HEALTH IMPACT ASSESSMENTS IN HOSPITAL COMMUNITY BENEFIT: A MULTIPLE CASE STUDY OF THE USE OF HIAs AT CHILDREN’S HOSPITAL COLORADO

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Abstract:

Objective: To explore the use of Health Impact Assessments (HIAs) within nonprofit hospital community benefit activities.

Methods: We conducted case studies of three HIAs that were done in collaboration with Children’s Hospital Colorado as part of the hospital’s community benefit portfolio. We used data from key informant interviews and documents to construct individual explanatory case studies and we then conducted cross-case analysis to compare and contrast across cases.

Results: Hospital staff stated that HIAs provided Children’s Hospital Colorado with a transparent and systematic process for generating evidence-based recommendations with community and stakeholder feedback within the hospital’s community benefit activities. HIAs were used to generate recommendations to inform community benefit planning activities and to generate public policy recommendations to enhance child health. The case studies highlighted several issues that need to be addressed in order to further explore and advance the use of HIAs within hospital community benefit activities including: use of HIAs on explicit health issues, hospital capacity for HIAs, potentially broadening the scope of HIA recommendations, and the use of HIAs to generate recommendations from broad priority areas.

Conclusion: HIAs have the potential to meet the need for established, evidence-based, and stakeholder responsive tools and processes to be used within nonprofit hospital community benefit activities. In meeting this need, the non-profit hospital community benefit area can potentially serve as a major institutional home for the practice of HIAs. There is a need for additional research and practice innovation to further explore and refine the use of HIAs within nonprofit hospital community benefit activities.
Introduction
The use of Health Impact Assessments (HIAs) in the United States (US) has grown rapidly over the last decade (Dannenberg, 2016). HIAs have been used in a broad range of sectors including built environment, transportation, housing, energy etc. (Dannenberg, 2016). There is now growing evidence and consensus that HIAs are an important tool to introduce health optimizing recommendations in a variety of program and policy settings (National Research Council, 2011). The funding and creation of incentives and infrastructure or institutionalization of HIAs is now a major factor in the more widespread use of HIAs in the US (Morley, Lindberg, Rogerson, Bever, & Pollack, 2016).

While a number of organizations such as the National Research Council have highlighted HIAs as a valuable tool for “integrating health implications into decision-making” and as a tool that fits within the broader Health in All Policies (HiAP) movement, there has been limited institutionalization of HIAs in the US (National Research Council, 2011). There are, however, some examples of the HIA process being institutionalized on a small scale including legislation in Washington State that required an HIA to be conducted on a bridge replacement in Seattle (Seattle and King County Public Health, 2017). Two other interesting examples of HIA institutionalization are the Massachusetts Healthy Transportation Compact and the funding of HIAs in Alaska through the state’s natural resources permitting process (Anderson, Yoder, Fogels, Krieger, & McLaughlin, 2013; Massachusetts Department of Transportation, 2016). Both of these examples represent important advancements in the institutionalization of HIAs in the US. Additional avenues to institutionalize HIAs are needed in order to further advance the practice and realize the potential population health benefits of HIAs.

The use of HIAs within nonprofit hospital community benefit activities holds promise for the more widespread institutionalization of HIAs in the US (Tung & Williams, 2017). Nonprofit hospital community benefit activities are those that are required by the Internal Revenue Service (IRS) of nonprofit hospitals to justify their nonprofit status (Rosenbaum & Margulies, 2011). Nonprofit hospital community benefit activities have traditionally focused on the provision of charity care but a number of changes associated with the Patient Protection and Affordable Care Act (ACA) have pushed nonprofit hospitals to focus more on population and public health (Rosenbaum & Margulies, 2011; Young, Chou, Alexander, Lee, & Raver, 2013).

