OPTIMIZING YOUR HEALTH IMPACT ASSESSMENT (HIA) EXPERIENCE
HIA Handbook for Practitioners

Current decision

Potential for health effects

Vulnerable populations

Adequate time and resources

Interested stakeholders

HIA results considered by decision-makers

New information

MARCH 2017

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OPTIMIZING YOUR HEALTH IMPACT ASSESSMENT (HIA) EXPERIENCE
HIA Handbook for Practitioners

MARCH 2017

Authors

Tatiana Lin, M.A.

Carlie Houchen, M.P.H.

Sarah Hartsig, M.S.

Sheena Smith, M.P.P.

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Handbook Organization

This section explains the need for this resource and how it can be used by different parties. The *Handbook* includes six sections based on the steps of HIAs. Each section describes key challenges that HIA practitioners experience during the various HIA steps and highlights suggestions for addressing these challenges. The potential solutions to these challenges are presented through examples from the HIA field. The final section, *Bridging the Fields*, introduces readers to crosswalks between HIAs and other public health tools, including quality improvement, community health (needs) assessments and foundational public health services.

Why is this Handbook Needed?

During the last decade, the health impact assessment field in the United States and abroad has experienced substantial growth. Over the last seven years (between 2009 and 2016), the number of HIAs completed in the United States increased from 62 to 393.[1] As the practice continues to expand and mature, HIA practitioners will need to evolve their approaches to ensure that HIA efforts are more efficient, cost-effective and impactful. The solutions and strategies for reaching these goals could be largely derived from the practical experiences within the HIA field.

Although HIAs are conducted according to a general HIA framework, their implementation and outcomes vary based upon the local environment, participating stakeholders and existing policies. Practical experiences and lessons learned are instrumental in assisting HIA practitioners in operationalizing practice standards and avoiding pitfalls that could jeopardize the success of their HIAs. The majority of existing resources include experiences from the field in the form of case studies, stories and quotes. Therefore, there became a need to supplement this information and produce a resource that would further expand upon practitioner perspectives, experiences and approaches.

Several additional tools and processes have been developed to help communities across the country transform and improve their health. Hospitals and local and state health departments have been engaged in community health assessments (CHA) and community health improvement planning (CHIP). Nationally, states are exploring the feasibility of defining and providing foundational public health services— a suite of skills, programs/activities that must be available in state/local health departments system-wide.[2] As of 2016, eight states have identified models for providing foundational public health services.[3]

Many public health organizations have also been undertaking quality improvement (QI) efforts in order to improve their operations and programs to achieve measurable results. All of these efforts, including HIAs, share a common goal of improving community health. However, these processes are usually implemented separately from conducting health impact assessments. HIAs can play an important role in these efforts to improve community health, something which this *Handbook* will discuss.

Purpose of the Document and Audience

The purpose of this document is to serve as a resource of practical ideas of how to:

- Overcome challenges during the HIA process; and

- Incorporate HIA or its steps in community health assessments (CHA), quality improvement (QI) and foundational public health services.

This document is designed for health impact assessment and health in all policies (HiAP) practitioners, as well as stakeholders who are engaged in improving and strengthening their public health system and services, applying for national public health accreditation, conducting CHA and/or building QI culture within their organizations.

Methods

Development of Challenges and Solutions

The *Handbook* has been developed by the Kansas Health Institute HIA team, which has more than seven years of experience conducting health impact assessments, as well as delivering training, mentoring and providing technical assistance to HIA practitioners in Kansas and across the country. During this period, HIA team members were collecting and recording challenges and lessons learned based on their own experience and experiences of other practitioners. In order to develop a comprehensive list of challenges that practitioners might encounter during the steps of an HIA process and identify practical solutions for addressing them, the HIA team:

1. Reviewed a list of challenges and solutions collected over the years by the KHI HIA team members and identified additional issues through a brainstorming activity;

2. Conducted a survey to collect HIA practitioners' feedback on the identified challenges and solutions; and

3. Used findings from the survey to prioritize at least two challenges to discuss for each HIA step.

The survey provided valuable insights into what challenges practitioners experience and how they suggest to address them. The HIA team conducted the survey using Qualtrics, a web-based survey software. The survey included a mix of open- and close-ended questions and was structured by each HIA step. It was distributed via email to: 1) members of the Society of Practitioners of Health Impact Assessment (SOPHIA); 2) members of organizations involved in conducting or supporting the HIA field in the United States and abroad (e.g., Health Impact Partners; Human Impact Partners; Habitat Consulting; Georgia Health Policy Center; Centre for Health Equity Training, Research, and Evaluation, University of New South Wales Australia).

Overall, 31 people responded to the survey. The respondents were asked to review each group of challenges and to:

1. Select five challenges that they or other practitioners experience the most during each HIA step;

2. Provide suggestions for addressing the five challenges they selected for each step; and

3. Suggest any other challenges and potential solutions they or other practitioners have experienced that are not included on the list.

Description of Existing Resources

In order to identify existing resources that could be used to address challenges described in this *Handbook*, the KHI HIA team reviewed the websites of several organizations that have been leading HIA efforts at the local and national levels. This review included the websites of Health Impact Project, Society of Practitioners of Health Impact Assessment (SOPHIA), Robert Wood Johnson Foundation, University of California Los Angeles HIA Clearinghouse, Association of State and Territorial Health Officials, National Association of State and Territorial Health Officials, and Human Impact Partners.

Next, Google Scholar searches were performed to capture other HIA-relevant resources. Searches were conducted using the terms "health impact assessments," "health impact assessment guide," "health impact assessment resources," "health impact assessment handbook," and "health impact assessment toolkit." Resources were included only as they had specific content that contributed to the discussion of the featured HIA scenarios. The materials also had to be published between 2006 and 2016, and primarily focused on the HIA and HiAP practice in the United States.

The final list of resources was described in a table for each challenge. Some materials were referenced multiple times throughout the HIA Resources Table, as their content was applicable to more than one challenge.

Crosswalks

In addition, the team developed several crosswalks (pages 80–93) that describe approaches for integrating HIA into QI, CHA and foundational public health services. The development of crosswalks was informed by work conducted by the National Association of County and City Health Officials (NACCHO)[4][5][6] and expert opinion provided by several public health professionals.

Examples of HIAs

To demonstrate how challenges and solutions have been approached during the HIA process, the *Handbook* includes examples from several HIAs. The majority of these HIAs have been conducted by KHI, and were included because the authors of this *Handbook* had firsthand experience addressing these challenges during the HIA process. However, the *Handbook* also includes several examples of HIAs that have been carried out by other organizations. These examples were shared through the survey conducted by the KHI HIA team. A brief overview of all HIAs featured in this *Handbook* is provided beginning on page 5.

How Can This Handbook be Used?

This *Handbook* can be used by HIA practitioners to:

- Address existing challenges;

- Anticipate possible challenges and develop strategies for mitigating them;

- Learn about existing HIA and HiAP resources and how they can be used to address challenges; and

- Inform HIA curriculum for training and workshops.

This *Handbook* can be used by public health and health care practitioners to:

- Identify opportunities for integrating HIA steps and tools into QI, CHA and/or Foundational Public Health Services.

- Identify opportunities for conducting HIAs within CHA or foundational public health services.[7]

Limitations

There are several limitations that should be considered when using this *Handbook*. Although the authors of this resource tried to create a comprehensive list of challenges and solutions, some potential issues might not have been identified or included in the *Handbook*. Additionally, the proposed solutions have been developed based on the experience of the authors of this *Handbook* and informed by perspectives of the survey respondents. Thus, these practical tips should not be viewed as evidence-based practices (e.g., Minimum Elements and Practice Standards for Health Impact Assessment)[8] but rather as potential ideas for addressing various challenges.

While the summary of existing resources describes more than 45 relevant documents, this list is not comprehensive. Available resources that do not directly address challenges or solutions listed in the *Handbook* were excluded from the review. In addition, resources such as webinars and videos were not referenced in this *Handbook*.

Finally, the crosswalks (page 80–93) are subject to several limitations. Their development was primarily informed by the expertise of the *Handbook's* authors and a few public health experts, and might not fully represent broader perspectives of the fields. In addition, the crosswalks provide a high-level picture of connections between HIA steps and tools (e.g., QI, CHA, foundational areas and foundational capabilities). However, the crosswalks do not include a detailed description regarding how each of the HIA steps can be used to inform these tools. Thus, the use of these crosswalks might require a deeper understanding of each HIA step. The authors of this *Handbook* hope to develop additional resources to address this limitation in the future.

Potential Health Effects of Casino Development in Southeast Kansas (completed)[9]

Organization: Kansas Health Institute
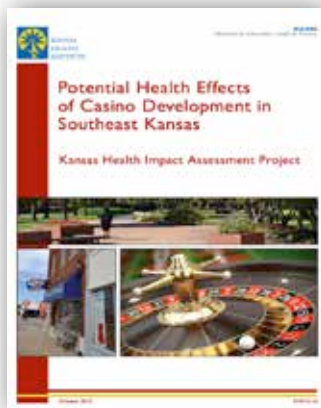
During the 2012 Kansas legislative session, state legislators considered three bills aimed at increasing the likelihood of a casino being built in Crawford County or Cherokee County in Southeast Kansas. KHI, in partnership with the University of Kansas School of Medicine–Wichita, launched the state's first health impact assessment in January 2012 to identify the potential health impacts of developing a casino in Southeast Kansas.

The HIA found that potential positive health effects of casino development are primarily related to creation of casino, leisure and hospitality sector jobs, which provide tangible benefits such as income and insurance, and intangible benefits such as sense of meaning. Employment, insurance and income all have strong, positive links to health.

Potential negative health impacts primarily would result from increased access to gambling. In particular, the number of pathological and problem gamblers could increase. Adverse health consequences of pathological gambling include nicotine dependence, substance use, depression and insomnia. Additionally, pathological gambling has been associated with higher rates of child abuse and neglect, domestic violence, unsafe sex and divorce.

In order to maximize the potential positive health impacts associated with this policy and minimize the potential negative health outcomes, the HIA offered a number of evidence-based recommendations including providing workforce wellness services, especially for late-shift employees, and eliminating smoking in and around the casino.

Potential Health Effects of Proposed Public Transit Concepts in Wichita (completed)[10]

Organization: Kansas Health Institute
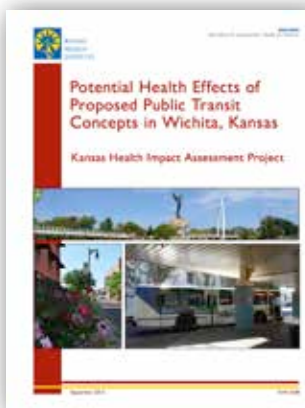
As Wichita policymakers considered options for improving the city's transit system, the HIA examined how those changes might affect the health and well-being of area residents. This HIA was conducted by KHI in collaboration with the University of Kansas School of Medicine—Wichita and the Hugo Wall School of Urban and Public Affairs at Wichita State University.

The HIA details how each of the proposed public transit concepts could affect the health of Wichita residents. Specifically, the HIA explored transit-related factors that influence health, including air quality, injury, exposure to secondhand smoke, access to employment, health care, food sources and educational and recreational resources.

In order to maximize the potential positive health impacts associated with this policy and minimize the potential negative health outcomes, the HIA offered a number of evidence-based recommendations, including prohibiting smoking at transit stops, increasing the bag limit to allow for more convenient shopping with public transit, developing a universal pass for students and locating bus stops near health care offices and specialty clinics.

Potential Health Effects of Expanding Liquor Licenses to Grocery and Convenience Stores (completed)[11]

Organization: Kansas Health Institute

This HIA informed state legislation on changes to the Kansas Liquor Control Act (introduced in 2014), that proposed to allow grocery and convenience stores to hold retail liquor licenses. The Kansas Liquor Control Act, which has been in place for more than 60 years, allows only liquor stores to sell spirits, wine and full-strength beer (lower-strength beer is currently sold at grocery and convenience stores). The HIA assessed how changes in the law could have both positive and negative health effects. The HIA found that allowing grocery and convenience stores to sell alcoholic liquor may result in a slight increase in consumption for the general population and larger increase for youth. The projected changes in consumption for youth may result in an increase in alcohol-related traffic accidents and sexually transmitted diseases.

The HIA provided several evidence-based recommendations to enhance the legislation's potential positive health impacts and minimize the potential negative health outcomes. For example, recommendations included tracking and monitoring data on the density of Kansas off-premise alcohol outlets, refraining from displaying alcohol products at the entrance of the store or near products likely to be purchased by youth, and increasing sobriety checkpoints in areas where there is an increased density of retail alcohol outlets, among others.

Potential Health Effects of Changes to the Kansas Corporate Farming Law (completed)[12]

Organization: Kansas Health Institute

This HIA was conducted to inform Kansas legislators and stakeholders about the potential positive and negative health effects that could result from changes to the Kansas Corporate Farming Law. During the 2013 Kansas Legislative Session, two bills were introduced to amend definitions relating to agricultural corporations and to repeal certain agricultural corporation statutes. These bills are likely to be re-introduced for consideration in the future. If passed, they could result in multiple impacts.

The HIA focused primarily on assessing the potential impacts that could result from allowing any agricultural business entity to establish and conduct agricultural business anywhere in the state. Specifically, it could increase the number of large-scale swine and dairy operations in Kansas. Key findings from the study showed that an increase in the number of swine and dairy operations in Kansas may result in some job increases, but no change in county-level rates of health insurance coverage, property values or school funding. It could also result in declining property values for properties located downwind and close to large livestock operations, increased waste production and volume of antibiotics used in animals.

To mitigate the potential negative health effects of the proposed changes to the law, the assessment included recommendations for policymakers, relevant agencies and livestock operations to consider. These included increasing the minimum separation distance between habitable structures and dairy and swine operations, compensating property owners within close proximity to swine and dairy operations, and restricting subtherapeutic antibiotic use in animals, among others.

Potential Health Effects of Legalizing Medical Marijuana in Kansas (completed)[13]

Organization: Kansas Health Institute

KHI conducted this HIA to inform Kansas legislators and stakeholders about the potential positive and negative health effects that could result from legalization of medical marijuana. During the 2015 legislative session, Kansas lawmakers considered three bills to legalize medical marijuana. Senate Bill 9 (and its House version, HB 2011) was proposed to legalize multiple forms of medical marijuana for various debilitating medical conditions such as cancer, glaucoma, hepatitis C and Crohn's disease, among others. House Bill 2282 included more restrictive provisions that only allowed use of medical marijuana for seizure-related conditions, such as epilepsy.

This study analyzed six factors related to the legalization of medical marijuana in Kansas, including access to marijuana, consumption of marijuana, crime, driving under the influence of marijuana, accidental ingestion of marijuana, and impact on vulnerable populations.

