide technical information about determinants of health. This information can be incorporated into the dominant decision-making processes and turned over to affected communities to do their own advocacy, creating multiple pathways to promote health equity, as represented in the schematic in Figure 4.

Figure 4: Democracy is realized through new pathways between participation and equity
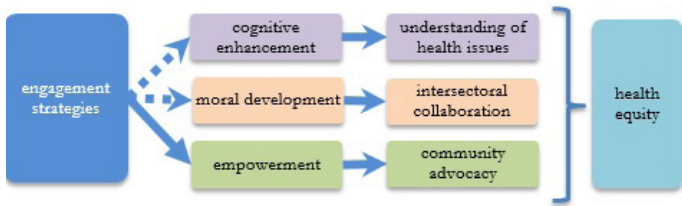
However, scholars of urban planning and social change have struggled to understand the complexity of these relationships between state agencies, citizen empowerment, and equity. Both advocacy and equity planning have been criticized as mechanisms for placating the aggrieved and diverting precious energy of communities with limited resources, thereby abetting the status quo (Piven, 1970). Avoiding this type of cooptation of HIA practice require that practitioners articulate participation norms in ways that are more concrete than a blanket preference for direct participation. Piven's critique of participatory planning indeed suggests HIA practitioners be open to the idea that generating technical information to be used in advocacy by affected populations could provide benefits which would not occur in the same way through an extensive participatory process.

Just as analytical strategies within HIAs vary given different purposes, participation should vary depending on the goals of an HIA (Baker et al., 2012; Harris-Roxas & Harris, 2011). Overly rigid definitions of participation elide the contributions made by HIAs that take a different form than the archetypal community-led HIA. This elision is problematic given the institutional infrastructure that can be built through more technocratic decision-support HIAs.

We suggest that a more complete view of HIA practice incorporates both the value of direct participation along with the contributions of less participatory HIAs to foster health in all policies and health equity. That is, the democratizing elements of HIA are less about participatory data gathering or community control of the HIA and more about expanding the publics and health pathways considered in public decisions. We have illuminated multiple pathways to pursuing health equity and as a result propose that democracy in HIA practice be a pragmatic mix-and-match process of aligning goals, assessment methods, and participation in order to move toward the ultimate goal of health equity.

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SEVEN YEARS IN THE FIELD OF HEALTH IMPACT ASSESSMENT: TAKING STOCK AND FUTURE DIRECTIONS

Rebecca Morley, MSPP; Ruth Lindberg, MPH, MUP; Bethany Rogerson, MSSP; Emily Bever; Keshia M. Pollack, PhD, MPH

Abstract:

The U.S. spends more per person on medical care than any other country, yet we have worse health indicators than many comparable wealthy nations. Research increasingly shows that social, economic, and environmental factors determine our health; however, there is still an emphasis on curing illnesses rather than addressing these underlying causes of disease. The Health Impact Project is a collaboration of the Robert Wood Johnson Foundation and The Pew Charitable Trusts, established in 2009 to promote and support the use of health impact assessment (HIA). As of January 2016, there were 386 HIAs either completed or in progress in the US in a variety of sectors—up from 62 HIAs in 2009. Although built environment HIAs still make up the largest sector of practice, other topics are emerging including education, criminal justice, and labor and employment. As the field matures, we are presented with new opportunities and challenges. In this article we offer lessons learned from our experience over the last seven years, and a view into the future of HIA. Specifically, we discuss the challenges and promises of making health a routine consideration in decision-making, translating HIA recommendations into policy, monitoring and evaluating the impact and outcomes associated with HIAs, promoting health considerations in federal decisions, and using HIAs as a tool for promoting health equity.

Background

An ever-growing body of research shows that the policies shaping our social, economic, and built environments have a significant impact on Americans' health. Research has demonstrated how factors such as the affordability and quality of housing, concentrated neighborhood poverty, transportation-related pollutants, and access to employment, education, and affordable, healthy foods affect health (National Research Council, 2011). Despite this, most money dedicated to improving health in the US is spent on medical care (Institute of Medicine, 2014). To improve population health outcomes and health equity, data and pragmatic recommendations for protecting and promoting health need to be factored into the public policy process.

HIAs have emerged as a widely used tool for promoting the inclusion of health considerations into public policy.

HIAs offer an opportunity for a more robust and democratic policymaking process, strengthening relationships among stakeholder groups and giving community members a stronger voice in decisions that affect them (Bourcier, Charbonneau, Cahill, & Dannenberg, 2015).

The Health Impact Project—a collaboration of the Robert Wood Johnson Foundation and The Pew Charitable Trusts—was established in 2009 as a national initiative to promote and support the field of HIA as a way to integrate health considerations into decision-making outside the health sector. Our initial goals were to: (1) coordinate and promote efforts to increase the use of HIAs; (2) support up to 15 HIA demonstration projects at the state, local, and tribal levels; (3) develop and manage a training and technical assistance network; (4) complete HIAs of two federal policies that affect health; and (5) conduct and disseminate

a comprehensive review of laws and regulations to identify opportunities to use HIAs to influence decisions.

Over seven years, we have attracted and invested more than $22 million in growing the field of practice, including funding over 100 assessments, conducting four federal-level HIAs, supporting training for more than 1,300 individuals, and serving as a convener for the field. The HIA field has grown tremendously. As of January 2016, in the US, there were 386 HIAs either completed or in progress in 41 states, at the federal level, in the District of Columbia, and in Puerto Rico—up from 62 HIAs in 2009. Over half of the HIAs conducted to date have been on local decisions (54%), while about 18% have focused on state level decisions. The remaining HIAs are split among the federal, regional, and county levels. The types of organizations leading or collaborating on HIAs are diverse. Of the HIAs reported on our online map, government agencies have conducted nearly half (49%), with the remaining conducted by non-governmental organizations (25%), academic institutions (22%), and other organization types (4%) (Health Impact Project, n.d.-b). About 70% of the HIAs conducted to date have been applied to decisions in the built environment (37%), transportation (19%), and natural resources (11%). HIAs have also been applied to decisions in other sectors, such as housing, agriculture, climate change, criminal justice, and economic policy (Health Impact Project, n.d.-b).

As the field of HIA expands and matures, we are presented with new opportunities and challenges. This paper describes our perspectives on the state of the field, current challenges, and future opportunities in five distinct areas: (1) making health a routine consideration in decision-making; (2) translating HIA recommendations into policy; (3) monitoring and evaluating the impact and outcomes associated with HIAs; (4) promoting health considerations in federal decisions; and (5) using HIA to promote health equity.

Making Health a Routine Consideration in Decision-Making

Despite increased interest in public health among professionals in sectors such as planning, housing, and community development, the integration of these considerations into decision-making is not standard practice. HIA practitioners are exploring a range of approaches to embed health into decision-making processes and common practices of various sectors.

One strategy is to build on existing legal authorities or to create new ones that facilitate the incorporation of health in decision-making or the use of HIA and related approaches. For example:

- The legal support for HIAs is already in place through policies such as the National Environmental Policy Act (NEPA) and similar laws at the state level. These existing authorities have been previously described at length (Health Impact Project and Arizona State University, 2012).