In 2012, nonprofit hospitals in the US reported spending more than $60 billion on community benefit (Leider et al., 2016). The redirection of even a small portion of this spending toward more population and public health oriented activities could have a significant impact on the public’s health (Corrigan, Fisher, & Heiser, 2015). This shift in focus from charity care towards population health represents a tremendous opportunity for the integration of hospitals and public health systems, but what community benefit spending levels should be and what specific activities hospitals should engage in have yet to be established (Leider et al., 2016). This has created a need for additional tools and processes to guide nonprofit hospital investments and activities to enhance public health (Abbott, 2011).

This need for tools and process to guide hospital community benefit activities can potentially be served in part by HIAs in at least two ways. First, there is now a requirement for nonprofit hospitals to conduct community health needs assessments (CHNAs) and develop corresponding implementation plans (Health Affairs, 2016). Implementation plans are intended to guide and outline specific community benefit activities to address identified community health needs. HIAs can provide a transparent and systematic process and be used by nonprofit hospitals to generate recommendations to inform implementation plans. The HIA process is consistent with the IRS requirements that implementation plans (1) address priority areas identified in the CHNA, (2) be evidence informed, and (3) incorporate community and stakeholder feedback.
Second, HIAs can provide a mechanism for hospitals to directly engage in policy and make recommendations to enhance population and public health. An HIA used in this way would serve the role of an activity that directly benefits population health as opposed to a tool to guide community benefit planning and investment. HIAs used to generate policy recommendations can specifically address an identified community health need(s) and provide estimates of the anticipated population health impacts.

To further explore the potential for the use of HIAs within hospital community benefit activities, we conducted a pilot consisting of three HIAs in collaboration with Children’s Hospital Colorado. These three HIAs were embedded within various aspects of Children’s Hospital Colorado’s community benefit activities and hospital staff were involved in various rules for all of the HIAs conducted. This pilot effort was supported with funding from the Health Impact Project, a collaboration of the Robert Wood Johnson Foundation and The Pew Charitable Trusts.

The three HIAs conducted were: (1) the Colorado Marijuana and Child Abuse and Neglect HIA, (2) the Colorado Springs Pilot HIA, and (3) the Colorado Child and Adolescent Behavioral Health HIA. To explore the experience of using these HIAs within the context of nonprofit hospital community benefit activities, we conducted case studies informed primarily by key informant interviews of individuals who participated in various aspects of the HIAs and our own experience as HIA practitioners/researchers.

**Methods**

From December 2016 to March 2017, we conducted case studies with both explanatory and exploratory components for each of the three HIAs that were conducted as part of this pilot (Yin, 2009). The focus of our case studies was to identify and explain the impacts from each HIA and explore the utility of each HIA within the hospital community benefits context. After all of the pilot HIAs were complete, we conducted a total of 17 key informant interviews with various stakeholders (e.g. HIA team members, hospital staff, community stakeholders, etc.) who participated in the HIAs. These interviews were guided by a theme-based interview guide. Six key information interviews were conducted to inform the Colorado Marijuana and Child Abuse and Neglect HIA case study, seven key information interviews were conducted to inform the Colorado Springs Pilot HIA, and four key informant interviews were conducted to inform the Colorado Child and Adolescent Behavioral Health HIA.

All interviews were audio recorded and memos were then written to synthesize information and abstract key themes from each interview by the interviewer. When appropriate and available, documents such as legislative records were used as an additional data source for the cases. We used a data triangulation and explanation building approach to synthesize the data from the interview memos and documents (Yin, 2009). This involved using multiple data sources (e.g. multiple interviewer perspectives) to explain and explore the phenomenon of interest and iteratively developing an explanation of key events and their linkages for each case (Yin, 2009). As an additional validation step, interview participants were given an opportunity to review the case studies and any statements attributed to them. The Institutional Review Board at the University of Colorado reviewed and approved our research protocol.