Key findings from the study showed that the legalization of medical marijuana in Kansas may result in increased access to marijuana for certain groups, specifically for individuals with qualifying medical conditions. The study found that there would be little to no impact on consumption of marijuana among the general population. However, there may be some increase in marijuana consumption among at-risk youth. The study also found a possible increase in driving under the influence of marijuana and related traffic accidents and an increase in accidental exposure, specifically among young children.

To mitigate the potential negative health effects of the proposed legislation to legalize medical marijuana, the assessment included recommendations for policymakers and relevant agencies to consider. These included enacting regulations for child-proof packaging in order to prevent accidental ingestion of marijuana, discouraging adults from using marijuana in the presence of children because of the influence of role modeling by adults on child and adolescent behavior, educating the public on marijuana-related impairment, including riding with impaired drivers, and identifying evidence-based practices that keep health care providers accountable to the recommendations they make for medical marijuana, such as Kansas Tracking and Reporting of Controlled Substances (K-TRACS).

Cannery District Redevelopment Health Impact Assessment (in-progress)[14]

Organization: The Eau Claire City-County Health Department

In 2015, the Eau Claire City-County Health Department, in Eau Claire, Wisconsin, along with several community and academic partners, received a two-year grant from the Healthier Wisconsin Partnership Program. The goal of this research grant is to understand how to best incorporate health in the process for developing and planning the spaces where we live, work and play. As part of this project, the partnership is piloting the use of health impact assessment as a tool to evaluate potential positive and negative health impacts resulting from redevelopment of the Cannery District in Eau Claire.

The HIA is evaluating impacts to social cohesion, safety and accessibility as a result of changes to three focus areas: parks and trails, neighborhood design and housing. The HIA will be released in summer of 2017.

Negotiating Healthy Trade in Australia: Health Impact Assessment of the Proposed Trans-Pacific Partnership Agreement (completed)[15]

Organization: Centre for Health Equity Training, Research and Evaluation (CHETRE), UNSW Australia

In 2014, the Australian government was participating in ongoing negotiations for the Trans-Pacific Partnership (TPP), a free-trade agreement involving 12 Pacific-rim countries. The Centre for Health Equity Training, Research and Evaluation completed a health impact assessment to examine potential health effects of the TPP on the Australian community, based on publicly available documents. The HIA focused on four areas of potential impact:

- Cost of medicines;
- Tobacco control policies;
- Alcohol control policies; and
- Food labeling.

Using the existing evidence base, principally literature and population demographics, the HIA produced the following findings.

Medicine: The TPP risks increasing the cost of the Pharmaceutical Benefits Scheme (PBS), which is likely to flow to the Australian public in terms of increased co-payments for medicine. This may result in medical non-adherence for prescription use and prioritizing health care costs over other necessities (food, housing, etc.).

Tobacco: The TPP provisions pose risks to the ability of government to regulate and restrict tobacco advertising. This could potentially lead to increased tobacco use and smoking prevalence, resulting in tobacco related health harms across the community.

Alcohol: Some provisions proposed for the TPP have the potential to limit regulation of alcohol availability and alcohol marketing, and restrict alcohol control measures such as pregnancy warning labels. This may lead to alcohol-related disorders, worsening metal health and social disruption.

Food: There is the potential for TPP provisions to restrict the ability of government to implement new food labeling policies and limiting the reductions in the consumption of unhealthy foods. This is associated with rates of overweight/obesity and other related health outcomes.

The HIA offered several recommendations to the Australian government to modify trade provisions in order to mitigate the identified health impacts.

SE 122nd Avenue Planning Study Health Impact Assessment (completed)[16]

Organization: Oregon Public Health Institute

In 2010, Oregon Public Health Institute partnered with Portland Bureau of Planning and Sustainability (BPS) and many other stakeholders to conduct a health impact assessment of the SE 122nd Avenue Planning Study, a neighborhood planning study led by BPS. This HIA had several purposes, including: 1) evaluate the health impacts of the study's specific recommendations; 2) offer additional recommendations that, if implemented, would further improve many of the combined study area's health determinants; 3) address the potential health impacts of this particular type of neighborhood form that is being promoted in Portland and in many other cities throughout the country; and 4) provide an example of how health can be integrated into plans and policies.

In order to meet these goals, the HIA assessed the impacts of the study's recommendations on the following health issues:

- Opportunities for physical activity;

- Opportunities for accessing healthful foods;

- Opportunities for social engagement/ cohesion;

- Bicycle and pedestrian traffic safety; and

- Exposure to outdoor air pollutants.

The HIA produced a set of recommendations, ranging from aspirational goals to specific actions designed to improve community health and health equity while moving the community closer to its broader goals.

An HIA of the 2015 Qualified Allocation Plan for Low-Income Housing Tax Credits in Georgia (completed)[17]

Organization: Georgia Health Policy Center
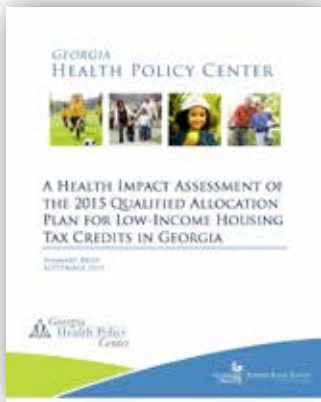
Each year, the Internal Revenue Service allocates housing tax credits to state housing finance agencies, which then award the credits to developers of qualified projects. The state agency must develop a qualified allocation plan (QAP) for disbursing the credits. Georgia Department of Community Affairs (DCA), through their Office of Housing Finance, awards about $22 million in Low-Income Housing Tax Credit (LIHTC) and state matching tax credits each year, creating around 2,500 new housing units. Thirty-five percent of this funding is reserved for affordable housing in rural parts of the state. This presented the opportunity for an HIA to consider how LIHTC financing could affect community health in ways not currently considered.

The HIA produced the following findings. Overall, affordable housing investments were found to improve health and quality of life, and increase opportunity for Georgia residents. To capitalize on this gain, numerous opportunities were identified through research, analysis and stakeholder input, with suggested alterations to scoring criteria categorized into three major topic areas.

1. The QAP could improve strategies to incentivize connections to healthy communities, particularly through the use of Demographic Cluster data developed by the Georgia Department of Public Health, to provide a more robust characterization of the communities in which LIHTC development is proposed.

2. Encouraging access to educational opportunities through more nuanced incentives for locating quality schools nearby would address this critical health determinant. Partnering with the Georgia Department of Education to use its College and Career Ready Performance Index as a new metric for school quality is a first step in this direction.

3. Multiple opportunities were identified for promoting healthy design and operation of affordable housing based on existing best practices. The HIA process has provided DCA with a menu of actions that could be used to improve health in communities across the state.

Healthier Nutrition Standards Benefit Kids: A health impact assessment of the Child and Adult Care Food Program's (CACFP) updated rules for meals and snacks (in-progress)

Organization: The Kids' Safe and Healthful Foods Project—a collaboration of The Pew Charitable Trusts and the Robert Wood Johnson Foundation

As part of the Healthy, Hunger-Free Kids Act of 2010, Congress directed the USDA to review and update CACFP nutrition standards to align more closely with the 2010 Dietary Guidelines for Americans.[18] In early 2015, based on science-based recommendations from the National Academies of Sciences, Engineering, and Medicine's Health and Medicine Division (formerly the Institute of Medicine and referred to below as National Academies), the USDA proposed several adjustments to CACFP standards to better meet children's nutritional needs without increasing costs.

Shortly after these updates were proposed, the Kids' Safe and Healthful Foods Project—a collaboration of The Pew Charitable Trusts and the Robert Wood Johnson Foundation—launched a health impact assessment to analyze how the proposed CACFP rule—the first significant update to the program's standards in nearly 50 years—might affect the overall health of children (ages birth to five years) who are served by CACFP in centers and family child care homes.[19]

The HIA studied several issues including the proposed regulation's potential effects on the nutritional quality of the foods served in CACFP and on children's health; children, early care and education provider, and parent attitudes toward healthy foods; and providers' costs and participation.

The HIA will be released in the summer of 2017.

Notes:

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Overview of the Screening Step

Screening is the first step of an HIA process. It determines whether an HIA is feasible, timely and would add value to the decision-making process.

According to several national resources,[20][21][22] the following elements should be evaluated during the *Screening* step:

- The potential for the decision to result in substantial health effects;

- The potential for unequally distributed impacts;

- Stakeholder interest/concerns about a decision's health effects;

- The potential for a decision to add new information that would be useful to decision-makers;

- The potential for the HIA to result in timely changes to a policy, plan, program or project; and

- The availability of resources, time and technical expertise.

Figure 1 describes key elements that need to be considered during the *Screening* step of an HIA.

Figure 1. **Key Elements of the Screening Step of a Health Impact Assessment (HIA)**
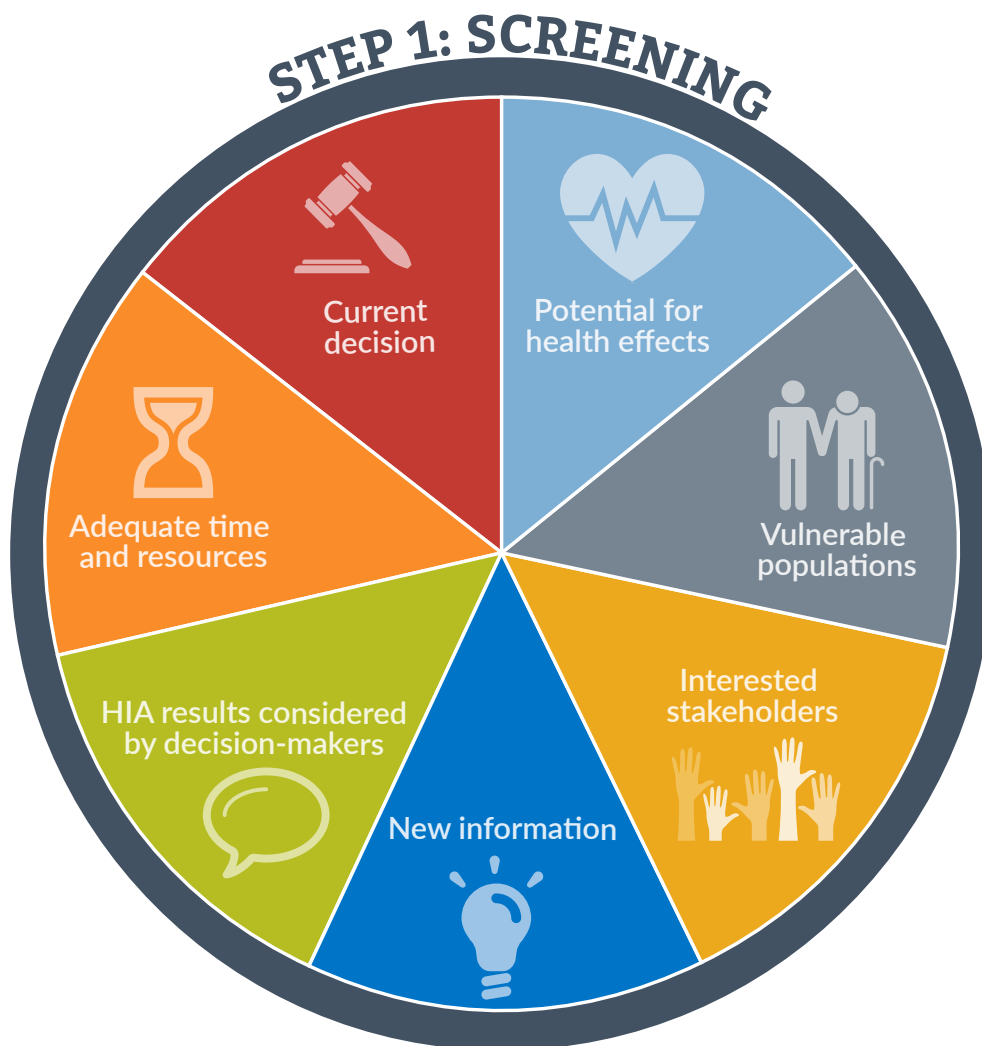
Source: KHI HIA Handbook for Practitioners, 2017.

Challenge 1. *The decision's scope and timeline are unclear and/or there is a change in the decision's scope or timeline.*

What Would an HIA Practitioner Do?

A. Work with decision-makers and relevant stakeholders to determine the scope and timeline of a decision.

B. Be prepared to make changes to the HIA—things change, and HIAs should be adaptable.

C. Take a staged approach:
1. Complete a desktop assessment to ensure availability of information if the decision-making process began quicker than expected.
2. Expand the HIA scope if the decision-making timeline is extended.

D. Determine the key points of the decision that are most likely to be included (even if they are not very specific at that point) to begin work on; continue to refine the HIA scope as the decision's scope or timeline are revised.

Overview of the Challenge

To select a decision that might benefit from an HIA, it is essential to understand its scope and timeline. Understanding the scope of the decision could also help determine if it could result in significant health effects and if the HIA would add value to the process. However, many proposed projects, plans or policies might initially emerge with a vague scope and unclear timeline. In such cases, it might be difficult to identify the specific elements of the decision that HIA can inform. Proceeding with an HIA without a clear understanding of the scope of the decision could lead to several issues.

- **Unclear scope:** The selected decision might not result in significant health effects. As a result, the HIA's future findings might not add value to the decision-making process. If the scope of a decision expands after the HIA is complete, the HIA might underestimate health effects.

- **Unclear timeline:** The HIA cannot be completed before the decision is made.

In general, HIAs are more effective if their findings and recommendations are communicated before decisions are made. A longer timeline than anticipated might increase the likelihood that an HIA's findings are considered, but too long of a gap between the HIA and the decision could render findings untimely, particularly if other environmental factors change.

> *Timeline and scope always must be clearly defined during the screening step of the HIA process and refined throughout the process.*
>
> *–Survey Respondent*

SOLUTION A: Work with decision-makers and relevant stakeholders to determine the scope and timeline of a decision.

Decision-makers and stakeholders can provide valuable insights about the plan/project/policy's scope and timeline. The type of decision-maker and stakeholder depends upon the level of the decision being made. If you are working on a state-level HIA, engage with legislators, lobbyists, revisers of statutes, legislative staff and state agency leadership to identify the most current timeline and scope. If you are working on a local-level HIA, engage with county commissioners, city council members, local organizations and agencies to keep up-to-date on the decision's timeline and scope.

> ### 💡 SOLUTION A EXAMPLE
> **Potential Health Effects of Expanding Liquor Licenses to Grocery and Convenience Stores**[23]
> *Organization: Kansas Health Institute*
>
> In 2014, House Bill 2556 was introduced to allow convenience and grocery stores to sell wine, spirits and regular-strength beer in Kansas. During the hearings, several amendments to the bill were proposed. The amendments were extensively debated but not immediately incorporated into the bill. The KHI team was hesitant to move forward with an HIA on this policy given potential changes to the scope of the policy under consideration. In order to clarify and confirm the amendments, the HIA team contacted several groups that were actively engaged in advocating for or against this bill. These groups were able to provide the most recent information about the bill and also shared their predictions about the final scope of the bill. As a result, the team was able to determine that the proposed policy might have significant health effects and identify specific provisions for the HIA to focus on.