- State policymakers are increasingly exploring how HIAs can help identify the potential and often overlooked health consequences of policies, plans, programs, and projects across a range of sectors. The National Conference of State Legislatures (NCSL) conducted a review of state legislation and statutes identifying and addressing HIAs and found that between 2009 and May 2014, 17 states considered 56 bills that would create a mandate for some consideration of health effects when making decisions (National Conference of State Legislatures, 2014). Many of the analyses proposed in these bills would not fit the strict definition of an HIA, but eight states have considered legislation that incorporated most elements of a formal HIA. One example of state HIA legislation is what is commonly known as the Healthy Transportation Compact. Enacted by the Massachusetts Legislature in 2009, the Compact establishes the use of HIAs to determine the health effects of state transportation projects (*An Act Modernizing the Transportation Systems of the Commonwealth*, 2009; Massachusetts Department of Transportation, n.d.).

Another strategy for making HIA routine practice is to develop organizational infrastructure, institutional support, leadership, and process changes. This approach includes adding HIA responsibilities to job descriptions, developing and formalizing partnerships within and across agencies, and identifying sustainable sources of funding. In 2012, the Health Impact Project expanded its funding opportunities to provide grants for this purpose. For example, between 2013 and 2016:

- The Tri-County Health Department in Denver, Colorado included "Health in All Policies" in their strategic plan as a way to better connect the built environment and public health sectors. Tri-County's Board of Health approved a budget for a new position to make progress toward this goal through the Department's Land Use and Built Environment Program.
- Oregon Health Authority collaborated with the Oregon Department of Transportation to develop a tool that models how specific transportation policy and funding decisions would relate to changes in physical activity.
- The Los Angeles Department of Public Health established the Health Impact Evaluation Center to develop the capacity and systems to routinely conduct HIAs. As part of their efforts, this center is creating screening tools and protocols to guide the agency's decisions on when to conduct rapid HIAs, as well as materials to facilitate completion of the screening and scoping steps.

A third strategy is to build health into the way other sectors do business by streamlining the HIA steps or through a

"checklist" approach. For example:

- In the built environment and housing sectors, the Health Impact Project partnered with the U.S. Green Building Council (USGBC) and Enterprise Community Partners to embed health information into the Leadership in Energy and Environmental Design (LEED) certification system and the Enterprise Green Communities Criteria, respectively. These updated green building standards define a process by which architects, designers, and developers can consider the connections between the design, construction, and operation of buildings and public health. The Green Communities Criteria, first launched in 2004, is the leading green building standard for affordable housing in the U.S. and has been adopted by 23 states and eight major cities. In these locations, competitive funding streams critical to affordable housing development, such as states' Qualified Allocation Plans for allocating Low Income Housing Tax Credits and municipal affordable housing finance products, list certification to the Criteria either as a requirement or a preferential condition of funding. As of February 2016, over 500 affordable housing buildings containing approximately 29,000 units have received the certification, with over 50,000 more units on the path to certification. The 2015 version of the Criteria requires that developers identify potential resident health factors and design their projects to address resident health and well-being. An optional criterion calls for the developer, at the pre-design phase of development and continuing throughout the project life cycle, to collaborate with public health professionals and community stakeholders to assess, identify, implement, and monitor achievable actions to enhance health-promoting features of the project and minimize features that could present risks to health (Enterprise Green Communities, 2015). Approximately 250 projects are expected to implement the required health criterion by June 2016. A similar credit is being piloted by USGBC as part of its LEED system, an international green building certification program. Between the system's inception in 2000 and 2015, USGBC certified more than 26,600 real estate projects and more than 70,000 residential units worldwide across all sectors of the building industry, including affordable housing, commercial real estate, schools, homes, and neighborhoods.
- In the transportation sector, as part of its 2035 regional transportation plan, the Nashville Area Metropolitan Planning Organization (MPO) in Tennessee adopted new health scoring criteria for selecting and funding transportation projects, dedicating 60 of the 100 points to health promoting projects. Seventy percent of the selected roadway projects included active transportation elements, compared with roughly two percent in the prior plan. As part of its 2040 plan, the

MPO now dedicates 80 of 100 points to health promoting projects (Nashville Area Metropolitan Planning Organization, n.d.).
- In the planning sector, Meridian Township, Michigan, adopted a checklist-based tool that allows new proposed development projects to be evaluated according to health criteria that include access to safe places to exercise and healthy foods, design that facilitates social interaction, and standards for air and water quality (Charter Township of Meridian, n.d.). Planners work with each developer based on the findings of the evaluation to incorporate design elements that will improve health. In the 10 years since implementation, this simple approach has resulted in dozens of health-supportive modifications.

Institutions such as banks, hospitals, and foundations have the ability to impact health equity through their lending, land acquisition and development, and investments, respectively. We are exploring policy and financial levers that can facilitate widespread use of HIA and related approaches. For example, the Patient Protection and Affordable Care Act [§ 9007, 26 U.S.C. 501(c) (2010)] requires non-profit hospitals to conduct community health needs assessments and create community health improvement plans. In addition, building on prior state legislative efforts, the Health Impact Project is testing a "health note" to integrate potential health considerations into legislative analysis. A health note is similar to a fiscal note, and provides a brief, objective, nonpartisan summary of the potential positive and negative health impacts of a proposed bill. The health note draws upon the principles of HIA, but is streamlined for use on a large number of legislative proposals within a short timeframe.

As the field of HIA has matured, it is possible that for some decisions we have enough information about the potential health effects and corresponding mitigation strategies to move directly into implementation. The field could benefit from a central repository of sector- and decision-specific information and tools that could facilitate the translation of past HIAs into policy, and make HIA practice more accessible to professionals in a range of sectors outside of health. For example, the Health Impact Project has supported the National Center for Healthy Housing and the National Housing Conference to develop guidance for incorporating health into housing decisions. Similar efforts are underway to facilitate HIA practice in other sectors, including planning and disaster recovery.

Translating HIA Recommendations into Policy

There remains a need for targeted HIAs that inform specific decision points, and focus on translating HIA recommendations into policy. One time HIAs targeting specific decisions can bring new evidence and stakeholder involvement into a decision that has the potential for substantial impact on health or health equity.

The policy impacts of past HIAs are numerous. For

example, an HIA on the design of a modern streetcar in Tempe, Arizona was used by the Tempe Citizen Advisory Committee to inform the final streetcar system design. Based on the HIA recommendations, the City of Tempe established a weekly farmers' market to improve access to healthy food, as well as other goods and services. Similarly, as a result of an HIA on a community transportation plan in Decatur, Georgia, the city implemented a comprehensive set of infrastructure improvements to enhance the accessibility, safety, and connectivity of sidewalks, intersections, and streets for users of all ages and abilities. An HIA in Connecticut contributed to a new law that calls for the identification of state funds to remediate hazardous housing conditions and centralization of this funding within a single agency.

