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TRACKING STATE-LEVEL HEALTH IMPACT ASSESSMENT LEGISLATION FROM 2012-2016

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Abstract:

Background: Scientifically constructed, open source legal datasets that capture key features of state legislative activity can be used for evaluation, and to identify trends in law across jurisdictions and over time.

Methods: Using policy surveillance methods, a team of legal researchers collected and analyzed state-level Health Impact Assessment (HIA) legislation across 50 U.S. states and Washington, D.C. between January 1, 2012 and December 31, 2016. One dataset captures the characteristics of all HIA bills that were introduced but not enacted during the period of the study. The second dataset captures the characteristics of all HIA laws, including statutes and regulations that were enacted or amended during the period of the study.

Results: Between January 1, 2012 and December 31, 2016, 40 HIA bills were introduced but not enacted, and three HIA laws were enacted or amended. Notable trends include: greater legislative activity was observed in the Northeastern United States as compared to the rest of the country; a majority of HIA legislation was proposed by Democratic members of state government; HIA mandates were promulgated through state agency rulemaking process more frequently than the legislative process; and most of the proposed legislation provided no explicit source of funding to implement HIAs within the legislative text.

Conclusion: Evaluation research is necessary to understand the factors that drive the success and failure of HIA legislation, and its impact when applied to decision-making, health determinants and outcomes, and health equity.



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Introduction

State policymakers recognize that decisions made in housing, criminal justice, and education also affect public health and state health care spending — spending that amounts to hundreds of billions of dollars each year across the United States (Marmot, M. & Allen, J., 2014; The Pew Charitable Trusts and John D. and Catherine T. MacArthur Foundation, 2016). As legislators aim to reduce costs and improve population health, some are exploring how Health Impact Assessments (HIAs), which assess the potential public health effects of a proposed decision, could be used to better inform state-level decision-making. One straightforward way that legislators can promote HIAs is to require or encourage the practice through legislation.

The impact of HIA legislation on government practice, policy making, and social outcomes has not been evaluated. In order to gain a deeper understanding of HIA legislation, and to support evaluation of its implementation and effects, this research captures and analyzes trends in requiring, encouraging, or incentivizing the use of an HIA, including legislation requiring the use of HIA as a tool and HIAs addressing state-level policy, between January 1, 2012 and December 31, 2016.

To examine the full legal landscape of HIA legislation, the bills research included collecting bills that were introduced and failed, and those that were introduced but still under consideration on December 31, 2016. The laws research included collecting legislation that was enacted or amended during the period of the study. Bills were identified independently from laws because identification and analysis of failed or stalled efforts to implement HIA legislation, in conjunction with the analysis of the successful laws, allows for a comprehensive understanding of state-level HIA policy activity, or lack thereof. This article summarizes HIA legislative activity, notes key patterns and trends, and highlights the need for additional research to evaluate the impact of laws on population health.

Background

HIA is a systematic process that uses an array of data sources and analytic methods and considers input from stakeholders to determine the potential effects of a proposed policy, plan, program, or project on the health of a population and the distribution of those effects within the population (Quigley, et al., 2006). HIAs provide recommendations on monitoring and managing those effects (Quigley, et al., 2006). The formal elements of an HIA include screening of the need for and value of conducting an HIA, scoping and creation of objectives, assessment of the baseline health status of affected populations, inclusion of recommendations, reporting on the findings, and the monitoring and evaluation of its results. (National Research Council, 2011). HIAs provide pragmatic, evidence-informed recommendations about how to modify the proposed action to reduce risks and promote benefits, as well as provide recommendations on monitoring health effects after implementation (National Research Council, 2011). HIAs also examine whether and to what extent decisions could reduce health disparities and improve health equity.