**Results**

Here we report our results organized by case. Each case begins with a brief overview of the HIA, followed by impacts, if any, from the recommendations. We then present perspectives of community stakeholders shared on the HIA process, followed by perspectives shared by Children’s Hospital Colorado staff on the utility of the specific HIA within the community benefit context.
Colorado Marijuana and Child Abuse and Neglect Health Impact Assessment

This HIA was led by the Colorado School of Public Health and conducted in collaboration with Children’s Hospital Colorado and the Kempe Center for the Prevention and Treatment of Child Abuse and Neglect. The motivation for this HIA was to improve child and family health by generating recommendations on state policies surrounding how marijuana use should be handled in Child Welfare decision-making. More specifically, this HIA was scoped to generate recommendations for mandatory reporting and Child Welfare screening decisions when marijuana is involved and improve consistency in practice across the state of Colorado, while reducing the number of families unnecessarily interfacing with the Child Welfare system.

Impacts

The HIA recommendations informed the development of House Bill (HB) 16-1385, which updated and modernized the definition of child abuse or neglect in the Colorado Children’s Code as it relates to substances. During the 2016 legislative session this bill passed through the Colorado House of Representatives, but did not pass through the Colorado Senate before the close of that year’s legislative session. Although HB 16-1385 did not pass in 2016, there is interest among stakeholders involved with the HIA to continue work in future legislative sessions.

In addition, one of the key stakeholders involved with the HIA, the executive director of Illuminate Colorado – a strategic partnership of the established nonprofits: Colorado Alliance for Drug Endangered Children, Prevent Child Abuse Colorado, Colorado Chapter of the National Organization on Fetal Alcohol Spectrum Disorder, and more recently Sexual Abuse Forever Ending – noted the potential for the HIA recommendations to inform future training and education for mandatory reporters as well as Child Welfare caseworkers. She develops and assists in the delivery of Child Welfare curriculum for the state of Colorado and expressed interest in using the HIA recommendations to develop new materials on marijuana/substance abuse training.

Another key stakeholder, the state Child Welfare associate director stated that the state is embarking on modernizing the Trails database system, a statewide automated case management system that includes Child Welfare, Child Care, and Youth Corrections data, to better track substance use; which aligns with one of the HIA’s data recommendations. This change will help with aggregating data around when and where substance use occurs within the Child Welfare context, inform counties on how to target their services and supports, and to develop prevention strategies in the future.

Despite the ongoing policy efforts, stakeholders that we interviewed said that practice among mandatory reporters and Child Welfare screeners in the state had not changed since the HIA recommendations were finalized.

Stakeholder perspectives

Interview participants for this HIA included two executive directors of institutional partners, two county-level human services division administrators, a state-level Child Welfare associate director, and the contracted meeting facilitator for the HIA. All participants had no previous HIA experience. There was consensus among the interviewees that the main objective of the HIA was achieved, which was to develop evidence-informed recommendations to assist mandatory reporters and Child Welfare screeners in their decision-making when marijuana is involved.

Relationship building among diverse stakeholders was expressed as one of the most effective elements of the HIA. Interview participants also stated that the stakeholder engagement process in the HIA was effective: formal stakeholder meetings created a forum for different perspectives to be incorporated in interpret-
ing the implications for the current state of science on the HIA recommendations. The perspectives included spanned the spectrum from child abuse pediatricians to marijuana patient advocates and child welfare workers at both the state and local levels.

While interviewees agreed that the HIA produced valuable recommendations, some stated that the delineation between developing the HIA recommendations and drafting policy language was unclear. This HIA developed two tiers of recommendations: the first tier focused on recommendations for actual practice and the second tier focused on updating legislation to be consistent with the practice recommendations. Many interviewees stated that they were uncertain as to where the HIA formally ended and policy and advocacy efforts began. Furthermore, some participants felt that the policy efforts that came out of the HIA were beyond the original scope; such that a couple participants stated that they were initially unaware that the HIA recommendations would lead to proposed legislation.

Interviewees also stated that the HIA team could have improved on the dissemination of the HIA findings and recommendations. The final HIA report was shared with all stakeholders who participated in the process, but not formally shared with or presented to Colorado Department of Human Services, other county Child Welfare departments, or mandatory reporters such as those in hospital systems. One county Child Welfare administrator added that there has been little discussion on the issue of marijuana once the HIA was completed, which she found disappointing, given the amount of time and energy she had dedicated to the work.