> " *Use time developing an understanding of the policy process as an opportunity to build relationships with stakeholders.* "
>
> –Jimmy Dills, Research Associate II, Georgia Health Policy Center

SOLUTION B: Be prepared to make changes to the HIA—things change and HIAs should be adaptable.

In order to exercise effective decision-making, policymakers need access to evidence-based information applicable to their community, city and/or state. One of the key strengths of an HIA is that it provides information that is relevant and specific to a decision under consideration. However, the changing nature of a decision can pose a challenge to fully align the scope of an HIA with the decision that is taking place. For example, collecting primary data and analyzing it with a shorter-than-anticipated timeline might be difficult to complete. The magnitude of this challenge would depend upon the timing of the scope change.

If the decision's scope changes when the HIA is in the *Screening* or *Scoping* steps, HIA practitioners can incorporate these changes relatively easily. For example, the HIA team can update the list of identified impacts that may result from the decision or modify the planned assessment approaches. However, changes in the decision's scope during the *Assessment* or *Reporting* step can pose substantial challenges due to time constraints. A practitioner would have to assess the feasibility of expanding or adjusting the HIA's scope during the later phases of the HIA. In any case, HIA practitioners should always be prepared to make changes and align the HIA scope with the decision in order to make the findings and recommendations meaningful for decision-makers.

> **Be technical and tactical when conducting HIA. Adapt the process to fit the context.**
>
> *– Fiona Haigh, M.P.H., L.L.B., BsocSci, Research Fellow, Centre for Health Equity Training, Research and Evaluation*

SOLUTION C: Take a staged approach: complete a desktop assessment, then expand the HIA scope.

When the timeline is unclear, HIA practitioners can consider taking a staged approach. This decision should be made during the *Screening* step. For example, the HIA team can first complete a desktop assessment to ensure the availability of the most pertinent information if the decision was announced quickly. However, if the decision is postponed and the HIA team has more time, it can expand its assessment efforts by conducting a more robust stakeholder engagement process and analyzing secondary data.[24]

> **A staged approach can help save time and resources, while adding value to the decision-making process.**
>
> *– Tatiana Lin, Senior Analyst & Stategy Team Leader, Kansas Health Institute*

During the HIA of the Trans-Pacific Partnership Agreement, the HIA team wasn't able to determine when the final agreement would be released, as all negotiations were conducted privately. The Centre therefore determined that a staged assessment approach would enable the HIA team to react to shifting deadlines. The Centre did this by conducting a desktop analysis first, in which they gathered existing evidence for impact pathways and by limiting the scope. When the HIA team learned that the negotiators were meeting in early 2014, and were potentially concluding their negotiations, the Centre was able to consolidate the evidence it had gathered into a policy brief that could be used to inform the proceedings. When the negotiations did not conclude at that time, the HIA team proceeded with the next stage, which included stakeholder consultation and broader consideration of health impacts. The HIA team was then able to produce the final HIA report which was released in February 2015, prior to the conclusion of negotiations.

SOLUTION D: Determine the key points of the decision that are most likely to be included and begin work on those points.

Time, resources, or the desire to have health information before a plan is finalized may dictate that the HIA move forward without a complete plan of all the issues that will be assessed. Often—even before a policy, plan or project is finalized—there may be components of the plan that are certain to be included (e.g., a new transit station will be built, but there are multiple locations being considered).

This information may be determined during the *Screening* step of the HIA and through close relationship or collaboration with decision-makers. As HIA practitioners move to the *Scoping* step, an HIA can be used to evaluate portions of a policy or project before all of the details of the plan are formalized. In some cases, HIAs are more useful to decision-makers as an interactive tool that can provide information throughout the process rather than a one-time evaluation. As the HIA provides evidence for some health impacts, the plan may change or solidify, providing the opportunity for additional assessment as additional portions of the project are determined.

SOLUTION D EXAMPLE
Transforming Eau Claire: Designing a Healthy Community (Cannery District HIA)[26]
Organization: Eau Claire, Wisconsin

The Cannery HIA focused on a redevelopment project in the city of Eau Claire, Wisconsin. The development was planned to occur in separate phases. As a result, parks and trails were to be developed in advance of housing and commercial areas. A conceptual plan for the park was drafted a year before the HIA, but during the HIA, the plan became fluid and was discussed at length by city staff. Even though the park plan had not been formalized, the HIA team identified parts of the plan that, based on discussions with city staff, were likely to be included in the final development. As an example, it was clear that a multi-use trail would go through the park. There was also interest in including public art, a children's playground and other features. At this point, the research for the HIA focused on the impacts of parks on physical and mental health, as well as health impacts and recommendations for trails, public art and public park space.

The team similarly identified that there was interest in including mixed-use development and mixed-income housing. Without a specific plan that indicated the number, size, location, or amenities planned for the new mixed-used community, the HIA team provided evidence for how to maximize health benefits and reduce negative health outcomes as related to general mixed-use development and affordable housing, and provided suggestions for features that could increase safety and walkability of a neighborhood.

This arrangement required close collaboration with decision-makers and city staff, including the Redevelopment Authority, Planning department, Parks & Recreation department, and city manager. The team also worked closely with community members to provide neighborhood context for potential health impacts.

HIA Resources Available to Address this Challenge

Several resources were developed by HIA practitioner organizations to address this challenge. The table below highlights resources by author and recommended content. Please click on the *Authors* link to access the original resource when reading the online version of this *Handbook*.

Resource	Authors	Recommended Content
Challenge 1. *The decision's scope and timeline are unclear and/or there is a change in the decision's scope or timeline.*		
Guidance and Best Practices for Stakeholder Participation in Health Impact Assessment[27]	Stakeholder Participation Working Group of the 2010 HIA of the Americas Workshop	**Engage with stakeholders to clarify HIA scope and timeline** — *Guidance and Best Practices for Stakeholder Participation in Health Impact Assessment* (*Appendix A*, page 38) provides a list of stakeholders that might need to be involved in the HIA. The table included in the Appendix describes stakeholders by category, potential contributions and challenges. This list can be used to identify stakeholders that might be able to clarify the scope and timeline of the HIA or work with decision-makers on this issue.
Health in All Policies: A Guide for State and Local Governments[28]	American Public Health Association; Public Health Institute	**Implement Health in All Policies (HiAP) strategies** — If the HIA cannot be performed due to changes in the scope of the decision, Health in All Policies tools could be used to incorporate health considerations. *Health in All Policies: A Guide for State and Local Governments* describes strategies for implementing HiAP efforts across various sectors.
Considerations for the Selection of Appropriate Policies, Plans, or Projects for Analysis using Health Impact Assessment[29]	Human Impact Partners	**Understand the nature of the challenge** — *Considerations for the Selection of Appropriate Policies, Plans, or Projects for Analysis using Health Impact Assessment* discusses the challenge of "unclear scope and timeline" in the context of land-use and legislative decisions. This resource can be used to identify and examine the influences on a proposed plan/project/policy scope and timeline.
A Health Impact Assessment Toolkit: A Handbook to Conducting HIA[30]	Human Impact Partners	**Include a decision maker on the HIA Steering Committee** — *A Health Impact Assessment Toolkit: A Handbook to Conducting HIA* (Section 2.2, page 23) lists specific roles and responsibilities of steering committee members throughout the HIA process. Decision-makers serving on the steering committee can provide insight into the decision timeline or scope.

HIA results considered by decision-makers

Challenge 2. *Decision-makers are not likely to pay attention to the HIA results once the HIA is completed.*

What Would an HIA Practitioner Do?

A. Identify decision-maker priorities and include them in the HIA.

B. Engage with interested decision-makers who can help create opportunities for the consideration of HIA findings and recommendations.

C. Focus your efforts on working with stakeholders that would have an impact on the opinions of the decision-makers.

Overview of the Challenge

HIAs can result in multiple benefits, including increasing community participation in the decision-making process, building momentum around the issue, educating decision-makers on the health impacts of a policy, and creating new partnerships between public health and other sectors. While all of these benefits are meaningful, the most successful and effective HIAs are considered to be those in which the findings and recommendations have been considered and acted upon by decision-makers. Several

HIA experts define HIA success as "one where its findings are considered by decision-makers to inform the development and implementation of a [policy, program or project]." Others have suggested that "success for HIAs should therefore be defined by both their impacts on decisions, and on the environments in which decisions are made."[31] Multiple studies conducted to evaluate the effectiveness of HIAs suggest that the HIA impact on the decision is highly desirable but often is quite challenging to achieve. Inability to achieve this result can diminish the HIA's value, especially in the eyes of the community.

> " *Commitments to making some changes to policy/plans are critical for HIAs to become impactful.*
>
> – Survey Respondent "

SOLUTION A: Identify decision-maker priorities and include them in the HIA.

To increase decision-maker buy-in for future HIA recommendations and findings, it is essential to ensure that the issues assessed during the HIA process are of interest to decision-makers. The HIA team can use several strategies to determine the decision-maker priorities, including: review the decision-maker's voting record; attend public meetings (e.g., legislative hearings, city council meetings) and record questions or comments offered by the decision-maker; schedule a face-to-face meeting; and invite the decision-maker to serve on the HIA steering committee/advisory panel. In addition, engaging with decision-makers allows the HIA team to understand the plan, policy or program at a practical level. Having a practical understanding is critical to the successful design and execution of a health impact assessment. This will result in findings and recommendations that will have the opportunity to be meaningfully considered and implemented to support positive health outcomes and mitigate negative health effects.

SOLUTION A EXAMPLE
An HIA of the 2015 Qualified Allocation Plan for Low-Income Housing Tax Credits in Georgia[32]
Organization: Georgia Health Policy Center

While examining the allocation of Low-Income Housing Tax Credits in Georgia, the HIA team was initially focused on health outcomes and housing as a critical determinant in the interactions with stakeholders and decision-makers.

The team quickly learned that though the housing stakeholders certainly acknowledged these connections to health, it was not enough to move them to change the process. Instead, the HIA team had to shift the focus and framing to what was most important to these stakeholders, which was scoring points under the allocation criteria (the more of which a proposed development gets, the more likely it is to receive funding and be built). The HIA team still focused on what it considered the highest leverage pieces of the policy from a health standpoint, but it shifted the engagement approach to emphasize making health-related allocation criteria points easier to obtain.

For example, the original policy offered points for locating near-high performing schools, but the method for determining performance was a cumbersome process that focused only on standardized test scores and took a long time for developers to complete. The change the HIA team recommended was to use a more streamlined measurement of school quality that included more variables (including test scores) and was easily accessible through a single website.

This reduced the time it took for developers to apply for these points, and it led to a three-fold increase in the number of applications seeking the education-related points. The HIA team increased attention on a critical health determinant for lower-income families while also working on what was important to the decision-makers.

SOLUTION B: Engage with interested decision-makers who can help create opportunities for the consideration of HIA findings and recommendations.

Cultivating HIA champions among decision-makers is another way to create opportunities for the consideration of HIA findings and recommendations. Champions are influential policymakers, public officials or stakeholders interested in the decision under consideration and are willing to help engage their peers in conversations around the HIA. The more influential a champion is in the decision-making process, the more important their support can be to sustain engagement and develop a sense for HIA findings and recommendations. Local communities can be instrumental in identifying potential champions and helping to secure their buy-in. HIA practitioners should ensure that champions are part of the planning processes, have an opportunity to inform the HIA scope, and receive timely information.

SOLUTION B EXAMPLE
HIA: Potential Health Effects of Proposed Public Transit Concepts in Wichita, Kansas[33]
Organization: Kansas Health Institute

During the *Screening* step of the Wichita Transit HIA, the KHI team identified that not all Wichita local elected officials were interested in the health impact assessment and its future results. In order to ensure that the HIA's future findings would be reviewed and considered, KHI decided to engage with decision-makers who were especially invested in improving local transit system. Two Wichita City Council members agreed to serve on the Wichita Transit Advisory Panel and help KHI create opportunities for sharing the HIA results with other local elected officials.

As a result, KHI was able to secure an in-person meeting with each city council member and present HIA results to the full city council during one of the public hearings. The HIA's results were discussed by decision-makers, and two low-cost HIA recommendations were implemented. The first was an increase in the limit of bags passengers could carry on the transit vehicles, which allowed transit-dependent populations to more easily utilize the transit system for grocery trips. The second was to limit smoking at bus stops in order to improve air quality for adults and children waiting for the bus.

Janet Miller
City Council
District 6
Wichita, Kansas

shares her experience with HIA at the local level

" *As policymakers, you're always hoping you're doing something that will help, but if you do it in a vacuum—and only on hunches and anecdotal information—those are not our proudest moments.* "

Q&A based on the HIA: *Potential Health Effects of Proposed Public Transit Concepts in Wichita, Kansas*

Source: KHI HIA Policymaker Profile, 2015.

SOLUTION C: Focus your efforts on working with stakeholders who would have an impact on the opinions of the decision-makers.

One of the key considerations in the screening step of an HIA is whether or not decision makers are open to the findings of the HIA. Engaging decision makers throughout the HIA process can increase the chances of HIA recommendations being considered and acted upon. However, this type of engagement might not always be possible. Some experience from the HIA field suggests engaging stakeholders who are well-positioned to inform the decision-making process.

SOLUTION C EXAMPLE
Negotiating Healthy Trade in Australia: Health Impact Assessment of the Proposed Trans-Pacific Partnership Agreement[34]

Organization: Centre for Health Equity Training Research and Evaluation, part of the Centre for Primary Health Care and Equity, Faculty of Medicine, UNSW Australia

Rather than using the HIA to inform decision-makers directly, the finding may be used to inform grassroots or political advocacy groups. The key decision-makers involved in the Trans-Pacific Partnership (TPP) Agreement were high-level government administrators, such as the minister of Foreign Affairs and Trade. The HIA team initially contacted ministry staff to engage them in the HIA process, but it became clear very quickly that due to the secretive nature of the negotiations, the ministry would not be able (nor was interested) to receive input from the public. However, there was an existing advocacy network of community-based organizations, academics and individuals who were working to influence the negotiations.

The HIA team decided that while official channels to inform the TPP may be closed, the advocacy network could provide a secondary route to bring the HIA findings into the public discourse. To foster this, the HIA team established a stakeholder-focused advisory committee.

The HIA was scoped to align with the priorities of this committee, and in addition to having input through the HIA process, the committee was also responsible for developing a dissemination strategy for the final report. The communications and advocacy expertise of these organizations enabled them to widely disseminate the HIA–leading to dozens of newspaper articles, radio interviews and public support from members of Parliament. The HIA was also used as testimony in a senate inquiry.