A total of 419 HIAs have been conducted in the United States as of June 2017 (The Pew Charitable Trusts, 2015). They have aimed to inform decision-making at the federal, state, and local levels in a range of sectors, including agriculture, criminal justice, labor and employment, education, transportation, and housing (The Pew Charitable Trusts, 2015). Approximately 18% of these 419 HIAs (n=76) focused on state-level policy decisions (The Pew Charitable Trusts, 2015). These HIAs examined state legislation, such as paid sick leave and food tax policies; state programs or regulations and their implementation, such as housing inspection and tax credit grant programs; and projects by state-level decision-makers, such as highway design and redevelopment (The Pew Charitable Trusts, 2015).

Prior research by the National Conference of State Legislatures (NCSL) identified 56 bills that were introduced in 17 states between January 2009 and May 2014 that would require some consideration of health effects in decision-making (National Conference of State Legislatures, 2014). Most of these bills, however, did not meet the formal definition of an HIA (Health Impact Project, 2015; National Conference of State Legislatures, 2014). NCSL's analysis found eight states that considered legislation that required or encouraged assessments that met most, but not all, requirements of a formal HIA. Policymakers in three of these eight states — Massachusetts, Vermont, and Washington — enacted legislation that ranged in scope from requiring an HIA for a specific bridge replacement project, to establishing the use of HIAs to determine the health effects of state transportation projects.

In 2016, through a grant from the Health Impact Project — a collaboration of the Robert Wood Johnson Foundation and The Pew Charitable Trusts — the Policy Surveillance Program of the Center for Public Health Law Research at Temple University developed two longitudinal datasets in order to create a comprehensive and systematic study of recent HIA legislative activity.

This study, which builds on the research conducted by NCSL from 2009-2014 (National Conference of State Legislatures, 2014), illuminates the variation that exists in successful, unsuccessful, and pending HIA legislation across the 50 U.S. states and Washington, D.C., from 2012 to 2016 as it pertains to HIA requirements, techniques, and various sectors and industries.

Methods

The research team used the methods outlined in Anderson et al., (2013) as a foundation to develop a policy surveillance mapping study on HIA legislation. Policy surveillance, one form of scientific legal mapping, is the ongoing, systematic collection, analysis, and dissemination of policies across jurisdictions, and over

time (Burris, 2014). The HIA study focused on state-level HIA legislation from January 1, 2012 to December 31, 2016 across the United States. The research team created two distinct datasets. One dataset, HIA Bills, captures characteristics of all HIA bills that were introduced but not enacted during the time period of the study. The second dataset, HIA Laws, captures the characteristics of all HIA laws that were enacted or amended during the period of the study. For the purposes of the study, both statutes and regulations were included as laws. The research team consisted of two legal researchers and one legal supervisor from the Policy Surveillance Program of the Center for Public Health Law Research at Temple University who collaborated with two subject matter experts from the Health Impact Project.

The researchers included policies that explicitly use the term “health impact assessment(s)” within the legal text, and/or include the six formal elements of an HIA. Policies that did not meet the inclusion criteria were excluded, including legislation requiring only health risk assessments, community health assessments, or proposals where vague references to assessing public health impacts were discussed.

The researchers identified and recorded citations of relevant bills and laws (including statutes and regulations) from Westlaw, a legal research database. The researchers developed search strings and conducted keyword searches for each dataset: “TE(health /5 (assessment or impact or review))”; “health and impact and assessment”; and “health and impact and review.” When these searches yielded a relevant bill or law, the researchers examined the table of contents to determine if any of the surrounding statutes or regulations were also relevant. The researchers supplemented keyword searches by consulting secondary sources. For quality control, the team conducted redundant research, in which each researcher independently identified and recorded relevant citations for each jurisdiction. The supervisor then compared the research to identify and resolve

all divergences (or differences in research results) between the original and redundant research. Once the citation list was finalized, the researchers collected the legal text from each state legislature's website. This research process was repeated in batches of ten states at a time until all relevant bills and laws were collected. HIA bills that were separately proposed in each chamber of the state legislature were individually collected. However, if there were multiple versions of the same bill, the researchers collected the most recent version of the bill that included the HIA requirement.