Children's Hospital Colorado Perspectives

Leadership and staff at Children’s Hospital of Colorado stated that while they did view this HIA positively and as being consistent with the organization’s overall community benefit objective of improving child health, they ultimately viewed it as motivated more by opportunity and need than being clearly aligned with the hospital’s formal community benefit obligations. They noted that this HIA was not embedded within the hospital’s formal community benefit activities in that it was not used to inform implementation plans and was not directly aligned with community health priorities identified in the hospital’s formal CHNAs. Despite this, hospital representatives noted that HIAs could be used opportunistically like this in order to make policy recommendations to benefit public health and that HIAs used in this way fit within the larger umbrella of community benefit activities.

**Colorado Springs Pilot Health Impact Assessment**

This HIA was conducted to generate recommendations to inform Children’s Hospital Colorado’s formal community benefit implementation plan in Colorado Springs, CO. This effort was led by the Colorado School of Public Health and conducted in collaboration with Children’s Hospital Colorado’s Child Health Advocacy Institute. This HIA was scoped to address health priority areas identified in CHCO’s CHNA in El Paso County. More specifically, it focused on mental health and physical activity in school-aged children. This HIA generated recommendations for Children’s Hospital Colorado to invest in and advance school-based health centers as part of the hospital’s future community benefit activities.

**Impacts**

The HIA recommendations informed the development of Children’s Hospital Colorado’s 2016 Community Health Action Plan for El Paso County (Children’s Hospital Colorado, 2016). The report specifically highlights the school setting as a primary place for programming to address the top six health priorities for the region, particularly that “CHCO will spearhead the creation of school resource centers that will provide: integrated primary care services, including mental and oral health; community support services;
professional development and technical assistance for school personnel; and will inform targeted policy initiatives” (Children’s Hospital Colorado, 2016).

**Stakeholder perspectives**

Interview participants for this HIA included three representatives from Children’s Hospital Colorado, two school-based health center employees, a public health planner from the local health department, and the externally-contracted meeting facilitator. None of the interviewees had previous experience with HIAs. All interview participants stated that the HIA’s major objective was to determine CHCO’s role to address identified health priorities in the Colorado Springs region.

Non-hospital interview participants stated that the hospital’s desire to collaborate with the community was evident. Participants shared that the HIA process also allowed for community voice and feedback to determine where the hospital’s community benefit investment should go. Regarding the development of new partnerships, many participants felt that the HIA gave the hospital good exposure to the Colorado Springs’ experience and the region’s uniqueness.

The HIA’s stakeholder engagement process helped to build stronger relationships between the hospital and local community as well as between local stakeholders. Interviewees stated that stakeholder meetings were productive with the right individuals represented; that the conversations facilitated a sharing of experiences, ideas, and resources between groups; that good questions were asked; and appreciation among stakeholders to be able to share their perspectives and have an open dialogue about the health priorities in their community. Several stakeholders stated that that they now wanted to become more involved in the health of the community and partake in more face to face interactions with other organizations that focused on the shared goal of improving child health. Ultimately, all participants shared that the HIA created a better understanding of the community in Colorado Springs and brought together a stakeholder group to discuss what role the hospital could play in the community.

Despite these successes, there were several challenges shared by participants. First, many stakeholders and even one of the hospital staff members who was a formal member of the HIA team were not aware of the impact of the HIA recommendations. They were not aware of how and if the recommendations were being adopted by the hospital and incorporated into its implementation plan. Several stakeholders stated that they received a draft report of the HIA, but did not realize that the process had been completed. In fact, many participants felt that the HIA process ended abruptly with no formal closure; a couple felt that there could have been a final group meeting to “wrap up loose ends” as there was lag time between the last meeting and the distribution of the draft report.