> " *Working to inform communities can be just as impactful as directly informing decision-makers.*
>
> – Katie Hirono, M.P.H., Research Associate,
> Centre for Health Equity Training, Research and Evaluation "

HIA Resources Available to Address this Challenge

Several resources were developed by HIA practitioner organizations to address this challenge. The table below highlights resources by author and recommended content. Please click on the *Authors* link to access the original resource when reading the online version of this *Handbook*.

Resource	Authors	Recommended Content
Challenge 2: *Decision-makers are not likely to pay attention to the HIA results once the HIA is completed.*		
HIA Committee Roles and Functions[35]	Human Impact Partners	**Engage with decision-makers to find a champion or to identify top priorities** — *HIA Committee Roles and Functions* outlines the responsibilities of different types of committees that may form for the purpose of the HIA, including the steering committee. A task of the steering committee is to "mobilize and sustain high level of engagement, political commitment, and momentum to achieve the HIA objectives." This includes finding champions among decision-makers and working with them to identify top priorities.
Health Impact Assessment Policymaker Profile[36][37]	Kansas Health Institute	**Cultivate HIA champions** — *Health Impact Assessment Policymaker Profile* (issue brief and video) identifies common characteristics of HIA champions and discusses how to work with HIA champions.

Challenges and Solutions

The table below includes challenges and solutions that HIA practitioners might experience during the *Screening* step of the HIA. The light bulb icon 💡 means that this challenge was discussed in detail in the *Screening* section.

Challenge	Potential Solutions
Key organizations are not interested in participating in an HIA.	• Communicate how an HIA can be valuable to each organization/agency. • Identify and engage with a lobbyist or consultant who is able to encourage participation in the HIA process. • Meet with key organizations regularly to provide information and updates. • Share examples of HIAs that were useful to decision-makers and resulted in benefits to the community.

Challenge	Potential Solutions

The decision's scope and timeline are unclear.	• Work with decision-makers and relevant stakeholders to determine the scope and timeline of a decision.
	  – For a state-level HIA, engage with legislators, lobbyists, revisers of statutes, legislative staff and state agency leadership to identify the most recent timeline and scope.
	  – For a local-level HIA, engage with county commissioners, city council members, local organizations and agencies to identify the most recent timeline and scope.
	• Be prepared to make changes to the HIA—things change, and HIAs should be adaptable.
	• Take a staged approach:
	  – Complete a desktop assessment to ensure availability of information if the decision-making process began quicker than expected.
	  – Expand the HIA scope if the decision-making timeline is extended.
	• Determine the key points of the decision that are most likely to be included (even if they are not very specific at that point) to begin work on; continue to refine the HIA scope as the decision's scope or timeline is revised.

The proposed plan/ project/policy is health-related and it is unclear if an HIA would add value to the discussion.	• Consider conducting an equity-focused HIA that examines how a decision could disproportionately impact vulnerable populations. • Assess additional issues that were not previously discussed or considered. • Communicate to key stakeholders the value that an HIA would bring including more extensive assessment and community engagement.
Decision-makers are not likely to pay attention to the HIA findings once they are released.	• Identify decision-maker priorities and include them in the HIA. • Engage with interested decision-makers who can help create opportunities for the consideration of HIA findings and recommendations. • Focus your efforts on working with stakeholders that would have an impact on the opinions of the decision-makers. • Frame results in a way that will resonate with decision-makers. • Work with various partners and media to help share the HIA results.
There is a change in the decision timeline.	• Assess the feasibility of completing an HIA according to the new timeline. If a comprehensive HIA is not feasible, do a desktop assessment.
It is difficult to determine what to do if the proposed plan/project/ policy is not suited for an HIA.	• Consider using other assessment tools such as HiAP to inform the decision.
The HIA will may not be viewed as a credible and evidence-based source of information due to an advocacy reputation of the organization conducting an HIA.	• Be mindful of all sides of the issue and present evidence. • Consider partnering with an agency/organization that doesn't have a vested interest in this issue in order to increase credibility.

Overview of the Scoping Step

Scoping is the second step of the HIA process. It determines what health impacts are going to be studied, which populations will be included in the study, and the methods that will be used to conduct an HIA.

According to several national resources,[38][39][40] the following tasks should be performed during the *Scoping* step:

- Establish goals and anticipated outcomes of the HIA;
- Establish the HIA scope;
  - Identify potential significant health and health equity impacts that will be studied;
  - Set geographic and demographic boundaries;
- Create research questions;
- Identify and select research methods to analyze each research question;
- Determine an approach to evaluation and characterization of impacts and their distribution; and
- Engage stakeholders.

Figure 2 describes key elements that need to be considered during the *Scoping* step of an HIA.

Figure 2. **Key Elements of the Scoping Step of a Health Impact Assessment (HIA)**
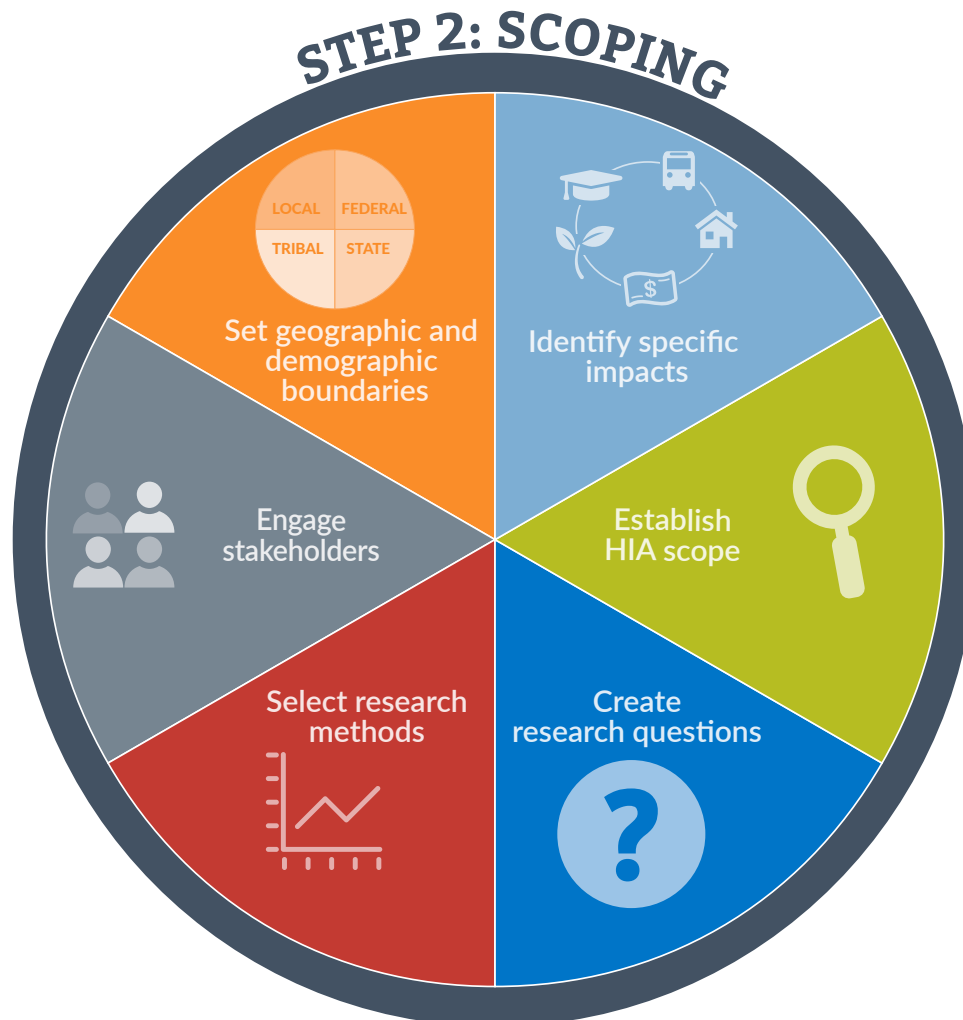
Source: KHI HIA Handbook for Practitioners, 2017.

Challenge 1. *Stakeholders disagree about the purpose of the proposed plan/project/policy.*

What Would an HIA Practitioner Do?

A. Review the public position documents (e.g., testimony).

B. Conduct a media content analysis.

C. Engage a credible third-party expert to analyze the scope of the decision.

D. Review examples from other states that have similar plans/projects/policies.

Overview of the Challenge

When stakeholders disagree about the purpose and impacts, it could substantially affect the HIA project team's ability to move forward beyond the first step of the HIA. This issue could arise in a situation particularly when no official review or analysis of the decision under consideration is available. In the absence of such a determination, stakeholders could offer different interpretations of the scope of a plan/project/policy. If this issue is not adequately resolved at the beginning of the HIA, the report findings and recommendations could be dismissed by some stakeholders as not being relevant.

In order to resolve this challenge, the HIA practitioner could implement the following strategies discussed on the next page.

> " *We realized that stakeholders disagreed about the intent and scope of the policy later in the HIA process. As a result, we had to stop our assessment and engage in additional activities in order to confirm the scope of the policy.*
>
> *– Tatiana Lin, Senior Analyst & Strategy Team Leader, Kansas Health Institute* "

SOLUTION A: *Review the public position documents.*

In general, organizations participate in public discourse around the issues of their interest. The participation can take multiple forms, including testimony, media interviews and publication of a memo or op-ed. In many cases, organizations release multiple public statements that clearly articulate their position regarding the issue. A review of this information can assist HIA practitioners in identifying what results each organization anticipates from the proposed plan/project/policy. This task can be accomplished by reading each document, summarizing and coding key themes.

SOLUTION A EXAMPLE
HIA: Potential Health Effects of Changes to the Kansas Corporate Farming Law[41]
Organization: Kansas Health Institute

During the Corporate Farming HIA, the participating stakeholders disagreed about what the proposed legislation would do, or in other words, the purpose of the legislation and how the passage of it would affect the state. Some stakeholders believed that the proposed legislation dealt only with the ownership structure of farmland, while others argued that the proposed policy would increase the number and size of livestock operations in Kansas. In order to identify the scope of the legislation, the HIA team reviewed testimony submitted by each key stakeholder organization, identified main themes and produced a color-coded summary table (*Figure 3*). The table highlighted impacts that had been publicly referenced by each organization and listed relevant statements from 2013 legislative testimony regarding the proposed bill. This activity helped to identify 11 impacts that the legislation was predicted to have, including the expansion of livestock (swine, dairy and poultry) operations in Kansas, in addition to impacts on crops/grain, Kansas family farms, jobs, economy, local control, population, air and water quality and quantity. By summarizing and referencing key themes from the testimony, the HIA team was able to substantiate the focus of the HIA.

Figure 3. **Summary of Key Issues Referenced in Regard to Senate Bill 191**

ORGANIZATION	PROJECTION: IMPACTED AREAS										
	Swine	Dairy	Poultry	Crops/ Grain	New Out-of-State Agribusiness/ New Markets	Kansas Family Farms	Jobs	Economy	Local Control		Water/ Air Quality
Kansas Department of Agriculture[25]	▓	▓	▓	▓				▓			

Source: KHI Corporate Farming HIA, 2015.

SOLUTION B: Conduct a media content analysis.

The second strategy that can assist HIA practitioners in determining, verifying and/or substantiating the focus of the proposed plan, project or policy, is to conduct a media content analysis. The media play an important role in informing the public about policy issues. Although there are several definitions of a media content analysis, the majority of definitions describe this method as a set of procedures that are used to make valid inferences from text.[42] Literature suggests that a media content analysis can be used to monitor the "cultural temperature of society." [43]

This research methodology can also be used to:

- Describe substantive characteristics of message content;

- Describe characteristics of message content;

- Make inferences to producers of content;

- Make inferences to audiences of content; and

- Predict the effects of content on audiences.[44]

HIA practitioners can utilize this methodology to examine communication content of the media as related to the plan/project/policy at-hand, and understand what key stakeholders and organizations have to say about it.

HIA: Potential Health Effects of Changes to the Kansas Corporate Farming Law[45]
Organization: Kansas Health Institute

KHI partnered with the University of Kansas School of Medicine—Wichita to conduct a media content analysis as a part of the process and impact evaluation efforts for the Corporate Farming HIA. The media content analysis assisted in identifying several potential impacts that were also referenced by stakeholders in the 2013 testimony. The purpose of this analysis was two-fold: to capture projected impacts and to assess the frequency and nature of media coverage surrounding proposed changes to the Kansas Corporate Farming Law. The content analysis was conducted by analyzing newspapers with a physical print presence and an online presence in Kansas. The online content of each of these papers was searched using several terms: "SB/Senate Bill 191," "HB/House Bill 2404," "Kansas Agricultural Growth and Rural Investment Initiative," "corporate agriculture," and "agriculture regulations," among others. The analysis findings were used to inform the identification of possible impacts of the legislation.

STATEMENTS FROM 2013 TESTIMONY ON PROPOSED LEGISLATION

"We have had interest from pork and poultry farms. Unfortunately, the restrictive corporate farming laws on the books are prohibitive and driving that business to other states."[26]

"Passing Senate Bill 191 will send a loud and clear message to farmers, ranchers and agribusinesses that Kansas is open for their business."[27]

"Over the years, agribusinesses, hog, dairy and poultry producers in particular, have approached Kansas about the possibility of locating in our state but they are concerned with the Kansas corporate farming laws."

"What you see in the table are some results in 2013 dollars of what the impact will be if we grow hogs and dairy by 10 percent."[28]

SOLUTION C: Engage a credible third-party expert to analyze the scope of the decision,

Engaging a credible third-party expert in analyzing the scope of the decision is a strategy that can be used separately or in combination with the previous two strategies. The third-party expert can be selected from a pool of professionals who have relevant subject-matter expertise, legal training and understanding of the local context in which the

decision is being made. In order to ensure that this expert's perspective is valued by key stakeholders, it is essential to select an expert that has a neutral reputation and hasn't been engaged in activities around the proposed plan/project/policy or similar issues. In choosing between in-state and out-of-state experts, it is important to consider the extent to which stakeholders would trust an out-of-state expert resource and the degree to which they would understand the local statutory and policy environment.

SOLUTION C EXAMPLE
HIA: Potential Health Effects of Changes to the Kansas Corporate Farming Law[46]
Organization: Kansas Health Institute

KHI contracted with the Public Health Law Center in St. Paul, Minnesota, to provide a legal review of Senate Bill 191, which was the focus of the HIA. The need for this review was determined based on the following reasons: 1) Disagreement existed among stakeholders regarding what the legislation would do; 2) There was a lack of any official analysis regarding the scope of the legislation. KHI commissioned

this legal review with an expectation that it would provide a reliable and comprehensive assessment of the policy impacts and confirm the scope of the HIA. In order to ensure that the third-party expert had a "neutral" reputation and wasn't engaged in the debate surrounding this policy, KHI selected an out-of-state entity with legal and subject matter expertise. The Public Health Law Center[47] had previous experience conducting research on agriculture-related issues but had not been engaged in discussions and work related to corporate farming laws in Kansas. The findings from the legal analysis were used to finalize the focus of the Corporate Farming HIA.