In an evaluation of 23 HIAs, the recommendations in 11 of the HIAs could be directly linked to the way decisions were developed or implemented, 11 of the HIAs changed the decision-making process, and 14 influenced changes beyond the decision under consideration (Bourcier, Charbonneau, Cahill, & Dannenberg, 2015). However, the same evaluation found that maintaining the HIA's influence after the report's release is an often overlooked or missing step. HIA teams in 10 of the 23 cases did not adequately disseminate the recommendations or follow up on implementation, and only one HIA established a detailed monitoring plan to track the implementation of the HIA recommendations (Bourcier, Charbonneau, Cahill, & Dannenberg, 2014). Often, grants end shortly after release of the HIA report, leaving little time to implement the report recommendations. Further, the funding timeframe does not allow grantees to capture the impact of HIAs on policy changes.

Health Impact Project grantees must include a monitoring and evaluation plan, and our grant selection criteria prioritize proposals with strong plans and partnerships to support ongoing engagement with the policies that will follow after the HIA. Despite these requirements and selection criteria, it is possible that longer grant periods or funding for implementation and monitoring could go a long way toward increasing the impact of HIAs. In addition, with a modest infusion of additional resources, many of our prior grantees and their partners are poised to translate HIA recommendations into policy.

One important consideration in moving HIA recommendations into policy is the role of advocacy in HIA. Some practitioners have expressed concerns that using HIA as a tool for advocacy could conflict with the HIA value of "ethical use of evidence" since the advocacy viewpoint could mean the group conducting the HIA has a preconceived policy outcome. The risk, therefore, is that decision-makers will become skeptical about the objectivity of the tool, thereby diminishing its future value. When screening, organizations should reference the practice standards to decide whether an HIA is the most appropriate approach, if the goal is to support a specific advocacy objective. Organizations may ultimately choose not to use HIA if bringing

diverse perspectives, and often opposing viewpoints, to present a balanced document is contrary to their overarching advocacy strategy. One approach that has proved successful is for organizations with established positions on a topic or issue to collaborate with a third-party. The third-party is responsible for conducting an independent and objective assessment, and the advocate can use the results of the HIA as part of a broader advocacy campaign. For HIAs led by advocacy organizations, the key is to ensure that a neutral party could read the report and come to his or her own conclusion—in other words, that the assessment is based on the best available evidence regarding potential health impacts, and presents the facts fairly and fully.

In the future, we will explore opportunities to support implementation of recommendations identified through HIAs. We also hope to identify ways that HIA practice and advocacy can be mutually supportive. For example, HIAs can generate objective data that advocacy organizations can use in their campaigns. Likewise, advocacy organizations know the priorities of the communities they serve and can help HIA practitioners select topics of importance to them. We also will help document and scale the strategies that are most likely to lead to the adoption of HIA recommendations in decisions, building on lessons from prior evaluations and input from the field.

Monitoring and Evaluating the Impact and Outcomes Associated with HIAs

Evaluations of HIAs in the US have documented their direct effects on decisions in non-health sectors as well as indirect effects, such as building consensus and relationships among decision-makers and their constituents, increased awareness of health among stakeholders, and giving community members a stronger voice in decisions that affect them (Bhatia, Rajiv, & Corburn, 2011; Bourcier, Charbonneau, Cahill, & Dannenberg, 2015).

Health Impact Project grantees are required to develop monitoring and evaluation plans, and evaluate the HIA process and early impacts within the grant period. Lessons learned from these HIAs are helping to inform how practitioners conduct HIAs, engage stakeholders, and disseminate products. Process evaluations are common, with practitioners determining whether the HIA was carried out according to the plan of action and applicable practice standards. A number of impact evaluations have examined the effect of HIAs on the decision-making process and the degree to which recommendations were adopted and implemented (Dannenberg, 2016). A recent study evaluated community participation in HIAs, including its impact on the success of an HIA (Center for Community Health and Evaluation and Human Impact Partners, 2015).

Outcome evaluations, which measure changes in health status or indicators resulting from implementation of the proposal, are rare because of methodological challenges such as confounding, effect modification, and meeting the epidemiologic standards for assessing causality.

Appropriate methods and analytic techniques capable of assessing whether an HIA accurately predicted long-term health impacts need to be developed (Taylor, Gowman, & Quigley, 2003). Despite these challenges, as the field continues to expand, we have seen how monitoring the implementation of HIA recommendations and evaluating the process, impact, or outcomes resulting from the HIA are being embraced as critical steps of the HIA process and not merely as an afterthought.

We are supporting additional well-designed evaluations to assess the impact of HIAs and the factors contributing to their success. For example, we are launching an independent, national evaluation that will examine the impact of HIAs on determinants of health and health equity and the conditions under which HIAs lead to impact on decisions. The findings from this work will be used to fill gaps in knowledge for HIA practitioners, policymakers, and funders and to inform our future investments.

Promoting Health Considerations in Federal Decisions

In 2009, there were five completed HIAs on federal agency decisions, including three focused on the natural resources and energy sectors, one on agriculture and food policy, and one on labor and employment policy (Health Impact Project, n.d.-b). As of February 2016, there were 21 HIAs completed or in progress in the US on federal agency decisions, an increase of 320% (Health Impact Project, n.d.-b). In 2010, the Affordable Care Act authorized the creation of the National Prevention Council to catalyze cross-sector collaboration across federal government agencies, in recognition that agencies responsible for our housing, education, transportation, and built environments can play a critical role in improving the public's health (U.S. Department of Health and Human Services, n.d.-a, n.d.-b). In 2011, the Council released the National Prevention Strategy, which prioritizes prevention, emphasizes evidence-based recommendations, and highlights HIA as an approach to use in reducing the burden of the leading causes of major illnesses and preventable death (National Prevention Council, 2011).

Although half of the HIAs completed or in progress to date on federal agency decisions have focused on natural resources or energy decisions, the topic areas in recent years include: policies on immigration; agriculture, food, and drug; housing; labor and employment; and transportation (Health Impact Project, n.d.-b). For example, HIAs have been used to inform: the U.S. Department of Agriculture's (USDA) nutrition standards for snack foods and beverages sold in schools; policies of the U.S. Equal Employment Opportunity Commission; federal immigration reform; federal paid sick leave policy; cleanup plans for a Superfund site; and numerous oil, gas, and mining permitting and project decisions (Health Impact Project, n.d.-b).

Federal agencies are also conducting or requesting HIAs. For example, regional offices of the U.S. Environmental Protection Agency (EPA) have used HIA to: (1) compare options for renovation and improvement at an elementary school in Massachusetts; (2) examine the impacts of a green infrastructure project on low-income, minority communities in Atlanta; and (3) examine expansion plans at the Ports of Los Angeles and Long Beach. The EPA has also integrated HIA into a federal environmental impact statement for a proposed expansion of the Red Dog Mine in Alaska (Health Impact Project, n.d.-b). In addition, the Health Impact Project collaborated with the U.S. Department of Housing and Urban Development (HUD) and partners from the Oregon Public Health Institute and Metropolitan Area Planning Council to conduct an HIA to inform an update of its designated housing rule and demonstrate how HIA might be used as a tool to advance the National Prevention Council's goals (Health Impact Project, 2015).