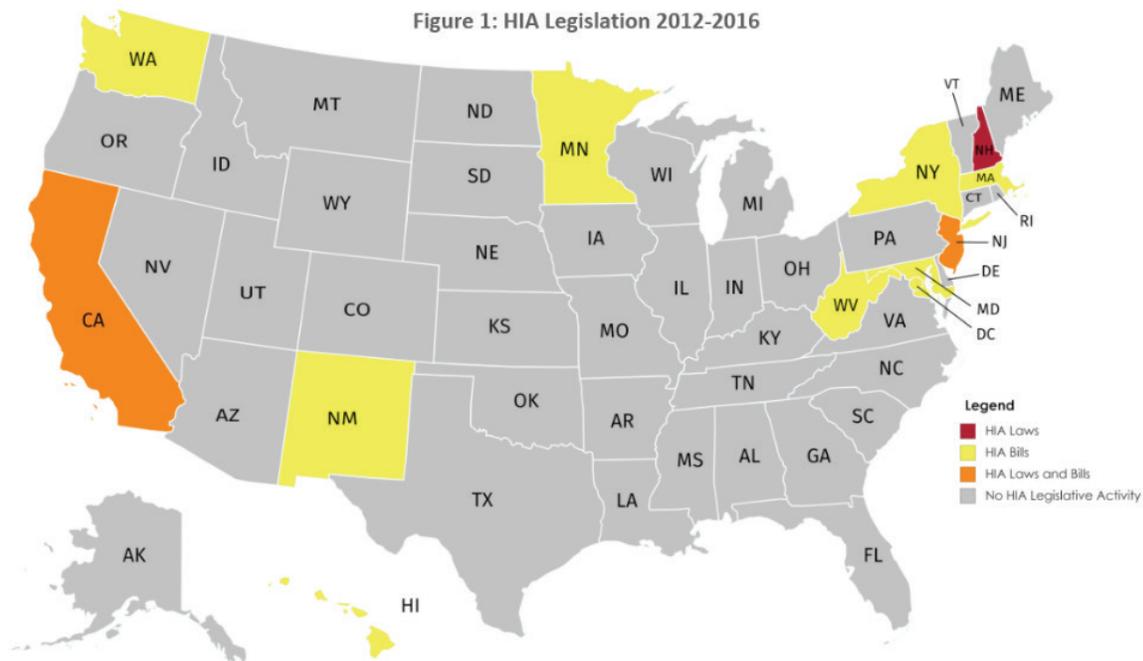
The team developed a list of constructs, or important features of the policies, based on the policies collected for the first ten states. Coding questions were drafted from the list of constructs in order to observe the policies' characteristics. HIA experts reviewed and refined the coding questions to ensure that the key elements of the policies were captured within the coding scheme. Once the questions were finalized, the team entered them into MonQcleSM, a coding-software platform.

Each jurisdiction was independently coded by two

legal researchers. The supervisor compared the results and the team resolved discrepancies through discussion and consultation with HIA experts. The team developed a research protocol to record the divergence rates and outline the coding scheme, definitions, and scoping parameters, including inclusion and exclusion criteria. Each dataset contains downloadable text of the policies, an interactive map and table, summary report, research protocol, codebook, and empirical legal data (Policy Surveillance Program, 2017a; Policy Surveillance Program, 2017b).

Results

Between January 1, 2012 and December 31, 2016, 40 bills were introduced but not passed in the 51 jurisdictions (50 states and the District of Columbia) surveyed across the United States. These 40 HIA bills were introduced in 11 jurisdictions (Fig. 1; Policy Surveillance Program, 2017a). Of the 40 bills, seven were introduced in 2012, ten in 2013, four in 2014, 14 in 2015, and five in 2016. During this period, one law was enacted in California in 2015, one regulation was



readopted in New Jersey in 2014, and one regulation was amended in New Hampshire in 2016 (Fig. 1; Policy Surveillance Program, 2017b).