SOLUTION D: Review examples from other states that have similar plans/projects/policies.

Lastly, HIA practitioners can also review similar plans/projects/policies proposed in other states and any relevant documents that describe their scope and potential impacts. However, this information should be considered with the local context in mind.

SOLUTION D EXAMPLE
HIA: Potential Health Effects of Legalizing Medical Marijuana in Kansas[48]
Organization: Kansas Health Institute

In order to understand what the proposed medical marijuana legislation would do in Kansas, KHI reviewed available information from other states that passed laws allowing its use. This review helped to identify similar bills and anticipated impacts for legalizing the use of medical marijuana in Kansas. Providing the national context also helped to determine what type of policy could align with the goals of stakeholders in the state.

Note: This section does not include a table with additional resources as HIA documents have not seemed to address this challenge.

Notes:

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Challenge 2. *Stakeholders want to study too many potential health impacts.*

Identify specific impacts

What Would an HIA Practitioner Do?

A. Discuss with stakeholders the amount of time and resources needed to study all impacts.

B. Prioritize potential impacts in collaboration with stakeholders.

C. Engage stakeholders in the assessment of additional impacts of interest.

D. Include a recommendation in the HIA report to study additional impacts in the future.

Overview of the Challenge

Stakeholders—people or entities that may be affected by a proposed plan/project/policy—are instrumental in determining which impacts should be examined during the HIA process.[49] However, each stakeholder group has specific expectations of the HIA scope, process and its results. The diversity of opinions and expectations within the group often result in the identification of a large number of impacts. In many cases, stakeholders expect that all of the identified impacts would be included in the scope of an HIA. As a result, HIA practitioners face a dilemma between completing an HIA within available resources and timeline, and meeting stakeholder expectations. Additionally, the assessment of a large number of impacts can lead to scope creep and jeopardize the project's success.

SOLUTION A: Discuss with stakeholders the amount of time and resources needed to study all impacts.

In situations when stakeholders are interested in studying too many impacts, HIA practitioners can engage them in discussion of resource implications. This task can be accomplished through in-person or virtual meetings. In order to make sure that stakeholders have a comprehensive picture, the HIA team can provide a preliminary resource assessment per issue. The following questions and consideration can be used to guide the resource assessment (*Figure 4*, page 31).

> " *Facilitate a discussion which allows the group to build consensus over how to prioritize the impacts, then guide them through a prioritization exercise.*
>
> – *Survey Respondent* "

Figure 4. **Questions and Considerations for Resource Assessment**

Questions	Considerations
Data Analysis: Are there any indicators available to measure the issue? Are data publicly available or is there a need to request it? Is it clear which assessment methods to use?	Data analysis efforts are more likely to require higher resource commitment if assessment of an issue warrants the use of multiple measures, if indicators are not publicly available or if it is unclear which assessment methods to use.
Literature Review: Does a literature review on this topic require a general ability to read and understand academic articles or technical expertise and deep knowledge of the subject matter?	Literature review efforts are more likely to require a higher resource commitment if an issue is examined through a systematic literature review process. Additionally, higher resource commitment can be expected when literature review requires technical expertise and deep knowledge of the subject matter.
Community Stakeholder Engagement: Are community stakeholders interested in participating in the proposed HIA? Can community stakeholder perspectives be gathered through telephone interviews, online surveys or virtual focus groups?	In general, the primary collection of data are time-consuming and resource-intensive. However, primary data collection efforts are more likely to require even higher resource commitment if community stakeholders are not interested in participating in the proposed HIA, if interviews and/or focus groups are conducted in person, and/or if administering a paper survey.

Source: KHI HIA Handbook for Practitioners, 2017.

"

Impacts cannot be addressed adequately if there are too many of them.

– Survey Respondent

"

SOLUTION B: *Prioritize potential impacts in collaboration with stakeholders.*

During the *Scoping* step of the HIA, stakeholders could potentially identify as many as 40 potential impacts. In order to narrow down the list of impacts, prevent the project's scope from getting too large, and ensure that the HIA is completed on time, the HIA project team can:

- Engage stakeholders in discussion of resource implications;

- Further prioritize impacts based on agreed-upon criteria; and

- Engage stakeholders in the assessment of additional impacts of interest.

Prioritization of issues allows the HIA team to direct resources, time and energy to those issues that are deemed most critical to address. Although there is no gold standard regarding the number of impacts that should be included in the HIA, it is reasonable to focus on no more than 15 priorities (e.g., upstream, downstream and health outcomes) within one HIA process.

HIA practitioners can use several methods and tools for prioritization. Some examples of the prioritization methods include:

- Prioritization Matrix;

- Hanlon Method;

- Multi-voting Technique; and

- Democracy.[50]

HIA practitioners can also conduct prioritization via a focus group or a survey. Regardless of the methods or processes used, HIA practitioners should establish prioritization criteria. In order to ensure stakeholder buy-in and ownership of the selected issues, it is critical to engage stakeholders in selecting criteria for use in prioritizing issues.

SOLUTION B EXAMPLE
HIA: Potential Health Effects of Legalizing Medical Marijuana in Kansas[51]
Organization: Kansas Health Institute

KHI used the survey software Qualtrics to engage stakeholders in prioritizing issues for the Medical Marijuana HIA. Based on a preliminary literature review and examination of media and public comments, KHI identified several issues that were often associated with the legalization of medical marijuana. In order to finalize the scope of the HIA, KHI asked stakeholders to review and rank issues in terms of their importance. For the sake of the survey, "importance" was defined as "impacts that are likely to occur as a result of legalizing medical marijuana and have a high potential to impact health." The survey documented preferences and informed the selection of the final list of impacts.

Example of a prioritization question from the Medical Marijuana HIA survey:

Please rank the following issues in terms of their importance of being included in the scope of the Medical Marijuana HIA by entering a number next to each issue in the text box provided.

Scale: A rank of 1 means you feel it is the most important issue to include and a rank of 9 is the least important.

- _____ *Access to marijuana*
- _____ *Consumption of marijuana*
- _____ *State tax revenue*
- _____ *Local tax revenue*
- _____ *Jobs*
- _____ *Citizen retention*
- _____ *Incarceration*
- _____ *Crime*
- _____ *Driving Under the Influence*

SOLUTION C: Engage stakeholders in the assessment of additional impacts of interest.

In some cases, stakeholders might be well-positioned to carry out a part of the assessment. Subject matter and technical expertise, as well as the interest level of stakeholders, should be considered before engaging these groups in conducting the HIA assessment. This approach can yield several benefits. For example, it can allow the HIA team to include additional impacts within available resources and ensure that stakeholders feel heard and acknowledged. In order to ensure that any additional assessment is successful, it is critical for the HIA team to provide adequate guidance to stakeholders engaged in the assessment work. The guidance could include:

- Information about relevant HIA minimum standards;

- Agreed-upon research questions;

- Criteria for selecting data sources and literature;

- Suggested format for capturing;

  – Findings;
  – Narrative;
  – Graphs; and
  – References.

In addition, the HIA team should review and confirm the proposed study design.

SOLUTION C EXAMPLE
HIA: Potential Health Effects of Proposed Public Transit Concepts in Wichita [52]
Organization: Kansas Health Institute

During the *Scoping* step, Wichita Transit HIA stakeholders expressed interest in transit's effects on ambient air quality and the localized air quality that transit riders and bus drivers experience. The HIA team recognized this issue as important, but was concerned about expanding the scope of the assessment given the project's timeline and resources.

However, the team was able to engage one of the advisory panel members—who was a professor of Industrial Engineering at Wichita State University and a pipeline safety contractor—in evaluating the quality of air at the transit center, on transit buses and at bus stops. The assessment resulted in several key findings and recommendations which were highlighted in the report. By collaborating with the advisory panel member and subject-matter expert on the assessment, the HIA team was able to act upon stakeholder recommendations and add value to the HIA report.

> "
> *Have a frank conversation about resource requirements.*
> – Survey Respondent
> "

SOLUTION D: Include a recommendation in the HIA report to study additional impacts in the future.

Adding an "other issues" section in the HIA report is another strategy for ensuring that HIA impacts identified by stakeholders are recognized and captured in the report without including a full assessment. The potential impacts can be described based on stakeholder perspectives with acknowledgement that future research is needed.

SOLUTION D EXAMPLE

HIA: Potential Health Effects of Expanding Liquor Licenses to Grocery and Convenience Stores[53]

Organization: Kansas Health Institute

The excerpt below highlights one of the issues included in the "other issues" section of the Liquor HIA report.

Jobs

There was a consensus among all stakeholders that jobs would be impacted. Proponents argued that new jobs would be created as a result of grocery and convenience stores being able to sell additional products. Small and rural grocery stores felt that they would be able to stay in business, and therefore maintain their current employees. According to grocery stores, they employ full-time and part-time workers. Those we spoke with stated there are health insurance benefits for full-time employees, which would lead to positive health impacts if the newly created jobs are full-time positions. On the other hand, liquor stores were concerned about losing their businesses and livelihoods as a result of larger businesses being able to sell alcohol products.

"The legislation will degrade the economic health of liquor store owners because it will hurt those businesses."
— Opponent

"There will be an increase in jobs for existing grocery stores. New stores bring a lot of economic development to communities."
— Large Grocery Store

HIA Resources Available to Address this Challenge

Several resources were developed by HIA practitioner organizations to address this challenge. The table below highlights resources by author and recommended content. Please click on the *Authors* link to access the original resource when reading the online version of this *Handbook*.

Resource	Authors	Recommended Content
Challenge 2. *Stakeholders want to study too many potential health impacts.*		
Guide to Prioritization Techniques[54]	National Association of County & City Health Officials	**Use prioritization tools to narrow down the number of impacts** — *Guide to Prioritization Techniques* provides specific techniques and tools (e.g., Strategy Grids, Multi-voting Technique) to assist in the prioritization of issues. The *Guide* also offers step-by-step instructions, examples and templates.
Guidance and Best Practice for Stakeholder Participation in Health Impact Assessment[55]	Stakeholder Participation Working Group of the 2010 HIA of the Americas Workshop	**Offer stakeholders the opportunity to assess some of the impacts** — *Guidance and Best Practice for Stakeholder Participation in Health Impact Assessment* (Table 5, page 17), details conditions that impact stakeholder participation and discusses how to effectively engage stakeholders as researchers.
A Health Impact Assessment Toolkit: A Handbook to Conducting HIA[56]	Human Impact Partners	**Use a scoping exercise to narrow down the number of impacts** — *A Health Impact Assessment Toolkit: A Handbook to Conducting HIA* provides a scoping exercise and a worksheet. These tools can be used to identify which impacts have sufficient information (e.g., data, literature) to conduct an analysis. Impacts can be prioritized based on the availability of information.

Challenges and Solutions

The table below includes challenges and solutions that HIA practitioners might experience during the *Scoping* step of the HIA. The light bulb icon 💡 means that this challenge was discussed in detail in the *Scoping* section.

Challenge	Potential Solutions
💡 *Stakeholders disagree about what the proposed plan/project/policy would do.*	• Review public position documents (e.g., testimony). • Conduct a media content analysis. • Engage a credible third-party expert to analyze the scope of the decision. • Review examples from other states that have similar plans/projects/policies.

The decision timeline is shorter than expected.	• Limit the number of issues studied.
	  – Focus on the issues with most health impacts or disproportionate burden of impacts.
	  – Prioritize issues of interest to stakeholders and decision-makers.
	• Implement a staged approach by conducting a desktop assessment (literature review) to make sure that information is available if the decision would be made sooner than expected. If the decision is postponed, then expand assessment efforts.
	• Conduct a desktop[57] assessment.

Stakeholders do not understand the framework for a "pathway diagram," a schematic of a logic framework that maps out the possible links between the decision and the potential resulting health effects.	• Identify alternative terms (e.g., logic model, theory of change, flow chart) that stakeholders can relate to. • Use examples that have clean structure and logical labels. • Make sure that the HIA team understands how to talk about or describe the pathway diagram.
It is unclear how to do "scoping" even after researching guidance documents.	• Contact organizations that can offer technical assistance or mentorship (e.g., SOPHIA). • Identify opportunities to participate in the *Scoping* step conducted by other HIA practitioners.
Stakeholders do not understand or agree with the value of the social determinants of health framework.	• If stakeholders do not understand the term "social determinants of health," use alternative terms (e.g., issues that community/stakeholders care about, factors that shape our health, factors that influence how we live, work and play). • Take the time to understand stakeholders' perspectives and adjust argument(s). • If stakeholders do not agree with the value of the determinants of health, use visuals (e.g., CDC pyramid,[58] SDH diagram[59]) to demonstrate the value. • Use practical examples from other HIAs.[60] • Recognize the role of individual responsibility while emphasizing shared responsibility. • Find a champion from stakeholder peers or a credible expert who can help to advance the dialogue.

Challenge	Potential Solutions
Stakeholders who serve in an advisory role disagree on potential impacts of the proposed plan/project/policy.	• Gather feedback from a wide variety of stakeholders (e.g., scoping survey, key-informant interviews) to capture priorities and help resolve the disagreement. • Conduct preliminary literature review to highlight evidence-based impacts. • Ensure that all methodology, decision-making and prioritization is transparent.
Stakeholders want to study too many potential health impacts.	• Discuss with stakeholders the amount of time and resources needed to study all impacts. • Prioritize potential impacts in collaboration with stakeholders. • Engage stakeholders in the assessment of additional impacts of interest. • Include a recommendation in the HIA report to study additional impacts in the future. • Use a survey or other tool to narrow down the number of impacts (e.g., 2x2 matrix).[61] • Offer stakeholders an opportunity to study the issues that the project team does not have capacity to undertake.
Stakeholders do not want to study certain health impacts.	• Consider the importance of impacts that stakeholders do not want to study and determine which ones to include based on their potential to have health impacts. • Explain inclusion and exclusion criteria.
It is difficult to gather stakeholder perspectives when attempting to select potential impacts of the proposed plan/ project/policy.	• Identify tools that can gather feedback more efficiently and from more people (e.g., surveys). • Research public documents to capture stakeholders' perspective.
It is unclear how to keep relevant stakeholders informed during the Scoping step.	• Provide regular updates via email, conference calls and/or face-to-face meetings. • Share draft versions of a pathway diagram. • Share research questions. • Ask stakeholders to identify vulnerable populations. • Consistently inform stakeholders about how their feedback is being considered.
Stakeholders feel territorial regarding the subject matter associated with the proposed plan/ project/policy.	• Meet with stakeholders to identify how the HIA can support their work. • Be clear about the value the HIA would bring. • Engage stakeholders that feel territorial in advisory group or HIA team (e.g., delegate certain activities).