HIAs can bring a new lens of health to contentious policy debates, provide new data to inform federal policy, and develop collaborative relationships among agency staff, stakeholders, and advocates (Pollack, Heller, Givens, & Lindberg 2013). HIAs have the potential to strengthen and supplement federal decision-making processes, such as through the use of HIA data in regulatory impact assessments and environmental impact assessments (as discussed previously). For example, the USDA highlighted the importance of the HIA on nutrition standards for snack foods and beverages sold in schools to their regulatory impact assessment, citing the HIA as "a recent, comprehensive, and groundbreaking assessment." The USDA also incorporated nearly all of the HIA recommendations in their interim-final rule (Health Impact Project, n.d.-a; U.S. Department of Agriculture, 2013). Furthermore, federal-level HIAs help policymakers engage with those affected by the policy decisions at a local level to fully understand the experience and possible effects of proposed policies (Health Impact Project, 2014).

Federal agencies face technical, economic, and political constraints in their decision-making and the HIA process needs to adapt and respond accordingly. In the designated housing rule HIA, for example, the goal was to provide HUD with data and information to inform the development of an updated rule. As a result, the assessment was conducted before the rule-making process began, necessitating the HIA team, in consultation with stakeholders, to develop and examine two scenarios of actions HUD could pursue in its rulemaking (Keppard et al., 2014). In the federal immigration reform HIA, the HIA team recognized the need for unique communication methods in the reporting phase, and used a national press call, legislative briefings, and videos, as well as developed a toolkit for advocates interested in communicating the findings and recommendations of the HIA to policymakers (Pollack, Heller, Givens, & Lindberg 2013).

Federal decisions have far-reaching impact and the field has an important opportunity to impact public health by increasing the use of HIA and related approaches in federal decision-making. The relationships that we have established with federal agency staff will enable us to identify areas where a health lens can add value to federal decisions and yield benefits to health and health equity. We are adapting

existing rapid HIA models for federal use. As part of the process, we will identify data sources, methods, and stakeholder input processes for integrating health considerations into federal policy in ways that the agencies can replicate and scale to fit the scope, resources, and timeline of a given decision. For example, in our recent work to inform HUD's update of its designated housing rule, we used existing structures that HUD could leverage in future decision-making, such as public housing resident advisory boards, to elicit stakeholder perspectives.

Using HIA to Promote Health Equity

Equity in health implies that everyone should have a fair opportunity to attain their full health potential and, more pragmatically, that none should be disadvantaged from achieving this potential if it can be avoided (World Health Organization, 1986). Health inequities are systematic differences in health status or the distribution of health resources between different subpopulations, resulting from social conditions. When groups face serious social, economic, and environmental disadvantages, health inequities are the result (American Public Health Association, 2015). HIAs address the root causes of health inequities by assessing the social determinants of health.

Equity is a core value that underpins HIA practice, initially described in the World Health Organization's Gothenburg Consensus Paper on HIA (Bhatia et al., 2014; World Health Organization European Centre for Health Policy, 1999). The HIA Practice Standards, first published in 2009 and most recently updated in 2014, require systematic consideration of the impacts of a proposed decision on health equity and development of recommendations to address equity impacts (Bhatia et al., 2014).

Although equity is a core value of HIA, the field would benefit from a more consistent and systematic approach to incorporating it into HIA practice. Many HIA practitioners and public health professionals need training and capacity building on how to address and incorporate equity in HIA. The Society of Practitioners of Health Impact Assessment (SOPHIA) published *Equity metrics for health impact assessment practice* as a reflective tool to evaluate the degree to which an HIA successfully incorporated equity and to help practitioners consider equity during the planning of their HIAs (SOPHIA Equity Working Group, n.d.).

One of the ways that HIA can promote equity is through its inclusive process and ability to build power within the community impacted by the decision. Community empowerment involves individuals acting collectively to gain greater influence and control over the determinants of health and the quality of life in their communities (Wallerstein, 2006; World Health Organization, 1998). HIAs can shift power to communities by bringing their voices to decisions, helping them take action, increasing community member contact with decision-makers, and helping strengthen the skills of community members to influence future decisions (Group

Health and Human Impact Partners, 2014).

Data collected by community groups, qualitative information from focus groups and interviews, as well as video and photo data projects, have all contributed meaningfully to our understanding of public health problems and solutions. Participatory research approaches can involve community members as full partners in research on decisions affecting them. Currently, most HIAs have some level of community involvement; however, few practitioners devote significant resources to community participation in the process (Center for Community Health and Evaluation and Human Impact Partners, 2015).

In the US, most HIAs are led by agencies or academic institutions; far fewer have been led by community-based organizations. There are several plausible reasons for the relatively low number of HIAs performed by community-based organizations. One possibility is that mounting a successful proposal for HIA funding is beyond the capacity of smaller community organizations. Larger organizations and institutions typically have grant writers and other infrastructure, such as access to HIA training, which can facilitate their success in highly competitive grant programs. Most practitioners would agree that greater involvement by community-based organizations in HIA practice will lead to greater impact for HIAs, including the comprehensiveness of the assessment, the likelihood that the recommendations will be adopted and sustained, and the contributions to self-efficacy and social cohesion for participating organizations and participants.

We are examining our own funding mechanisms to ensure that community-based organizations and others focused on equity have the capacity and opportunity to conduct HIAs and related approaches. We are seeking to increase the use of HIA and related approaches in places and among populations that are experiencing widening health inequities, such as in southern and Appalachian states. In February 2016, the Health Impact Project announced grants to address factors outside of health care that influence population health and health equity in seven states: Alabama, Arkansas, Kentucky, Louisiana, Mississippi, Tennessee, and West Virginia (Health Impact Project, 2016). Grant recipients will use the first phase of funding to develop a community-driven plan of action, identifying the most pressing health equity issues and the upstream contributors to those issues. Following the planning phase, grantees will have the option of completing an HIA or using an alternative approach (e.g., health scoring criteria and other checklist-based tools, cross-sector initiatives to target social determinants of health). Grantees will also receive coaching and training on stakeholder engagement, HIA, Health in All Policies, and leadership skills. Finally, we are working with partners to provide training and technical assistance to increase the consideration of equity in HIA practice. We will continue to explore new approaches to promote health equity through our work, evaluate our efforts, and build on lessons learned to inform investments.

Conclusions

HIAs and related approaches can effectively bring health information and perspectives from a broad set of stakeholders to decision-making. When we successfully and routinely factor health into the public policy process, we can create a future in which our social, economic, and built environ- ments enable all individuals in the US the opportunity to lead healthy lives. There are thousands of decisions made every day that affect health. Now is the time to consider health data and community voice in weighing tradeoffs, and use each decision as an opportunity to address the challenge of widening health inequities.
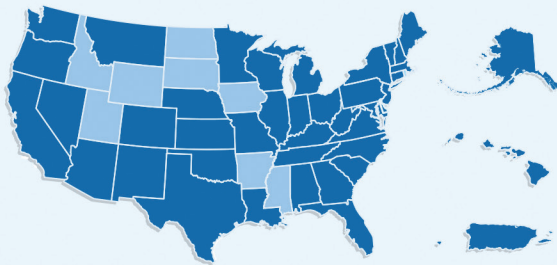
Health Impact Assessment: Informing Policy Around the Country

Growth of Health Impact Assessment

As of 2009, **62 HIAs** were completed or in progress. By January 2016, that figure was **386**.