The collected bills and laws varied in focus and scope. Some legislation proposed that an HIA be conducted for a specific project, such as 2016 MD H.B. 363, which required that an HIA be conducted by a specific date on the deployment of smart meters across Maryland. Some proposed legislation would have mandated the use of an HIA for specific activities conducted within the state. For example, 2015 NY S.B. 902 proposed that an HIA be conducted for all horizontal gas drilling and high-volume hydraulic fracturing activities in New York, while 2015 MN H.F. 3261 proposed that an HIA be conducted for projects involving clear-cutting in Minnesota. Other legislation had a broader focus, such as 2014 NM S.B. 48, which proposed that an HIA be conducted whenever a construction or development project in New Mexico would require an environmental assessment pursuant to state or federal law.

The study shows how state legislatures' approaches compare to each other, and thereby lays the groundwork for studies evaluating the implementation of state-mandated HIAs and the potential impact of such legislation on public health. The following subsections describe the key trends and features of HIA legislation from 2012-2016 captured by the study.

HIA Required

Some legislation mandates an HIA in order to assess a program or activity's public health impacts, while others only encourage their use (Health Impact Project, 2015). Of the 40 HIA bills analyzed, 37 (92.5%) required that an HIA be conducted, as opposed to simply encouraging the use of an HIA.

All three (100%) of the enacted HIA laws required, as opposed to encouraged, that an HIA be conducted.

Political Affiliation

Political affiliation of the sponsor may correlate with HIA legislative activity (Wismar, et al, 2007). Democratic members of state legislatures introduced more HIA legislation than representatives from other political parties. Democrats introduced 30 (75%) of the 40 HIA bills, while four (10%) bills were introduced by Republicans, and one (2.5%) was introduced by an Independent legislator. Three (7.5%) bills were sponsored by a combination of Republican and Democratic legislators. HIA provisions were included in two budget bills (5%) with no named sponsor.

A Democratic state senator initially introduced California's enacted law. New Jersey's administrative regulation was readopted under a Republican governor, and New Hampshire's regulation was amended under a Democratic governor.

Geographic Location

Although non-legislative HIAs have been conducted in nearly all states (The Pew Charitable Trusts, 2015), legislative activity to mandate or encourage HIAs was concentrated in specific geographic regions in the study's period. Twenty-four (60%) bills were introduced in the Northeastern United States, with the majority originating in New York and Massachusetts. States in the Midwest followed with seven (17.5%) bills and the Southern states introduced five (12.5%) bills. States in the West proposed three (7.5%) bills, while only one (2.5%) bill came from the Southwest.

Two (66.7%) of the three states that enacted an HIA law are located in the Northeastern United States, in New Jersey and New Hampshire. The third HIA law was passed in the West, in California.

Sectors Specified

The research team classified HIA legislation based on the various sectors and industries that are generally targeted in HIA legislation in order to determine

whether HIAs are more commonly used to address decisions within specific sectors (National Conference of State Legislatures, 2014). The sectors were selected based on the North American Industry Classification System (U.S. Census Bureau, 2017). The 40 HIA bills required their proposed HIAs to apply in seven distinct sectors. Environment – not including agriculture or oil and gas – was included most frequently, with 17 (42.5%) bills focused on issues in that sector, such as air and water, waste facilities, or forestry. Oil and gas was the focus in 10 (25%) of the HIA bills, the transportation sector accounted for six (15%) of the 40 bills, and the remaining bills were targeting other sectors including two in health care (5%), two in construction (5%), two in education (5%), and one in agriculture (2.5%). Three (7.5%) bills did not apply to a specific sector.

Each of the three enacted HIA laws targeted specific sectors. California’s law requires HIAs in the health care sector; New Jersey’s regulation applies to the environmental sector; and New Hampshire’s regulation applies to oil and gas.