Another challenge expressed by some participants related to the scope of the HIA. The scope of the HIA was refined and focused on school-based health centers based in large part on the perspectives and preferences of the hospital. A couple of participants expressed that although this narrowing of scope resulted in good recommendations that could be supported by the hospital, they would have appreciated a broader assessment of the priority areas and determination of scope with greater stakeholder input.

**Children’s Hospital Colorado Perspectives**

Hospital representatives, some of whom directly engaged as part of the HIA team, expressed enthusiasm for this HIA and stated that using the HIA process to inform implementation planning provided an established and transparent process to make evidence-based recommendations with stakeholder and community input. They noted that many hospitals struggled to use information gathered from the community health needs assessment process to develop implementation plans and activities. Hospital representatives
stated that the HIA process validated the community health needs assessment findings and brought things into alignment with local stakeholders to inform the broader implementation plan. Hospital representatives noted that the HIA allowed the hospital to build new community partnerships and relationships including with those who were not directly involved in the HIA process.

Hospital staff also stated that the implementation of HIA recommendations has been difficult and not yet fully developed due to the lack of staff, a physical structure, experience, and hospital resources for execution. Some hospital representatives expressed concern that working with community stakeholders through the HIA process might create expectations that would be difficult for the hospital to meet. One hospital staff member felt that incorporating hospital employees responsible for developing the implementation plan in the HIA process from the beginning would be beneficial and that setting clear expectations and communication channels early on in the process would be helpful for future HIAs used in this manner.

Children’s Hospital Colorado’s community benefit team also noted that the recommendations that came out of the HIA process were very detailed and specific and not necessarily calibrated well with the IRS community benefit implementation plan requirements. There were initial discussions that recommendations from the HIA might serve as the required implementation plan for the hospital in its entirety. As the HIA process progressed, hospital staff stated that the implementation plan needed to be broader in that it needed to address all of the identified community health priorities and outline more general strategies that would then need to be further refined when specific community benefit investments and activities would be decided on. As a result, recommendations from the HIA were broadened and made less specific when they were incorporated into the hospital’s implementation plan.

**Colorado Child and Adolescent Behavioral Health HIA**

This HIA was policy focused and motivated by Children’s Hospital Colorado’s implementation plan which stated that the hospital would utilize policy levers to address child and adolescent behavioral health – an identified community health priority area. This effort was initiated as a collaboration between the Colorado School of Public Health, Children’s Hospital Colorado’s Child Health Advocacy Institute, the University of Colorado’s Farley Health Policy Center, and the Keystone Policy Center. This HIA was intended to generate recommendations to the state of Colorado on how to implement an anticipated competitive grants program that would be made possible through a proposed tobacco tax ballot initiative. The objective of this proposed competitive grants program was to enhance child and adolescent behavioral health services in the state of Colorado.

**Impacts**

This HIA was not completed as the tobacco tax ballot initiative intended to fund the proposed grants program did not pass during the November 2016 elections. At the time the HIA was in the assessment phase and after consultation with the HIA and the stakeholder team, a collective decision was made to terminate the HIA as the decision point was longer present.

**Stakeholder perspectives**

Interview participants for this HIA included a government affairs specialist and the executive director for advocacy at Children’s Hospital Colorado, a policy director at the Farley Health Policy Center, and a senior policy analyst from the Keystone Policy Center. All but one had previous HIA experience. In addition, all interview participants were in agreement that the HIA’s major objective was to develop recommendations for a grants program targeted at enhancing child and behavioral health services in Colorado that was to
be funded by the proposed tobacco tax ballot initiative.

This HIA was conceptualized as flowing directly from the hospital’s implementation plan which highlighted among other approaches, that child and adolescent behavioral health would be addressed through available policy approaches. As such, the initial scope of the HIA was very broad and was not initially specific to the tobacco tax funded grants program that became the eventual focus of the HIA. The initial broad scope was described both positively and negatively by many participants. The government affairs specialist felt that as collaboration between the different entities was still being built, the HIA seemed to move slowly initially. The Farley policy director agreed with this perspective and felt the scope of the HIA could have been refined earlier in the process.