Challenge	Potential Solutions
Stakeholders have an interest in studying impacts that may not have evidence to support them.	• Make an effort to identify evidence. • If there is limited evidence, supplement with qualitative research (e.g., key-informant interviews, survey, focus groups). • If there is no evidence from the research or data, explain and justify to stakeholders. • Flag these impacts as areas of stakeholders' interest in the report.
There is disagreement among stakeholders/ decision-makers on priority impacts.	• Include at least one priority impact from each stakeholder group. • Prioritize impacts based on agreed-upon criteria.
Some impacts prioritized by stakeholders and/or decision-makers do not have clear or distinct linkages to health outcomes.	• Study a few of these issues in addition to other health impacts. • Include a recommendation in the HIA report to study additional impacts in the future.
It is difficult to determine which vulnerable populations will be impacted by the proposed plan/project/ policy.	• Identify potential populations based on literature and stakeholder feedback.
Stakeholders do not agree on the definitions of key terms relevant to the proposed plan/ project/policy.	• Use the most common sources in the field to establish definitions. • Create a project dictionary for feedback and discussion. • Use the project dictionary as a tool to get everyone on the same page. • Review the language used in regulations and local/state laws to establish definitions. • If there are discrepancies within definitions, discuss them in the HIA report.
The HIA team does not know or understand common language/ terminology used in the field associated with the proposed plan/project/ policy.	• Create a project dictionary. • Encourage team to read articles/research related to the issue.

Notes:

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Overview of the Assessment Step

Assessment is the third step of an HIA process. It includes a summary of existing (baseline) conditions and analysis of potential health impacts.

According to several national resources,[62 63 64] the following tasks should be performed during the *Assessment* step:

- Develop a profile of relevant health issues or factors that impact health (e.g., access to transportation, quality housing) and health outcomes (e.g., percentage of adults who have diabetes) among the affected communities;

- Conduct assessment (e.g., literature review, data analysis, key-informant interviews, surveys or focus groups);

- Describe the strength of evidence based on best practices for the relevant field; and

- Create findings and characterize health impacts (e.g., direction, magnitude, likelihood).

Figure 5 describes key elements that need to be considered during the *Assessment* step of an HIA.

Figure 5. **Key Elements of the Assessment Step of a Health Impact Assessment (HIA)**
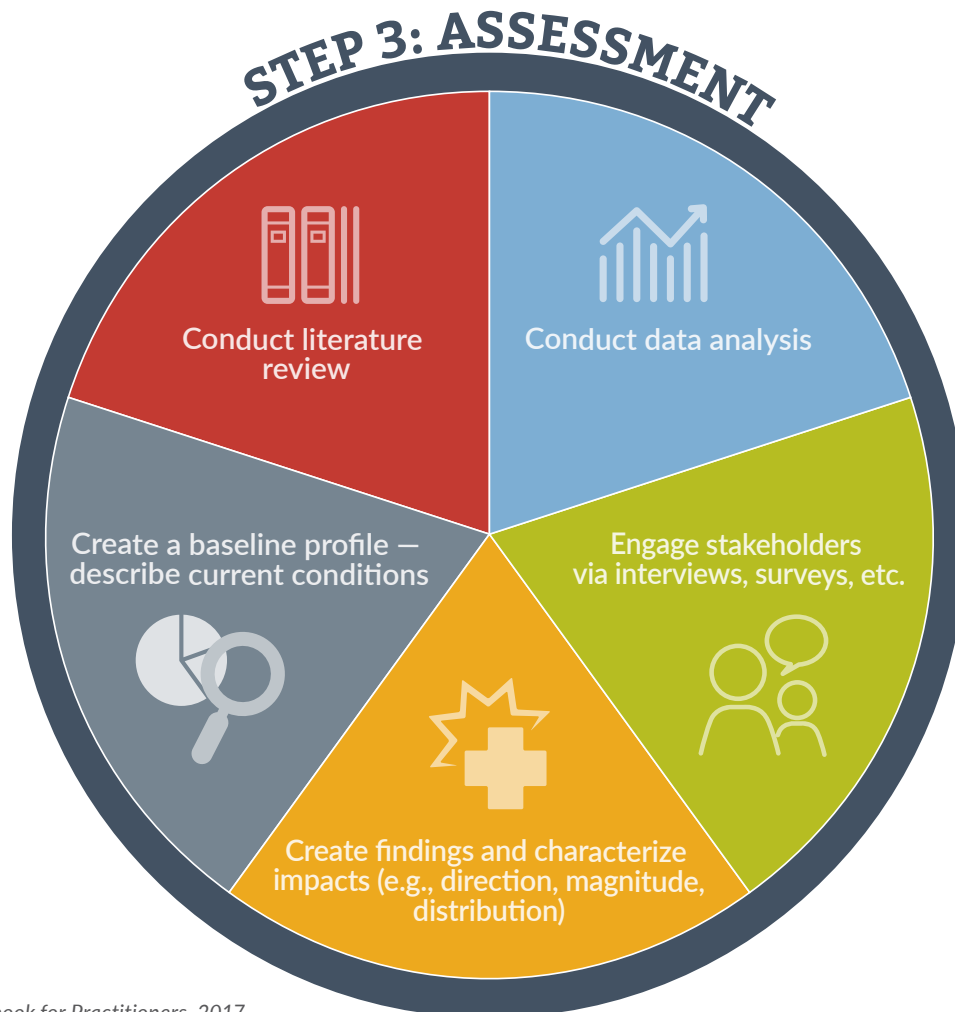
Source: KHI HIA Handbook for Practitioners, 2017.

Challenge 1. *Data are not available for assessing certain impacts.*

Conduct data analysis

What Would an HIA Practitioner Do?

A. Identify proxy measures if desired data are not available.

B. Use alternative approaches to demonstrate potential impact.

C. Find data that are similar, or available in other areas of the state and country that are being used for comparison. Data from another area are better than no data.

Overview of the Challenge

During the *Assessment* step of the HIA process, the team conducts literature review, data analysis and gathers stakeholder perspectives through focus groups, surveys and/or key-informant interviews. All assessment components are equally important; however, in many cases decision-makers and stakeholders are especially interested in local data. Data availability varies by indicator and across geographic areas. As a result, HIA practitioners might find themselves in a situation when data are not available for some or the majority of indicators included in the HIA scope. Lack of data analysis related to these issues might hamper practitioners' ability to create robust findings and characterize the impacts associated with the decision. Additionally, a lack of data analysis might diminish the value of the HIA results for decision-makers and stakeholders.

> " *This happens a lot. Either because the data aren't available, or you don't have the capability to conduct a certain type of data collection. I think it's important in this situation to include whatever data are available.*
>
> – Survey Respondent "

SOLUTION A: *Identify proxy measures.*

A proxy variable is an easily measurable variable that is used in place of a variable that cannot be measured or is difficult to measure. The proxy variable can be something that is not of any great interest itself, but has a close correlation with the variable of interest. Proxy measures are commonly used when direct measures are not available. HIA practitioners should use proxy measures when there are little or no data available. However, when proxies are used, the relationship between the indicator and the result should be well-understood and described. The selection of a proxy measure should be informed by research and the level of correlation should be taken into consideration. For example, if the expected result is changes in household expenditures, research suggests that household income may be a suitable proxy measure.[65] The proxy indicator is based on the assumption that an increase in household expenditures may be a result of increased income.

SOLUTION A EXAMPLE
HIA: SE 122nd Avenue Planning Study HIA[66]
Organization: Oregon Public Health Institute

One of the primary neighborhood changes being considered by Portland city planners and community members in the SE 122nd Ave Planning Study was significant improvements to the area's bicycle and pedestrian infrastructure. During the *Scoping* step, many stakeholders expressed interest in knowing how much additional physical activity people would get as a result of these infrastructure changes. After examining the issue, the HIA team determined that there wasn't enough information available for predicting how much additional physical activity people would get as a result of the improvements. Instead, the HIA team decided to assess the extent to which the new infrastructure would increase opportunities for physical activity, with the assumption that increased opportunities for physical activity would likely result in increases in actual levels of physical activity. Since this assumption was well-grounded in research, they decided that this measure would be a good proxy for actual changes in physical activity levels resulting from improvements to the neighborhood's bicycle and pedestrian infrastructure.

> " *It is not always possible to use the real measures, so proxy measures present a viable alternative. However, it is important to remember that proxy measures might not fully represent the outcome of interest.*
>
> *– Tatiana Lin, Senior Analyst & Strategy Team Leader, Kansas Health Institute* "

SOLUTION B: Use alternative approaches to demonstrate potential impact.

For some policy decisions, the data needed to assess the potential impact are very detailed and specific. As a result, it is sometimes challenging to find secondary data that meet the desired level of detail and specificity to answer the research questions of the HIA. In these cases, HIA practitioners might choose to utilize other available data sources or develop a hypothetical model or scenario that captures the possible impact of the decision.

SOLUTION B EXAMPLE
HIA: Healthier Nutrition Standards Benefit Kids: A health impact assessment of the Child and Adult Care Food Program's updated rules for meals and snacks
Organization: Kids' Safe and Healthful Foods Project—a collaboration of The Pew Charitable Trusts and the Robert Wood Johnson Foundation

When conducting an assessment of the potential health impacts of proposed nutritional standard changes for the United States Department of Agriculture's (USDA) Child and Adult Care Food Program (CACFP), the HIA team found that no national surveillance data were available to document the meal components and quantities of food served by providers across the country. In order to assess the potential impact of these regulatory updates, the HIA team developed a week of hypothetical CACFP menu scenarios with meals, snacks, and drinks based on established parameters. The HIA team created menus for pre-revision CACFP standards, the proposed rule requirements, and best practices included in the proposed rule. Since no national data were available and because stakeholder input was unified in noting the diversity of meals currently being served, the menus were not able to be representative of all foods served by CACFP-participating providers. Rather, they are examples of what could comply and how it might change in accordance with updated standards.

The team examined menus using the USDA's Center for Nutrition Policy and Promotion's Healthy Eating Index (HEI), a scoring metric that measures diet quality and how closely eating patterns align to the Dietary Guidelines for Americans. A score for each meal component—such as fruits and vegetables, dairy, and grains—was calculated on each of the five days for each of the three scenarios. Although no quantitative conclusions could be drawn from the menu analysis, providing the HEI scores for the proposed changes helped to demonstrate the possible impact of the rule changes.

SOLUTION C: Find data that are similar or available in other areas of the country or state that are being used for comparison purposes.

Some decisions about plans/projects/policies have no relevant, locally available data to examine impacts of the decision because the plan/project/ policy has never been implemented in that area. In these cases, it is helpful to look to other areas of the country or state that have implemented similar decisions and examine the connection to the impacts identified in the HIA. In some cases, data are available to examine the issues before the decision was made and after, which helps to identify a potential association with the plan/ project/policy.

SOLUTION C EXAMPLE
HIA: Potential Health Effects of Casino Development in Southeast Kansas[67]
Organization: Kansas Health Institute

In order to assess the potential effects of a casino presence on the Southeast Kansas Gaming Zone (SEKGZ), the HIA team used the Southwest Kansas Gaming Zone (Ford County) as a control county as a casino was not yet developed in the SEKGZ. In addition to having similar characteristics to SEKGZ such as population, median age, median household income and poverty rates, Ford County is home to the Boot Hill Casino, a gaming facility comparable in size to one that would likely be developed in southeast Kansas. The minimum required investment and privilege fees for Ford County were similar to the lower amounts proposed for SEKGZ. The data were gathered on a broad range of effects (from alcohol-related accidents to jobs) for periods before and after the Boot Hill Casino opened in 2009. The pre-and post-data were compared. The Ford County analysis was supplemented by data analyses of five counties in northeast Kansas—Atchison, Brown, Doniphan, Jackson and Nemaha— which house four tribal casinos. Impacts on those counties were determined and were extrapolated to predict potential impacts on the Southeast Kansas Gaming Zone.

HIA Resources Available to Address this Challenge

Several resources were developed by HIA practitioner organizations to address this challenge. The table below highlights resources by author and recommended content. Please click on the *Authors* link to access the original resource when reading the online version of this *Handbook*.

Resource	Authors	Recommended Content
Challenge 1. *Data are not available for assessing certain impacts.*		
Improving Health in the United States: The Role of Health Impact Assessment[68]	National Research Council	**Utilize proxy measures, literature and stakeholder perspectives** — *Improving Health in the United States* (page 62) provides a list of resources to use as alternate data sources when data of interest are not available.
A Health Impact Assessment Toolkit: A Handbook to Conducting HIA[69]	Human Impact Partners	**Utilize proxy measures, literature and stakeholder perspectives** — *A Health Impact Assessment Toolkit: A Handbook to Conducting HIA* (*Assessment* section) of this resource suggests ways for gathering evidence when data are not available.
Health Impact Assessment: A Guide for Practice[70]	Rajiv Bhatia, M.D., M.P.H.	**Utilize proxy measures, literature and stakeholder perspectives** — *Health Impact Assessment: A Guide for Practice* (page 20) suggests ways for gathering evidence when data are not available.

Conduct data analysis

Challenge 2. *Data are not available at the desired geographic level.*

What Would an HIA Practitioner Do?

A. Use data from a larger geographic level and make projections for the area of your focus.

B. Utilize local-level data from other areas (another city or state) and explain why it makes sense to use it for your community.

Overview of the Challenge

While data are great tools for bringing people together to discuss the numeric characteristics of their community, searching for appropriate data can also be a significant challenge when the desired data are not available to describe the community. Common data challenges arise when practitioners would like to compare data points, but realize that one data point is measuring something slightly different or is available at the county or state level rather than for a specific locality. However, there are strategies that HIA practitioners can utilize to ensure that data used in the HIA are an accurate, meaningful and helpful representation of the community in question.

SOLUTION A: Use data from a larger geographic level and make projections for the area of your focus.

Often the focus of HIAs are decisions within communities that are too small to have reliable estimates from national survey efforts whose aims are to gather information about larger geographic areas. When needed data do not exist for the

specific locality of the project, a potential solution is to use data from a larger geography that includes the locality of interest. However, it is important to note the ways in which characteristics of a larger geography differ from the specific area of study and the resulting implications on the data. For example, if using regional data for a certain indicator that isn't available at the county-level, and that region includes a county with a population that is larger or differs on certain demographic measures, it is helpful to note that this may be a limitation of using regional data.

> " *Clearly indicate that data from a larger geographic level were used to estimate local data, and assess potential impacts.*
>
> – *Survey Respondent* "

SOLUTION B: Utilize local-level data from other areas (another city or state) and explain why it makes sense to use it for your community.