Organizations Required to Conduct HIA

HIA legislation generally specifies the organization that is required to conduct the required or encouraged HIA (National Conference of State Legislatures, 2014). In this study, twenty (50%) of the HIA bills tasked their state’s department of health to conduct the HIA. A public health program within a local university was explicitly mentioned in eight (20%) of the bills. Local governments were required to conduct the mandated HIA in five (12.5%) bills. Three (7.5%) of the bills required a private, non-government contractor to conduct the HIA. The remaining organizations included private entities (2 bills, 5%), a specific committee or task force (2 bills, 5%), the department of transportation (2 bills, 5%) and the department of environment (1 bill, 2.5%).

California’s HIA law requires that the California Health Benefit Review Program, a program established by the University of California (local university public health

program), conduct the HIA. New Jersey’s regulation requires the HIA be conducted by a private entity seeking permit approval, while New Hampshire’s regulation requires that an independent health and safety expert, (private, non-government contractor) conduct the HIA.

Methods Used in Conducting the HIA

The HIA process can be accomplished using a variety of methods, including risk assessments, population analysis, and expert opinion (National Research Council, 2011). Twenty (50%) of the collected HIA bills required that the entity managing the HIA conduct their own original research, data collection, and analysis. Other methods that are required within the HIA bills include risk assessments in 10 (25%) bills, population analysis in nine (22.5%), literature review in nine (22.5%), and stakeholder engagement in eight (20%). Expert opinion was required in six (15%) bills, while secondary data analysis was only specified in two (5%) bills. Notably, 14 (35%) bills did not require any specific methods be followed while implementing the HIAs.

California’s HIA law requires original research and data collection, expert opinion, and policy analysis. New Jersey’s HIA law requires original research and data collection, risk assessment, and secondary data analysis, and New Hampshire requires just risk assessment and expert opinion.

Funding Mechanism

The provision of funding is an important practical consideration in HIA legislation (National Conference of State Legislatures, 2014). Of the HIA bills, 10 (25%) included a funding mechanism within the language of the bill, while 28 (70%) of the bills did not mandate any funding for the required HIAs within the legislative text. Two of the bills (5%) did not require governmental funding, but did mandate that a private entity that is required to conduct an HIA fund such an HIA on its own.

Of the three states that passed or amended HIA laws, only California creates a funding mechanism for HIAs, requiring that the Health Care Benefits Fund in the State Treasury fund the assessments. The regulations in New Jersey and New Hampshire do not create an explicit funding source within the legal text.

Discussion

Only three HIA laws were enacted or amended at the state-level across the country between January 1, 2012 and December 31, 2016. The failure to pass or amend HIA legislation was a common thread throughout the United States regardless of the variation among the legislation's applicable sector, the HIA methods required by the legislation, the geographic location of the state, or the legislation's inclusion of an HIA funding mechanism.

Although HIAs do not require legislative authorization, policy support, including HIA legislation, has been identified as an enabling factor for HIA use (Dannenberg, 2016). Most bills introduced in state legislatures fail to pass, and this study was not designed to identify the reasons the proposed bills did not become law. It is possible that some or all of these bills failed simply because lawmakers were opposed, or were unfamiliar with HIAs and their potential utility. Other political and contextual factors, such as funding constraints, or controversy over the sector or subject area that would be the focus of the HIA (such as fracking), may also be responsible (National Research Council, 2011). Further research on HIA policymaking may illuminate how HIA proponents can use policy advocacy, policymaker education, or translational research to improve the adoption rate in the future. It would also be valuable to examine if and how the success and failure rates of state HIA legislation compare with other types of legislation, which may generate knowledge that can help with policy formulation and adoption.