Ultimately, through an iterative screening and scoping process, the HIA team assessed various potential policy approaches and eventually decided to focus the HIA on the tobacco tax initiative. The rationale was that it was likely the initiative would pass and that there was a real opportunity for evidence-based recommendations to be adopted in how the resulting program would be administered. In addition, the campaign director for the tobacco tax initiative was also an HIA team member. The broader HIA team viewed this involvement as increasing the likelihood that HIA recommendations would be adopted. Despite this perception and consensus to focus on the tobacco tax initiative, all interview participants shared that the HIA was inherently challenging, given that the outcome of the ballot initiative – that would fund and create the grants program – was uncertain.

Interview participants stated that having an HIA team member who was well integrated into the tobacco tax campaign was essential to the process. It was also noted that this team member had the relationships with the key players statewide given her professional background and involvement in the tobacco tax initiative. This resulted in a stakeholder engagement process that members of the HIA team viewed as including most, if not all, of the politically influential organizations that are active in child and adolescent behavioral health in Colorado. These groups included: the state health department, major state foundations, and representatives from the governor’s office.

However, the campaign director and HIA team member stated that there was initial skepticism among stakeholders around the authenticity of the HIA process and that some foundations wanted to complete this process separately and on their own. Overall, the political landscape along with relationships among stakeholders involved in the tobacco tax initiative and administering agencies were expressed as challenging for her to balance.

All interview participants stated that if the tobacco tax initiative had passed, the recommendations from the HIA would have had an excellent chance of being adopted. Furthermore, all participants agreed that the right stakeholders were at the table and engaged in the HIA process. The ultimate failure of the tobacco tax initiative during the November 2016 election effectively made the HIA irrelevant. After prolonged discussions, the HIA team eventually made a decision to terminate the process.

Children’s Hospital Colorado Perspectives

Leadership and staff at Children’s Hospital Colorado, who were directly involved as part of the HIA team, stated that they had high expectations for this HIA. They saw this opportunity as a proof of concept for the use of HIAs, as a tool that the hospital could use in the future to make recommendations and inform policy as part of the organization’s community benefit portfolio. They also stated that this HIA was a test for the hospital to take a more proactive role in policy engagement, as opposed to a more reactive stance that the hospital has adopted in the past. They also stated that they viewed this HIA as being very well aligned with the hospital’s CHNA priority areas and implementation
plan strategies. The defeat of the tobacco tax initiative was described by hospital representatives as unfortunate, but they echoed the opinions of other stakeholders and stated that in their opinion the recommendations that would have come out of the HIA process would have had a good chance of being adopted if the initiative had passed.

Hospital representatives also stated that this HIA in particular gave them a greater appreciation for what was involved in conducting an HIA and the potential for the process in the future. The hospital’s government affairs specialist stated that while he still viewed HIAs as a useful tool to make policy recommendations, he also now better understood how time and resource-intensive the process is. He noted that for much of the policy work that the hospital engages in an HIA is more than is necessary. He went on to state that an HIA would be most useful to make policy recommendations when there was (1) a need for more rigorous assessment of scientific evidence and data and/or (2) the need for a very systematic and structured stakeholder engagement process to build consensus among diverse participants.

Discussion
This pilot, the three HIAs that were conducted in collaboration with Children’s Hospital Colorado as part of the organization’s community benefit activities, has highlighted the potential, limitations, and opportunities for improvement in the ongoing use of HIAs within nonprofit hospital community benefit. There is a clear need for processes and tools to generate evidence-based recommendations to guide hospital community benefit activities in various ways.

The focus of this work was to explore the use of HIAs within hospital community benefit. In many ways the lessons learned from previous HIA practice and evaluations were consistent and apply to our experience such as the importance of authentic stakeholder engagement and the challenges of timing and working on legislation (Dannenberg, 2016). In other ways, the community benefit context created unique challenges and considerations.