Occasionally, another city or state has undertaken a data collection effort to examine exactly the data point that would be useful somewhere else. HIA practitioners can present the data from elsewhere as helpful for informing the conversation, but note limitations such as differences in population characteristics, that might affect the data's comparability to the area being assessed in the HIA. In these cases, presenting some data is more helpful than presenting no data at all. Additionally, there are statistical methods that can be used to model the data for your purposes.

SOLUTION B EXAMPLE

HIA: Potential Health Effects of Changes to the Wichita Transit System[71]

Organization: Kansas Health Institute

In 2012, KHI conducted an HIA that assessed how changes to the city's transit system might impact the health of Wichita residents. During the *Scoping* step of this HIA, the team identified 19 indicators for further assessment. However, the majority of indicators, including the health status indicators (e.g., percentage of adults with high cholesterol, percentage of adults who are overweight) were available only at the county level. The team assessed the feasibility of using county-level data to make projections for the city of Wichita. The review of the 2012 U.S. Census data showed that 76.5 percent of Sedgwick County residents live in Wichita. In addition, it was determined that both the county and the city have some similar characteristics, such as being densely populated, racially diverse, have high poverty rates, and low median household incomes. Given that the largest proportion of the Sedgwick County population lives in Wichita and the county and city have similar demographic characteristics, the HIA team used county-level data to make projections for the city of Wichita. The findings included an appropriate disclaimer and discussion of the limitations.

HIA Resources Available to Address this Challenge

Resources were developed by HIA practitioner organizations to address this challenge. The table below highlights resources by author and recommended content. Please click on the *Authors* link to access the original resource when reading the online version of this *Handbook*.

Resource	Authors	Recommended Content
Challenge 1. *Data are not available at the desired geographical level.*		
Improving Health in the United States: The Role of Health Impact Assessment[72]	National Research Council	**Use best available data** — *Improving Health in the United States: The Role of Health Impact Assessment* discusses that data are often not available at the desired geographical level to specifically capture the impacts on the community of interest (page 60). Suggested solutions include relying on a larger geographical area, combining multiple data years and geographical units.

Challenges and Solutions

The table below includes challenges and solutions that HIA practitioners might experience during the *Assessment* step of the HIA. The light bulb icon💡means that this challenge was discussed in detail in the *Assessment* section.

Challenge	Potential Solutions
The HIA team does not have subject-matter expertise and/or technical expertise to study the proposed plan/ project/policy.	• Secure a consultant or partner with entities that have the required subject-matter expertise. – Potential sources for consultants: local experts from local/state agencies, industry groups or academia.
The HIA team does not know how to identify the appropriate methodology to use for completing the assessment.	• Review analytical approaches used in similar HIAs. • Secure HIA-experienced technical assistance. • Secure a consultant. • Make sure that the methodology includes an environmental scan of relevant policies/ laws.
The HIA team does not know the data sources needed to complete the assessment.	• Review data sources used in similar HIAs. • Review data sources used in research/literature. • Get expert advice from local/state agencies or academia. • Attend relevant industry conferences.
The HIA team does not have qualitative expertise in conducting interviews, surveys and/ or focus groups.	• Review HIAs and adapt methodology as applicable. • Mentor or partner with entities that have required technical expertise. • Engage HIA advisory panel/steering committee members in conducting qualitative work. • Secure a consultant.
The HIA team is unsure if approval is needed from an Institutional Review Board (IRB).	• If HIA is externally funded, contact a funder. • Identify IRB organizations in the state and contact them. • Review IRB protocols (HHS Human Research Protection and HRSA). • Consider going through IRB in any case. • Do not determine on your own if you can qualify for an IRB exemption.

Challenge	Potential Solutions
Stakeholders disagree about appropriate methods to use in completing the assessment.	• Review literature to identify the most appropriate methods and summarize evidence for each one. • Identify pros and cons of each method using experts and research. • Select methods with the most scientific backing and be transparent.
Data are not available for assessing certain impacts.	• Identify proxy measures if desired data are not available. • Use alternative approaches to demonstrate potential impact. • Find data that are similar, or available in other areas of the state and country that are being used for comparison. Data from another area are better than no data. • If no data are available, use literature and stakeholder perspectives to inform findings.
Literature/research is limited for assessing certain impacts.	• Expand beyond peer-review literature—use grey literature, white papers, working papers, etc. • Base findings on data and literature review. If literature and data are not available, consider excluding these indicators from the assessment.
Data are not publicly or electronically available.	• Identify agencies that host data. • Submit data requests. • Secure budget to pay for data. • If data are not available electronically, train your team to assess paper records.
Data are not available at the desired geographical level.	• Use data from a larger geographical level to make projections for the area of your focus. • Utilize local-level data from other areas (another city or state) and explain why it makes sense to use it for your community.
The way the data are broken down differs across data sets.	• If data are available but not at the right geographical level, use the best available data (e.g., state-level data, combine multiple years, combine geographical units). • Download original dataset and break it down by the desired groups. • Use literature or field standards to define commonly used data breakdowns.

It is unclear how to keep relevant stakeholders informed throughout the assessment step.	• Engage stakeholders in the:
	  – Identification of data sources and methodology;
	  – Conducting key-informant interviews; and
	  – Provision of feedback on industry regulations and political considerations.
	• Email updates or host regularly scheduled calls to keep stakeholders informed.
	• Share assessment results along the way.

Challenge	Potential Solutions
It is unclear how to assess the quality of evidence from the assessment.	• Develop a quality of evidence scoring system using literature and research. • Review and adapt other HIAs scoring systems.
It is unclear how to characterize impacts associated with the proposed plan/project/ policy.	• Review examples of HIA reports and HIA standards. • Walk through each impact (e.g., increase in traffic accidents) and identify how it would change in the context of the proposed plan/project/policy from a baseline.
It is unclear what to characterize (e.g., magnitude, impacted populations).	• Identify characterization categories in collaboration with stakeholders. • Consider always using magnitude, likelihood, distribution and quality of evidence (meaningful and easy to communicate).
It is unclear how to quantify impacted populations that might be impacted by the proposed plan/project/ policy.	• Review the effect of similar policies on vulnerable populations. • Review the indicators used in similar projects. • Ask stakeholders who the impacted population is likely to be and what data exist to capture the effect.

Notes:

Overview of the Recommendations Step

Recommendations is the fourth step of an HIA process. Recommendations are a way to suggest action that can enhance positive health effects and mitigate potential negative health effects related to the proposed plan/project/policy.

According to several national resources,[73 74 75] the following tasks should be performed during the *Recommendations* step:

- Use criteria in developing recommendations including:
    - Responsiveness to predicted impacts;
    - Evidence-based (informed);
    - Technical and political feasibility;
    - Cost-effectiveness; and
    - Unaccompanied by additional negative consequences.

- Create specific recommendations to address the health and equity impacts identified; and

- Engage stakeholders and community members in developing recommendations and spearheading their future implementation.

Figure 6 describes key elements that need to be considered during the *Recommendations* step of an HIA.

Figure 6. **Key Elements of the Recommendations Step of a Health Impact Assessment (HIA)**

STEP 4: RECOMMENDATIONS

Use input from experts, communities and research

Make sure that recommendations are responsive to the impacts, are actionable, feasible and enforceable

Empower others to spearhead implementation of recommendations

Create recommendations that sustain or enhance health benefits and mitigate health risks

Source: KHI HIA Handbook for Practitioners, 2017.

| Create recommendations that sustain or enhance health benefits and mitigate health risks | **Challenge 1.** *It is difficult to find evidence-based recommendations.* |

What Would an HIA Practitioner Do?

A. Capture potential recommendations during the literature review.

B. Provide rationale for each recommendation.

C. Review existing sources (e.g., *County Health Rankings*, CDC Community Guide) to identify potential best or evidence-based practices.

Overview of the Challenge

One of the key strengths of an HIA is the tool's ability to provide practical and feasible recommendations that aim to maximize potential health benefits and mitigate potential health risks. The most successful and effective HIAs are considered to be those where findings and recommendations have been considered and acted upon by decision-makers. In order to ensure that HIA recommendations, if implemented, could result in improvements, HIA practitioners should strive to make recommendations that are informed by the best available evidence. Additionally, decision-makers and stakeholders might be resistant to implement recommendations that lack supporting evidence. However, HIA practitioners often find it challenging to identify recommendations informed by evidence. Identifying relevant recommendations that are evidence-based can be resource and time intensive and often, evidence-informed practices are not available for the subject at-hand.

> *Expansion of the evidence base only happens when initiatives based on available data provide more data [...] So I think recommendations can be made on the strength of data points provided even if the total picture cannot be addressed.*
>
> – Survey Respondent

SOLUTION A: *Capture potential recommendations during the literature review.*

One of the challenges of finding evidence-informed recommendations is having enough time and resources dedicated to this task during the *Recommendations* step of an HIA. If practitioners start gathering recommendations after the assessment has been completed, they would have to conduct an additional literature review. In many cases, the HIA timeline might not allow practitioners to incorporate additional literature review. As a result, practitioners might develop recommendations based on stakeholder input. Incorporating stakeholders' perspectives in the HIA recommendations is important, but if those recommendations do not have a body of evidence supporting them, decision-makers may be less likely to consider implementing them. Capturing potential ideas for recommendations during the literature review in the *Assessment* step of the HIA could help the HIA practitioners identify and gather ideas and supporting evidence throughout the HIA process. However, it is important to note that actual recommendations should be developed once the findings are finalized.

SOLUTION A EXAMPLE
HIA: Potential Health Effects of Legalizing Medical Marijuana in Kansas[76]
Organization: Kansas Health Institute

During the *Screening* step of the HIA, the HIA team made a strategic decision to capture ideas for potential HIA recommendations during the literature review process. The team created a table (*Figure 7*) for each issue (e.g., consumption of marijuana, crime driving the influence) which was completed during the *Assessment* step. Tables included all study information (population sampled or dataset used, period of data collection, data collection methods, study design, study limitations, findings, and potential recommendations). The recommendations were recorded for each finding that emerged during the literature review. Given that these recommendations were captured prior to the completion of the full *Assessment* step, which also included data analysis and stakeholder engagement—the HIA team reviewed and assessed each recommendation in the context of the findings from the full assessment. The recommendations that were found applicable to the overall findings were shared with the stakeholders for further feedback and refinement.

Figure 7. **Literature Review Framework**

Authors and Database	Population/ Sample	Years & Data Source	Study Design	State Regulatory Model	Limitations	Findings	Recommendations
Friesthler et al., 2013	31 medical marijuana dispensaries located within the city limits of Sacramento	2010-February 2011 Premise Survey; 2010 Sacramento Police Department Violent Crime Data	Cross-Sectional	Dispensary and Self-Grow	Location of the dispensary may have confounded results (i.e., high crime areas vs. low crime); Small sample; Specific location renders results non-generalizable	Dispensaries with security cameras and signs requiring an identification prescription card had lower levels of violence within 250 feet (-1.05, 1.77-0.32, p<0.05); Local jurisdictions have imposed similar distance buffers around residential zones; Most states defer regulatory authority regarding security measures at dispensaries to local jurisdictions.	Some security measures, including those that are relatively inexpensive may help reduce crime around dispensaries; The effectiveness of security measures appears to vary by measure.

Source: KHI Medical Marijuana HIA, 2015.

SOLUTION B: Provide rationale for each recommendation.

There is a growing awareness among HIA practitioners for the need to make the recommendation process more transparent. This can be achieved by providing users with information about each recommendation, including the reasoning behind each final recommendation and why it was given its direction and emphasis. A comprehensive explanation for the basis of the recommendation can play a critical role in influencing a user's acceptance of the recommendation. This strategy also could become especially important in the instances where a recommendation is perceived as controversial or does not fully align with established practice process.

SOLUTION B EXAMPLE
HIA: Potential Health Effects of Changes to the Kansas Corporate Farming Law[77]

Organization: Kansas Health Institute

During the literature review, the HIA team identified recommendations and described rationale for suggesting them. The rationale highlighted available evidence and provided supporting references.

	KEY FINDINGS	RECOMMENDATIONS	RATIONALE
AREAS	The findings were developed based on the literature review, data analysis and expert opinion (HIA Advisory Panel).	The recommendations were drawn from the findings and are intended to maximize health benefits while minimizing health risks.	The recommendations were based on evidence-based materials or expert opinion.
WASTE	• An increase in the number of large-scale swine or dairy operations will increase the amount of waste produced. • Increased amounts of waste might have a negative impact on air quality and increase risk for water pollution and soil contamination. The extent of this impact could depend upon the number and density of new operations and management practices.	**Kansas Department of Health and Environment and Kansas Department of Agriculture could consider:** (13) Exploring technologies and tools like the "Odor Footprint Tool" developed by the University of Nebraska to improve odor control.* (14) Conducting a statewide study of existing large-scale livestock operations' nutrient utilization plans (NUP) to determine if this process adequately regulates manure application in Kansas. (15) Identifying the volume of manure produced in Kansas and how much can be reasonably applied (specifically with potential increase in livestock operations). (16) Establishing and maintaining a publicly available database of all regulated animal feeding operations in Kansas. The database should include the name and location of each operation, the numbers and types of animals and animal units on each site, key characteristics of facility operations and waste management plans, and results of routine inspections or complaint investigations (e.g., similar to Iowa Database[315]).	**Utilizing "Best Practices:"[316]** (13) Using "best practices" and evidence-based tools such as the "Odor Footprint Tool", allows livestock operations to estimate and reduce problems with unpleasant odor around existing or proposed livestock facilities. This tool also provides information to determine the minimum separation distances that should be maintained around those facilities and helps in siting decisions. Additionally, tools like this one can help to compare odor control technology options for a facility.[317] **Surveillance and Monitoring:** (14) (15) Monitoring the volume of manure produced could assist the state in developing appropriate plans for land application and disposal procedures of excess manure. (16) An online database would provide access to information about Kansas livestock operations (e.g., location, animal numbers, environmental or geological reviews; and details about manure management plans, production areas, manure storage structures and treatment systems). The database would support effective monitoring and planning.

Source: KHI Corporate Farming HIA, 2015.

SOLUTION C: Review existing sources (e.g., County Health Rankings, CDC Community Guide) to identify potential best or evidence-based practices.

Nationally, several databases,[78] tools and other resources exist that provide information on evidence-based practices and programs. These resources are typically sponsored by federal agencies or other research organizations that rate practices at different levels based on evidence of effectiveness for their outcomes. Generally, these resources aim to help users identify practices that can be implemented or adapted to their local setting. Given the interdisciplinary nature of HIAs, HIA practitioners need to identify tools and resources relevant to their HIA. For example, HIA practitioners who work on criminal justice HIAs can identify evidence-based practices through the National Institute of Corrections' database.[79] *What Works Clearinghouse* is another example of a database that reviews existing research on different programs, practices and policies in education.[80]

It is important to note that there is no general cross-disciplinary repository of evidence-based practices. In addition, some areas or topics might not have a dedicated database for finding these practices. In these instances, HIA practitioners could consider identifying evidence-based practices through the literature review process.