Research gaps remain in understanding how HIA laws are implemented, the impact of those laws on decision-making in various sectors, and ultimately how HIA laws affect health determinants and health outcomes. Future research could track the implementation of the three successful HIA laws from this time period, as well as others that may arise in future state legislative sessions, to understand the facilitators and barriers of these laws and to monitor their impacts. Monitoring these laws' effects on health determinants and outcomes, a formal step of HIAs that includes process, impact, and outcome evaluation, could also help advance HIA practice, since the monitoring step of the HIA process is often omitted in practice. (Dannenberg, 2016). Studying the implementation of these laws could also help to identify and establish the critical components that any HIA bill should contain in the future. It is likely that HIA laws need to provide sufficient clarity in terms of how the HIA will be carried out and provide enough guidance and support, such as funding or staffing mechanisms, for the HIA process to be successful.

The findings presented in this paper also highlight the disproportionate distribution of HIA bills and laws in terms of geography, sector, and political affiliation of the primary sponsor. Approximately two-thirds (66%) of the HIA bills and laws in the datasets were introduced in the Northeastern United States, and most of the bills sought to use HIAs to inform decisions related to environmental issues, oil and gas, and transportation. Future research should explore these trends in more depth and seek to understand why policymakers may be more likely to pursue HIA bills and laws in specific sectors or topic areas. The findings also demonstrate that Democrats introduced 75% of the HIA bills. Again, future research may benefit from exploring these differences by political ideology.

As of June 2017, HIAs have been conducted in 42 of 50 states and the District of Columbia (regardless of legal mandate), and have informed decisions across a range

of sectors including transportation, natural resources and energy, housing, criminal justice, education, and labor and employment (The Pew Charitable Trusts, 2015). These HIAs are being conducted across the country, but recent legislative activity has only occurred in 11 states within the period of this study. Clearly, HIA practice is expanding in the absence of legislation, with 419 HIAs being conducted as of June 2017 (The Pew Charitable Trusts, 2015). The lack of state-level HIA legislation in recent years raises the question of whether state-level HIA laws are necessary, and whether they should be promoted to support HIA activity over more voluntary practices. Future research may test the hypothesis that HIA growth and practice differs by whether or not a state has HIA legislation, and to examine differences among the impacts of HIAs conducted because of legislation compared to those undertaken without legislation. This information can help practitioners identify whether HIA legislation as policy support is a critical enabler for HIA use, and may provide empirical data to support policy diffusion from one state to another (Nicholson-Crotty, 2015). If research finds that legislation is unnecessary, identifying which non-legislative approaches best support state-level HIA activity will be crucial in order to meet the goal of positively affecting population health and health equity.

Limitations

The research team designed the study to exclude bills and laws requiring forms of public health analysis that did not meet the narrow definition, or include the specific criteria, of a formal HIA, such as the exclusion of health risk assessments and community health needs assessments. Also excluded were bills and laws that included vague provisions ordering the examination of the potential impact of a specific issue or project on health, but did not provide details to suggest that an HIA would be the mechanism. Moreover, the study's state-level mapping does not capture HIA provisions enacted at the federal or local levels. This focus on formal, state-legislated HIAs may underestimate the

true volume of HIA legislative activity.

Additionally, this project observed the policies as written in the bills, statutes, and regulations, and thus it does not provide insight on how well an HIA was carried out in practice. Further, if a law was passed prior to January 1, 2012 and was still effective during the period of the study it was excluded as out of scope. Lastly, while we captured introduced bills that were not enacted, we did not capture proposed rules and regulations that had failed or were still pending, as only successfully amended or promulgated HIA regulations were included in the scope of the study.

Conclusion

Legislative action can encourage the use of HIAs across the United States to examine the public health implications of decisions in a range of sectors. The findings presented in this study highlight the need for additional research to understand the factors that may drive success or failure of HIA bills, such as political will and resources, in addition to the question of whether state-level HIA legislation is the best approach to drive HIA implementation. Further research is needed to understand how HIA legislation is being implemented and the impacts of HIA legislation on decision-making, health determinants and outcomes, and health equity.

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