386

62

2009   2016
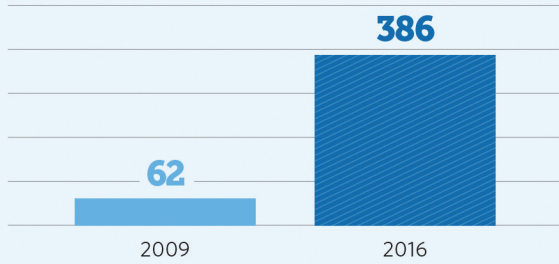
HIAs have been conducted in **41 states, the District of Columbia, and Puerto Rico** and at the federal level.

Variety of Sectors
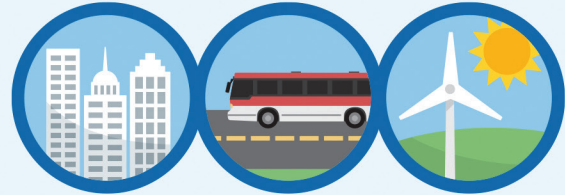
About 70% focused on built environment, transportation, and natural resource decisions.

Roughly 30% focused on the housing, agriculture, climate change, criminal justice, economic policy, and other sectors.

Level of Decision Assessed

54% Local   **18**% State

28% Federal, regional, and county

Over nearly seven years, the Health Impact Project—a collaboration of the Robert Wood Johnson Foundation and The Pew Charitable Trusts—has attracted and invested more than $22 million in growing the field of practice.
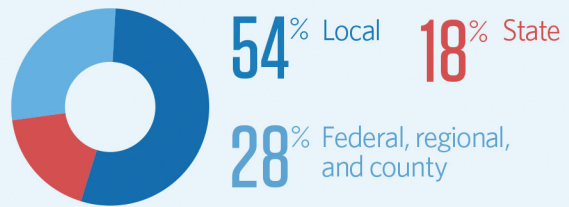
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PERSPECTIVES FROM THE FIELD

ADVOCACY IN HIA: INCREASING OUR EFFECTIVENESS AND RELEVANCE AS PRACTITIONERS TO ADDRESS HEALTH, EQUITY, AND DEMOCRACY

Lili Farhang, MPH; Jonathan C. Heller, PhD

Abstract:

The role of advocacy in Health Impact Assessment (HIA) is debated among practitioners. Concerns revolve around whether engaging in advocacy undermines objectivity and credibility. While there is agreement that dissemination of findings and recommendations is necessary, there is a spectrum of activities that can be undertaken in an HIA, one end of which might be considered advocacy.

In this *Perspective from the Field*, We posit that in conducting an HIA, practitioners are choosing to advocate for a set of causes that may include improved health, decreased inequity, and increased democracy. We come to the table with these values and the intent to advocate for them. For any HIA to be relevant and effective at advancing these causes in decision-making contexts, practitioners must use the best available evidence *and* a range of strategies to communicate evidence to policy audiences, including deliberate tactics with community organizations, decision makers, and others that can aid in addressing power imbalances. Though we believe that HIA practice cannot reach its full potential without embracing advocacy, practitioners must make decisions given their context, including local power dynamics as to how far into the advocacy spectrum they venture in any given HIA.

This paper is geared towards HIA practitioners and others who want to understand the opportunity advocacy provides. We begin by describing the underlying values of HIA that inspire this perspective, including those in the 1999 Gothenburg Consensus Paper on HIA (Quigley et al., 2006). After briefly describing concerns HIA practitioners may have with advocacy, particularly that it undermines the objectivity and credibility of the HIA process, we then discuss common advocacy activities practitioners might undertake, and ways to address risks these activities may pose. These opportunities to undertake advocacy include partnering with diverse stakeholders, developing advisory committees, gauging the power and policy context, and thinking broadly about the best tactics to effectively communicate findings. We conclude with a case study describing how advocacy was used in the Treatment Instead of Prison HIA in Wisconsin to advance health, equity, and democracy.

Introduction

The 2014 *Minimum Elements and Practice Standards for Health Impact Assessment* open by describing the goal of HIA: "Health Impact Assessment (HIA) is a practice that aims to protect and promote health and to reduce inequities in health during a decision-making process" (Bhatia et al., 2014, p. 1). As practitioners seeking to accomplish this goal, we recognize that use of sound science is necessary. We also recognize that it is not sufficient; in our perspective, advocacy is also necessary.

Advocacy is defined by Merriam-Webster as "the act or process of supporting a cause or proposal" (Retrieved 2015, from http://www.merriam-webster. com/dictionary/advocacy) and a variety of activities within HIA can be judged as advocacy [see Box 1]. Advocacy may be seen as the involvement of stakeholders with a pre-determined position in the HIA and giving them control over aspects of the HIA. Communications and dissemination activities are also often characterized as advocacy, most often when the HIA is used to influence the outcomes of a decision, for example through direct or grassroots lobbying [see Box 2].

The appropriateness of these activities is debated among practitioners (Advocacy in HIA Working Group, 2013). Layered on the debate are questions about the relationship between advocacy and research objectivity, bias, and neutrality. We posit that in order for most HIAs to be relevant and effective at protecting and promoting health and reducing inequities – as well as advancing democracy, another core value of HIA – in the context of a decision-making process, it is necessary for HIA practitioners to engage in advocacy to influence how decisions are made. Many HIAs that we and others have conducted have failed to affect decision making as a result of our limited engagement with the decision-making process.

We believe this is because those who benefit from current inequities and limitations on democracy are powerful forces and, in the face of these forces, data by itself does not lead to change. This is evident in a wide range of policy debates, from gun control to climate change, and from healthy food access to access to paid sick days. As Congressman Henry Waxman says, "When you look back on key legislative fights over public health issues, you will see that the expertise and advocacy of public health professionals provide a critically important counter pressure to the lobbying clout of special interests. The grassroots efforts by the public health community help educate legislators and play a pivotal role in our legislative efforts to improve the health of the people of the United States" (American Public Health Association, 2005, p. 5).

Practitioners, therefore, must often use the best available evidence *and* a range of strategies to communicate the evidence to various policy audiences, including deliberate tactics with community organizations, decision makers, and other stakeholders that can aid in addressing power imbalances. There are barriers and risks to conducting advocacy, but there are also opportunities throughout the HIA process to overcome and allay those.

This paper is geared towards HIA practitioners and public health professionals who want to understand the opportunity advocacy provides to advance a more effective and relevant HIA practice. We begin by describing the larger context of HIA practice that drives this perspective, barriers to engaging in advocacy, and opportunities and best practices to conduct advocacy in the context of HIA. We end with a case study describing how advocacy was used in an HIA in Wisconsin to advance health, equity, and democracy.