Our experience reinforces the potential for HIAs to be used as a tool within hospital community benefit in at least two ways, (1) embedded within nonprofit hospitals’ formal community benefit assessment and planning activities and (2) to generate evidence-based policy and program recommendations to address identified community health priority areas.

Our experience also highlights several issues that need to be addressed in order to further advance the use of HIA within hospital community benefit activities including: use of HIA on explicit health issues, hospital capacity for HIA, potentially broadening the scope of HIA recommendations, and the use of HIA to generate recommendations from broad priority areas.

Nonprofit hospital community benefit activities have an explicit health focus and the HIA field has historically conceptualized the use of the tool as most beneficial when used on topics and sectors where there is typically not an explicit health focus (The Pew Charitable Trusts, 2016). The rationale for this is that in these areas, there are important health implications that are not typically factored into decision making and HIAs can provide an avenue to include important health considerations that would not otherwise be included. This is true, but HIAs can still provide significant benefits to important decisions in health explicit areas. All of the HIAs that we engaged in for this pilot were on health focused topics. The systematic HIA process provided structure that resulted in recommendations developed based on more methodical and rational incorporation of scientific evidence and stakeholder perspectives than if an HIA was not conducted. In addition, use of HIAs on health explicit topics could help to more systematically incorporate certain criteria that go beyond the total health impacts such as equity of anticipated impacts.

Our pilot also highlights the need for capacity build-
ing to conduct HIAs if there is additional growth in the use and institutionalization of HIAs within hospital community benefit. This could take the form of training and capacity building among hospital staff involved with community benefit. The technical needs of hospitals could also be served by outside consultants or via collaborations with health departments or other institutions with HIA knowledge and expertise. Given the potential for hospital community benefits to serve as a mechanism for enhancing hospital and public health collaboration, the potential use of HIAs collaboratively between hospitals and health departments could serve the technical needs of hospitals and help build collaborations in population health efforts between hospitals and health departments (Abbott, 2011).

In our pilot, we found that the detailed and specific recommendations that were generated by the HIA process was not always well calibrated with the needs of community benefit planning activities such as IRS required implementation plans. In our experience, Children’s Hospital Colorado took the recommendations from the HIAs we conducted in Colorado Springs, CO and broadened them to be incorporated into the hospital’s formal implementation plan in the region. Despite this, Children’s Hospital Colorado expressed enthusiasm for the HIA process and expressed that there was clear value in using HIAs in this way. Specific and actionable recommendations are considered best practice in HIA and are a great strength of the process but there might be utility in adapting the HIA process to generate broader recommendations for use by hospitals in their community benefit planning activities. This is an area where future research and practice innovation is needed.

All of the HIAs used in this pilot generated recommendations from broad priority areas and were not based on an already existing program or policy proposal. Traditionally, HIAs have been used to generate health maximizing recommendations when an existing proposal has already been put forward (The Pew Charitable Trusts, 2016). Existing practice already has precedents for the use of HIA when there is not an existing proposal in place, but based on our pilot efforts, HIAs used in this manner hold the most promise for use by nonprofit hospitals as part of their community benefit activities given the need to address broad community health priorities. This does raise questions about adherence to best practices and whether or not these types of changes would make the process different enough to no longer qualify as an HIA.

**Limitations**

This pilot and the corresponding case studies included only three HIAs conducted in collaboration with one hospital. The stakeholders we interviewed were only a subset of all stakeholders involved in each HIA and there could have been different perspectives that we did not capture. What we learned from this pilot and the implications are related to context and may not be generalizable to other nonprofit hospitals with different settings and circumstances.

**Conclusion**

HIAs or HIA-like processes can potentially help meet the need for established, evidence-based, and stakeholder responsive tools and processes to be used within nonprofit hospital community benefit activities. In meeting this need, the nonprofit hospital community benefit area could potentially serve as a major institutional home for the practice of HIA. There is a need for additional research and practice innovation to further explore and refine the use of HIA and/or HIA-like processes within nonprofit hospital community benefit activities.
References