Foundations of our Perspective

Health Impact Assessment is shaped by a set of foundational values and concepts, and that inspire our perspective that advocacy is essential to the field's success. The 1999 Gothenburg Consensus Paper on HIA and the 2006 International Association for Impact Assessment Special

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Box 1. Examples of Advocacy Activities within HIA

What is perceived as advocacy varies based on the institutional context of practitioners. Most commonly, however, advocacy is perceived as how stakeholders are engaged in the process and in HIA communications and dissemination. Below we describe activities that may be considered to be advocacy within HIA.

Stakeholder Participation

Including stakeholders, such as those who have a pre-existing position on a proposal, in the HIA process

Prioritizing the HIA goals and research questions based on the interests of stakeholders

Using assessment methods (e.g., Community-based Participatory Research) that are directed by only some stakeholders

Prioritizing recommendations based on the interests of stakeholders

Giving stakeholders decision-making authority over the process

Inclusion of impacted populations and communities facing inequities – who are perceived as having a predetermined position – in the HIA process

Fostering coalition and consensus building within HIA

Communications and Dissemination

Public release of findings and recommendations

Proactive outreach to highlight and translate findings and recommendations to decision makers, media, and/or stakeholders

Responsiveness to informational and educational requests from decision makers, media, and/or stakeholders

Publicly highlighting and translating evidence via interviews, letter writing, public testimony, and other activities

Working with stakeholders to build their capacity to use HIA findings and recommendations in decision making venues

Direct lobbying of decision makers to encourage support or opposition of a specific action

Grassroots lobbying of the public to encourage support or opposition of a specific action

Publication on HIA (Quigley et al., 2006) define values that guide the practice: democracy, equity, sustainable development, ethical use of evidence, and comprehensive approach to health. The Gothenburg paper contextualizes these values by stating that: "All policy processes are carried out in the framework of values, goals, and objectives that may be more or less explicit in a given society and at a given time. It is essential that such values are taken into account, otherwise HIA runs the danger of being an artificial process, divorced from the reality of the policy environment in which it is being implemented" (p. 4) As practitioners, these explicit and motivational values – and the worldview they represent – inspire us to be part of the field.

The World Health Organization's Commission on Social Determinants of Health Final Report (World Health Organization, 2008) provides guidance as to what equity and democracy mean in wider public health practice: "Any serious effort to reduce health inequities will involve political empowerment – changing the distribution of power within society and global regions, especially in favour of disenfranchised groups and nations…….Health equity depends vitally on the empowerment of individuals and groups to represent their needs and interests strongly and effectively and, in so doing, to challenge and change the unfair and steeply graded distribution of social resources (the conditions for health) to which all men and women, as citizens, have equal claims and rights" (p. 18). In other words, both the process of empowerment within the democratic process and the power accumulated by groups currently without power are considered central to the pursuit of health equity.

In accepting a set of values to motivate our practice, practitioners acknowledge that we inherently reflect a set of cultural norms and worldviews in our work; foremost among these worldviews is that research should inform policy making. As stated by Michael Nelson, professor of environmental ethics and philosophy at Michigan State University, "advocating for the use of science and for revealing the discoveries of science, as well as for specific policy positions are forms of advocacy. Simply because the former is uncontroversial does not mean it is not a form of advocacy, it most certainly is. So in some ways the question is not, is advocacy acceptable, but which kinds of advocacy are

acceptable and, most importantly, how ought we to go about advocacy…." (Nelson, n.d.). Indeed, a recent Pew study that found, "a large majority of the public (76%) and nearly all scientists (97%) say that it is appropriate for scientists to become actively involved in political debates on controversial issues such as stem cell research and nuclear power." (Pew Research Center for the People & the Press, 2009, p. 34).

In choosing to conduct an HIA, practitioners are either consciously or unconsciously choosing to advocate for a set of causes including improved health, decreased inequity, increased democracy, and empowerment. These values – or causes – are not neutral. They reflect a world with a set of policy outcomes and decision-making processes that are different from our current policy climate. The transition to this better world will not occur naturally, even if the evidence points towards it. Powerful social forces, including dominant interests, entrenched ideas, and disenfranchisement – that converge to maintain the status quo – need to be overcome. Advocacy is a necessary, though not sufficient, tool that can motivate policy makers to overcome these forces and advance health, equity, and democracy.

Concerns with and barriers to engaging in advocacy

Some within the HIA field have expressed unease with a wider perspective of advocacy, particularly that a practitioner engaging in advocacy undermines the objectivity and credibility of the HIA process, findings, and recommendations and may also reflect the biases of researchers (Advocacy in HIA Working Group, 2013). Concerns can be summarized as follows: engaging in advocacy makes the practitioner seem biased and engaging with others who advocate makes the practitioner biased by extension; scoping and assessing topics based on the priorities and concerns of historically impacted communities may lead to particular findings and recommendations that deviate from the dominant worldview; taking a position is not appropriate when practitioners may not know or understand the universe of competing priorities or unintended consequences related to a decision; and having our role as neutral public health practitioners evolve from informing to advocating to lobbying is potentially problematic.

Our perspective is that these concerns are based on perceived risks that can be addressed in the HIA process. While

> **Box 2. Advocacy and lobbying.**
> *Direct lobbying*: attempts to influence a legislative body through communication with a member or employee of a legislative body, or with a government official who participates in formulating legislation. The communications must refer to and reflect a view on the legislation (Internal Revenue Service, 2015).
>
> *Grassroots lobbying:* attempts to influence legislation by attempting to affect the opinion of the public with respect to the legislation and encouraging the audience to take action with respect to the legislation. The communications must refer to and reflect a view on the legislation (Internal Revenue Service, 2015).
>
> According to the American Public Health Association:
>
> > *"How is lobbying different from advocacy?"* Advocacy is participating in the democratic process by taking action in support of a particular issue or cause. Advocacy activities like participating in a town meeting or demonstration, conducting a public forum or press activity, or developing an issue brief for your local policy-makers on a particular public health issue do not constitute lobbying as long as you are not urging a policymaker to take a position or action on specific legislation (American Public Health Association, 20015)

we recognize that these concerns are authentic and real (e.g., both laws and funding sources may limit one's ability to engage in lobbying), one can carry out a sound HIA *and* advocate for an HIA's findings and recommendations with actions intended to maintain the integrity of the practice.

Advocacy reflects a spectrum of activity (see Box 1), the range of which reflects the institution in which a practitioner is situated. Public health professionals, in particular, face numerous barriers to conducting advocacy, including risk-averse agency leadership, political resistance from elected officials, lack of relationships and understanding of other policy domains, and a lack of capacity and resources. Public health is also disconnected from movements to advance equity and democracy, and unclear about how to contribute to these movements. Addressing these constraints is beyond the scope of this paper or the responsibility of any individual HIA practitioner; however, efforts exist to overcome them (National Association of County and City Health Official, 2014; Farhang, Heller, Levey, & Satinsky, 2015).

Opportunities to conduct advocacy in the context of HIA

There are a number of best practices we can undertake as practitioners to minimize potential sources of bias and to legitimize our advocacy activities. Primary among these is to be transparent about every aspect of the HIA process, including funding sources, partners and their roles, research approach, and decision-making processes. Information about these should be included in the HIA report and all other communications about the findings and recommendations.

Below, we delve more deeply into opportunities to conduct advocacy in the context of HIA, the potential causes of concern, and best practices to conduct an effective and relevant HIA that leads to improved health, equity, and democracy.

Partner with a diverse set of stakeholders, including those most likely to be impacted by the decision, to conduct the HIA
Some stakeholders, including community organizations, are often perceived to be advocates – and therefore biased – because they might be seen as having a position, use various tactics to get the attention of decision makers, and engage with populations that will be impacted by the decision. Other stakeholders' motivations, in contrast, are not scrutinized in the same way, either because their perspective aligns with the dominant worldview or because we do not even recognize that they are exerting control over the public agenda (Gaventa & Cornwall, 2001).

Often, there are different degrees of power among these various stakeholders. For some HIA practitioners, redressing this imbalance of power – i.e., empowerment as discussed by the WHO's Commission on Social Determinants of Health – in a particular decision-making context may be a goal for the HIA, a goal that should be transparently

stated. Partnership with disenfranchised groups, for example through a community organization, in the HIA process may be considered a way to advance empowerment, democracy, and equity.

Establishing a stakeholder oversight/advisory committee composed of people with variety of experience, including vulnerable populations most likely to be impacted by the decision at hand, to guide the HIA is good practice. By including people with varied experience, the HIA can represent different perspectives and be used to build consensus and relationships, which helps address past disenfranchisement. Establishing such a diverse committee can also address advocacy concerns around partnership with a community organization, as other members may be seen as contributing balance and scientific rigor. The HIA should be transparent about the membership of the committee and the committee's role in the HIA process.

Work jointly with an Advisory Committee to select and assess research topics
As with any research, HIAs require topic prioritization given budget and time constraints. One might believe that public health professionals, who have training and familiarity with the peer-reviewed literature, are in the best position to prioritize research topics. Focusing on topics with which stakeholders – especially members of impacted communities – are most concerned may be considered a form of advocacy, as it prioritizes some topics for research over others and de-prioritizes public health expertise.

However, focusing on topics of importance to stakeholders ensures that an HIA is adding value by responding to unanswered questions. Furthermore, while public health professionals bring their expertise to the HIA process, other stakeholders also have legitimate and valuable expertise; community members, for example, can inform the process with their lived experiences. Last, topics not well studied in the peer-review literature are still valid if they are of concern to stakeholders. The research priorities of many stakeholders make an HIA more robust. Again, transparency is important; the HIA should clearly state which topics were prioritized and deprioritized and why.

In the assessment phase, it is crucial that practitioners do not let their own or stakeholder's pre-conceived notions influence their findings on any of the selected research topics. Guided by the value of ethical use of evidence and the *Practice Standards*, (Bhatia et al., 2014), practitioners must consider evidence that both support and refutes particular impacts, acknowledge insufficient evidence when that is the case, and communicate that predictions are not definitive but based on best available evidence. Review by stakeholders and by professionals not affiliated with the HIA can be useful for identifying potential sources of bias and conclusions that are not supported by the evidence. These potential pitfalls and best practices are important in any HIA, not just those in which stakeholders such as community members

are heavily involved.

Gauge the power and policy context in determining the best strategy for taking a position

Coming to a decision at the conclusion of the assessment phase, after examining and weighing the evidence, about the benefits and harms of a proposal, and generating a set of recommendations, means we are not neutral. HIA recommendations are meant to maximize the benefits and minimize the harms. During the reporting phase, some might consider taking a position on the proposal to be a form of advocacy, believing that an "objective researcher" would let the evidence speak for itself.

However, if the research was carefully conducted and leads to clear conclusions about positive or negative impacts on health and equity, and if the HIA practitioner's goal is to improve health and reduce inequities, it is important that the practitioner communicate clearly about the evidence and its conclusions. Evidence cannot speak for itself.

This can lead to practitioners taking a position on all or part of a proposal, or being perceived as doing so. While some practitioners may be able to take a position and conduct advocacy based on that position and find that this helps achieve health- and equity-promoting change, others (e.g., those working in government agencies) may be constrained from doing so by their institutions or by lobbying regulations (e.g., they may not be able to communicate their views directly to decision makers). In some cases, other stakeholders who were part of the HIA process may take positions and lead advocacy efforts. These are all acceptable practices.

Importantly, practitioners should consider that they may not understand the full context of the competing priorities and choices faced by decision makers. For example, recommending in an HIA that a project not move forward in a particular community might just mean the project moves forward in another community not studied in the HIA. Given this, practitioners must be attuned to uncertainty in our research, be aware that advocating for HIA recommendations or taking a position could have unintended consequences, and consider how best to account for this in developing recommendations (e.g., by discussing potential recommendations with decision makers when appropriate).

Furthermore, if there is insufficient evidence to reach clear conclusions, the HIA should state so and communications about the findings should not overreach in those areas. Communicating the lack of clear findings can also be informative for decision makers and may, for example through recommendations, point to policy options with more certain impacts.

Finally, after doing several HIAs on similar proposals over time, whether the topic is food accessibility or criminal justice, an HIA practitioner is likely to develop a knowledge base around a set of topics, and may be able to come to a conclusion and/or take a position on a proposal before completing the HIA. Researching the local context with respect to a proposal and understanding the differences with previous contexts and proposals is important for minimizing bias and before taking a position.

Think broadly about the best tactics to effectively communicate findings

Translation and communication of findings and recommendations in the decision-making process – and to audiences to whom decision makers listen – may be considered advocacy by some. Most practitioners make active efforts to inform decisions, which include, for example, sharing the HIA report and summary materials extensively, letter writing, hosting public meetings, and disseminating products to the media. Some might define these information-sharing activities as advocacy.

At a minimum, practitioners have a duty to produce a publicly accessibly report and distribute it to decision makers and other stakeholders. Practitioners should also be willing to interpret and assist stakeholders to accurately use findings and recommendations. Speaking to decision makers, the media, and other stakeholders fulfills this objective. Beyond that, the range of activities in which a practitioner can engage will be construed by their institution and may be considered advocacy. There is no reason classifying such activities as advocacy should delegitimize them.

Some practitioners are concerned that testifying publicly or speaking with decision makers is lobbying and are concerned with overstepping legal limits. Lobbying has specific legal definitions (see Box 1) which vary by jurisdiction and which practitioners must understand. Lobbying restrictions must be followed. Conflating all advocacy with lobbying is counter-productive.

There is validity in asking whether it is in the best interest of improving health, and advancing equity and democracy, if an HIA practitioner takes a position on the proposal and plays a lead role communicating that position. In some contexts, the HIA practitioner may be seen as a "professional expert" and their voice can carry a significant weight. In other contexts, they may be seen as an interfering outsider and their leadership may be counter-productive. Ultimately, understanding context is integral to making the most of advocacy efforts and advancing opportunities – ones that have minimal negative consequences – to achieve HIA goals and align with practice values.

Case Study: Treatment Instead of Prison HIA

To elucidate what advocacy to promote health and reduce inequities looks like in the context of a specific HIA, we describe here the *Treatment Instead of Prison HIA* (Gilhuly, Farhang, Tsui, Puccetti, & Liners, 2012). In 2012, Human Impact Partners partnered with WISDOM (a statewide congregation-based organizing network based in Wisconsin), state agencies, academics, and other experts to conduct an HIA to assess the health effects of increasing funding in the

state budget for Wisconsin's treatment and diversion programs from $1 million a year to $75 million a year. Wisconsin, like other states, was incarcerating growing numbers of non-violent drug and alcohol offenders and had stark racial disparities in sentencing. WISDOM was campaigning to cut Wisconsin's prison population by expanding access to treatment programs and the HIA was conducted to understand the impacts these alternatives would have on incarceration. The HIA and other efforts led to a quadrupling of state funding in Wisconsin for treatment alternatives to prison.

In each phase of the HIA, HIP worked to ensure the process was responsive to our values of equity, democracy, and empowerment. From the start of the project, we carried out the process to maximize the advocacy for policy change based on our findings and recommendations:

Project management: HIP and WISDOM convened an Advisory Committee comprised of academics, researchers, and public agency staff to guide the HIA, evaluate the science to make sure the interpretation of information was accurate, and help develop recommendations grounded in the legislative and administrative reality of the state. Members of the Advisory Committee became natural spokespeople and advocates for the HIA's recommendations.

Screening: With WISDOM, we chose to conduct an HIA on a topic for which there were already constituencies engaged; it was a topic that was relevant and meaningful to people. This interest in the topic created a demand for the research and an audience interested in receiving and using the results. These audiences hoped the research would support their campaign, but were taking a risk that it might not. They were also open to changing their policy requests based on the HIA findings.

Scoping: The topics on which the HIA focused were based on questions about determinants of health that the Advisory Committee, WISDOM, and its community constituents – including those formerly incarcerated and their families – thought would have the largest impact on health and on the debate. Answering research questions prioritized by these partners increased the likelihood that stakeholders would use the research in the decision-making process and decision makers would therefore pay attention to the findings.

Assessment: The research process drew on multiple sources of information, including the experience and expertise of formerly incarcerated people, their families, service providers, law enforcement, and judges. For HIP and the Advisory Committee, including the voices of these stakeholders was important from an empowerment perspective and because published studies may not have examined some of the prioritized research questions thoroughly.

The evidence from the literature used reflected the consensus of researchers across multiple disciplines who participated in the HIA process about the potential impacts of the proposal. These researchers participated in meetings to review the evidence and reviewed the draft report.

Recommendations: The recommendations identified were responsive to the impact predictions and – because of the Advisory Committee's local knowledge – reflected the administrative and legislative reality of the state. Because stakeholders involved sought the best outcomes for their communities, they were committed to identifying feasible and actionable recommendations for which they could advocate.

Reporting: Findings and recommendations were summarized into easily digestible materials for decision makers to consider and stakeholders, including community members, to use in the decision-making process. While HIP participated in press briefings and media interviews to explain the HIA process and findings, our perspective was that community members would be the most effective spokespeople to communicate to decision makers and advocacy on their own behalf advanced the goal of empowerment. Through this model, where local voices spoke to the findings and recommendations, there was significant press coverage of the HIA. HIP was transparent with all stakeholders throughout the HIA process and in the final products about who funded the HIA, who was involved, and how the topics and research categories were selected.

Through the research, we found overwhelming evidence that expanding alternatives to incarceration would reduce the prison population, reduce crime, lower recidivism, and strengthen families by keeping up to 1,600 parents a year out of prison each year. Because studies showed that the cost of treatment was about one-fourth of the cost of incarcerating people, we found that the state would also save up to two dollars for every dollar spent on alternative treatment programs.

Based on an internal evaluation that included interviews with key partners, the HIA was a success on multiple levels. It had a tremendous impact on the conversation around treatment over incarceration in Wisconsin. Every major media outlet in the state covered its release, with over 30 news stories about it. In addition to the quadrupling of funding, legislators from both parties have pledged continued support for future funding increases. WISDOM continues to use the research in meetings with legislators, strengthen relationships with the public health community, organize their communities, and keep the issue in the media spotlight. Decision makers and the state budget were directly affected by the HIA findings and recommendations; there was a shift in the narrative around what affects health; new collaborations were formed; community members felt empowered by the experience of participating in the process; and the HIA continues to contribute to the dialogue around incarceration in the state.

Success resulted from the HIA process and the advocacy it supported. Because the project sought to answer a set of socially meaningful and relevant questions, WISDOM's organized constituencies – including citizens, clergy, prosecutors, judges, and service providers – were motivated

to integrate the findings and recommendations into their campaign. The approach also helped legitimize the research for decision makers, who, while caring about the underlying evidence, also cared to see a broad network of community, academic, and other stakeholders bought into the research. Had we not conducted the HIA to advocate for our causes of health, equity and democracy, the HIA may not have had as significant an impact.

The model of the *Treatment Instead of Prison HIA* is reflected in many of our other projects and has resulted in similar successes. In our *Farmers Field HIA* (Lucky, Satinsky, & Nasser, 2012) and our *University of Southern California HIA,* (Lucky & Heller, 2012) community organizations participating in the HIA used research findings to leverage housing, job, and health mitigations via legally binding community benefit agreements. Our *Jack London Gateway HIA* (Heller, 2007) led to changes in the design of a local development to address identified health impacts. Based on these successes, others, including government agencies (Pew Charitable Trusts Health Impact Project, 2014), are also beginning to conduct more advocacy in their HIAs as well. In all of these examples, various forms of advocacy – relevance of the topics of focus to local community stakeholders, empowerment of those groups through the HIA, and the direct and organized use of findings and recommendations in the decision-making process – led to successful HIA outcomes

that may not otherwise have been realized.

Conclusion

Working within a policy context, and driven by a set of foundational values, we must be thoughtful about how we, as practitioners, can be most effective at accomplishing the wider goal of HIA – to protect and promote health and to reduce inequities in health. While we cannot expect that the answers will be the same in all situations and that all practitioners will engage in the same activities, the success of the Wisconsin *Treatment Instead of Prison HIA* and other HIAs provide an example of how advocacy can be woven throughout the HIA process in such a way as to increase its relevance, use, and ultimately its efficacy in the policy-making domain.

The model of HIA described here, that combines sound science with advocacy for health, equity, and democracy, can lead to public health becoming a model of accountable and effective government. While HIA practitioners rely on empirical data, we know that data alone is not enough to influence the policy process. Context, ideas, and power matter.

The process and product of HIA can empower vulnerable populations most likely to be impacted by decision making and start to reform the structures and institutions that currently result in inequity. But data alone will not do this. Data need advocates.

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