SOLUTION C EXAMPLE

HIA: Potential Health Effects of Expanding Liquor Licenses to Grocery and Convenience Stores[81]

Organization: Kansas Health Institute

The HIA team developed the majority of the recommendations based on the Centers for Disease Control and Prevention (CDC) Community Guide. This database was selected based on the number and variety of practices related to the HIA topic. The database also described the strength of the evidence and potential intervention costs. Below is an example of a recommendation that was developed based on the Community Guide.

Finding	Recommendation	Rationale
Changes in alcohol outlet density and consumption may result in a small increase in DUI rates and/or traffic accidents and related mortality for the general population.	Increase sobriety checkpoints, especially in areas where there is an increased density of off-premise alcohol outlets.	According to evidence from the Community Guide, research and expert opinion, sobriety checkpoints are effective measures to identify intoxicated drivers and reduce the risk of traffic accidents.

HIA Resources Available to Address this Challenge

Several resources were developed by HIA practitioner organizations to address this challenge. The table below highlights resources by author and recommended content. Please click on the *Authors* link to access the original resource when reading the online version of this *Handbook*.

Resource	Authors	Recommended Content
Challenge 1. *It is difficult to find evidence-based recommendations.*		
County Health Rankings[82]	The Robert Wood Johnson Foundation and the University of Wisconsin Population Health Institute	**Review existing sources** — *County Health Rankings and Roadmaps, CDC Community Guide, Community Tool Box* are several resources that can be used to identify and create evidence-informed recommendations.
CDC Community Guide[83]	Centers for Disease Control and Prevention	
Community Tool Box[84]	The University of Kansas Workgroup for Community Health and Development	
Health Impact Project HIA Reports[85]	Health Impact Project	**Review similar HIAs** — *Health Impact Project — HIA Reports* includes an online collection of more than 400 completed HIAs. This resource can be used to identify evidence-informed recommendations from HIAs on similar topics.

Empower others to spearhead implementation of recommendations

Challenge 2. *Implementation of recommendations is outside of the HIA scope and timeline.*

What Would an HIA Practitioner Do?

A. Create short, medium and long-term implementation plan for recommendations.

B. Identify champions and create an actionable plan during the HIA.

C. Work with stakeholders to incorporate recommendations into their organizational plans.

Overview of the Challenge

In general, HIA recommendations are suggestions and not mandatory. During the *Recommendations* step of an HIA process, the HIA team usually identifies options for maximizing potential health benefits and mitigating potential health risks. Although the HIA team usually develops recommendations during the decision-making process, their consideration and implementation often fall outside of the HIA project end date. As a result, the implementation of the HIA recommendations depends on the buy-in of decision-makers and stakeholders and their interest in carrying them out. In instances where stakeholder and decision-maker ownership of recommendations was not established during the HIA process, the HIA recommendations might not be acted upon. As a result, the HIA could have a limited impact on the decision.

SOLUTION A: *Create short, medium and long-term implementation plan for recommendations.*

In general, HIAs produce a large number of recommendations that aim to maximize potential health benefits and mitigate potential health risks. The implementation of each recommendation might require changes in the existing regulatory process development of new regulations, identification of funding, among others. In order to increase the likelihood of implementing recommendations, the HIA team, in collaboration with stakeholders, could consider prioritizing recommendations as short, medium or long-term. The prioritization criteria could include: political will, availability of funding, magnitude of potential impact on health, or likelihood of a decision to have a disproportional effect on vulnerable populations.

> **"**
>
> *Invest your time in listening to stakeholders and energizing them about HIA recommendations.*
>
> *– Survey Respondent*
>
> **"**

SOLUTION B: Identify champions and create an actionable plan during the HIA.

Given that HIA recommendations are usually implemented after the completion of an HIA, it is critically important to identify and empower decision-makers or stakeholders to carry them out. In order to create these champions, the HIA team needs to have a clear understanding of which organizations or individuals are likely to have leverage and authority to move the needle. Face-to-face meetings with each organization can help to identify their priorities and assess potential interest in implementing future recommendations.

SOLUTION C: Work with stakeholders to incorporate recommendations into their organizational plans.

Another strategy to ensure that recommendations are considered and implemented is to identify opportunities for incorporating recommendations into the organizational plans of stakeholders. In these instances, recommendations could be embedded into existing processes such as strategic planning and community health improvement planning.

SOLUTION B EXAMPLE
HIA: Potential Health Effects of Proposed Public Transit Concepts in Wichita, Kansas[86]
Organization: Kansas Health Institute

During the Wichita Transit HIA, the team identified two key decision-makers who were interested in facilitating the implementation of the HIA recommendations—the director of the Wichita Transit and a city council member. In order to sustain their buy-in, the HIA team continued to work closely with them during the HIA process by providing regular updates, sharing findings and aligning the release of the HIA with their timeline. As a result, these individuals played an instrumental role in the adoption of two HIA recommendations.

> **"**
>
> *Huge challenge. When identifying the responsible parties, try as best as you can to get their buy-in and make them feel accountable.*
>
> *– Survey Respondent*
>
> **"**

HIA Resources Available to Address this Challenge

Several resources were developed by HIA practitioner organizations to address this challenge. The table below highlights resources by author and recommended content. Please click on the *Authors* link to access the original resource when reading the online version of this *Handbook*.

Resource	Authors	Recommended Content
Challenge 2. *Implementation of recommendations is outside of the HIA scope and timeline.*		
Improving Health in the United States: The Role of Health Impact Assessment[87]	National Research Council	**Energize stakeholders to lead implementation** - *Improving Health in the United States: The Role of Health Impact Assessment* (page 70) discusses strategies to encourage stakeholder leadership in the implementation of recommendations.
Improving Health in the United States: The Role of Health Impact Assessment[88]	National Research Council	**Create a monitoring plan - Improving Health in the United States:** *The Role of Health Impact Assessment* (page 71) recommends developing an implementation plan for each recommendation to distribute the sense of responsibility for implementation beyond the initial project team.
Potential Health Effects of Legalizing Medical Marijuana in Kansas[89]	Kansas Health Institute	**Create a monitoring plan** — *Potential Health Effects of Legalizing Medical Marijuana in Kansas* includes an example of a monitoring plan (page 77). This resource can be adapted.

Challenges and Solutions

The table below includes challenges and solutions that HIA practitioners might experience during the *Recommendations* step of the HIA. The light bulb icon 💡 means that this challenge was discussed in detail in the *Recommendations* section.

Challenge	Potential Solutions
It is unclear what processes and/or policies already exist that are relevant to the proposed plan/project/policy.	• Incorporate review of polices in the project scope/assessment step. • Ask stakeholders who work in relevant agencies to provide information on current policies.
💡 *It is difficult to find evidence-based recommendations.*	• Capture potential recommendations during the literature review. • Provide rationale for each recommendation. • Review existing sources and databases from various sectors (e.g., County Health Rankings, CDC Community Guide) to identify potential best or evidence-based practices. • Use third-party expertise and be transparent about how recommendations were created.
Stakeholders disagree with the recommendations included in the HIA.	• Consider creating recommendations with stakeholders. • Identify groups that might be more opposed to recommendations than others and work with them to create recommendations. • Use surveys to capture stakeholder feedback on recommendations. • Identify the recommendations that have been prioritized by stakeholders. • Create rationale and provide existing evidence for each recommendation.
It is unclear what accepted standards/ practices exist in the field associated with the proposed plan/project/ policy.	• Work with the industry stakeholders to identify and capture common practices if they are not already in writing.
It is unclear how to determine if recommendations are feasible.	• Define the term "feasibility" (e.g., political will, budget, interest, momentum). • Identify and recruit subject-matter experts that can discuss each recommendation in terms of its feasibility.

Challenge	Potential Solutions
It is unclear what agencies/parties should be responsible for implementing the recommendations.	• Use team expertise to assign responsible parties. • Solicit HIA stakeholder/advisory panel's perspectives on the assignments. • Review existing plans to see how responsible parties are usually assigned.
It is difficult to obtain stakeholder feedback on recommendations.	• Offer multiple ways to provide feedback: survey, phone call, in-person meeting, email, written feedback.
It is unclear how to keep relevant stakeholders informed through this step.	Roles for stakeholders during the development of recommendations: • Review and summarize existing regulations; • Help create recommendations; • Provide feedback on recommendations; • Determine feasibility and responsible parties; and • Help share recommendations with others.
Stakeholders are attempting to develop recommendations based on their agenda.	• In collaboration with stakeholders, develop clear criteria for recommendations (e.g., alignment with findings, evidence-informed, support community needs, financially and politically feasible). • Building consensus around recommendation criteria can make it easier for parties to agree on the final recommendations.
Stakeholders offer recommendations that do not align with HIA findings.	• Identify if there are any relevant findings. If not, do not add recommendations. • Consider creating a "good ideas" section and highlight suggestions that do not align with any findings.
Implementation of the recommendations is outside the HIA project scope and timeline.	• Create a robust plan for implementing recommendations. • Energize stakeholders to lead implementation of relevant recommendations. • If possible, create opportunities to follow up on the implementation. • Prioritize recommendations that can be implemented short-term.
There is no momentum to implement recommendations put forth in the HIA.	• Prioritize recommendations that can be implemented short-term (e.g., no funding and no political will necessary). • Energize stakeholders to lead implementation of relevant recommendations. • Create a robust plan for the future and assign responsible parties.
It is unclear what criteria to use for recommendations development (e.g., feasibility, impacted, population).	• Review HIAs and adapt recommendation criteria as applicable. • Make sure that stakeholders agree with the criteria for the recommendations.

Notes:

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Overview of the Reporting Step

Reporting is the fifth step of an HIA process. It includes the distribution of findings to decision-makers and others involved with the HIA.

According to several national resources,[90][91][92] the following tasks should be performed during the *Reporting* step:

- Create a publicly accessible report;

- Create a succinct summary;

- Provide stakeholders and decision-makers with opportunities to review the report and suggest feedback; and

- Use different communications strategies to disseminate the report.

Figure 8 describes key elements that need to be considered during the *Reporting* step of an HIA.

Figure 8. **Key Elements of the Reporting Step of a Health Impact Assessment (HIA)**

Source: KHI HIA Handbook for Practitioners, 2017.

Create a detailed report

Challenge 1. *The report is too lengthy or too complex.*

✎ What Would an HIA Practitioner Do?

A. Create a communications plan.

B. In order to decrease the length of a report, the HIA team could set a page limit, create a detailed outline, write with the final document in mind, and prioritize information based on its value.

C. In order to make sure that the report is easy to read and follow, the HIA team could use visuals (e.g., infographics) as much as possible; color-code outline and sections, maintain consistent flow (e.g., use the same framework/features in each chapter).

Overview of the Challenge

According to the *Minimum Elements and Practice Standards*, the HIA team "should produce a publicly accessible final report that includes, at minimum, the HIA's purpose, findings, and recommendations." In addition, the Standards specify that the "report should also include the process involved in arriving at findings and recommendations (e.g., assessment methodology and recommendation setting approach).[93] In general, the assessment process produces a large volume of information. As a result, many HIA reports are between 30 and 100 pages long, but it is not uncommon for reports to be significantly longer. Although the HIA reports contain valuable information, their length can obscure relevant information and make it harder for users to identify key points. This challenge can prevent key readers from using this information for their decisions and actions.

> " *Some information should be placed in an appendix and the narrative portion should have key graphs or charts to illustrate important findings.*
> – Survey Respondent "

SOLUTION A: Create a communications plan.

At the beginning of the HIA process the team should consider developing a communications plan. Without a plan, it might be challenging to identify how to communicate the HIA findings and recommendations in a format different from a technical report. The communications plan can help to identify different products. These products will be more streamlined, include only key components, thus may be tailored to different audiences

avoiding challenges that are associated with long and complex technical reports.

SOLUTION B: Set a page limit, create a detailed outline, write with the final document in mind, and prioritize information based on its value.

In order to estimate the number of pages per section, HIA practitioners could develop an overall product outline. In general, the content of an outline is structured around the identified HIA impacts. Thus, the development of an outline could be conducted after the *Scoping* step is completed and a list of impacts is finalized. However, during the *Assessment* step, the HIA practitioners might need to modify the outline as some identified impacts might not be feasible to study due to a lack of data and/or research. *Figure 9* provides an example of an overall outline for the Potential Health Effects of Legalizing Medical Marijuana in Kansas final report. The table of contents includes section headings and an estimated number of pages. The writers of an HIA report can develop sections based on their estimates and potentially eliminate the need to cut down the information later.

In addition to an overall outline, the HIA practitioners can develop a detailed outline for each section of the HIA report. The purpose of this outline is to provide further guidance and structure to the HIA report

writers. The detailed outline can include headings and subheadings. Under each heading, the HIA team can also include a brief overview of each section. This information can be used by the HIA report writers as a roadmap (*Figure 10*).

Figure 9. **An Overall Outline: Potential Health Effects of Legalizing Medical Marijuana in Kansas**

Table of Contents
About this Report (3 pages)..
Executive Summary (4 pages) ....
Overview of Legislation (1 page).......................................
Health Profile of Kansas (2 pages).....................................
HIA Methodology (2 pages)..
Analysis of health impacts (1 page) ....
Consumption of Marijuana (3 pages) ....
Crime (3 pages)..
Driving Under the Influence (3 pages) ....
Accidental Ingestion and Overdose (3 pages) ....
Vulnerable Populations (3 pages) ....
Other Issues (2 pages) ....
Findings and Recommendations (2 pages)................................
Appendices (4 pages) ....

Source: KHI Medical Marijuana HIA, 2015.

Figure 10. **Detailed Outline: Potential Health Effects of Legalizing Medical Marijuana in Kansas**

About this Report (3 pages)
This section will describe the purpose of the report, acknowledgements, and disclaimer.

Executive Summary (4 pages)
This section will provide a high-level overview of the decision under consideration, HIA process, research questions and summary of findings and recommendations.

Overview of Legislation (1 page)
This section will provide an overview of the proposed legislation and national perspective/landscape related to this issue.

Health Profile of Kansas (2 pages)
This section will describe Kansas demographics, health outcomes, health factors, including current rates of marijuana consumption.

HIA Methodology (2 pages)
This section will provide a high-level overview of Medical Marijuana HIA process and discuss limitation

Analyses of health impacts (1 page)
This section will list identified impacts in the context of a Pathway Diagram.

Consumption of Marijuana (3 pages)
This section will provide key findings and recommendations and discuss supporting evidence.

Key findings/recommendations
Connection to Health
Data
Literature
Stakeholders
Conclusion

Source: KHI Medical Marijuana HIA, 2015.

SOLUTION C: In order to make sure that the report is easy to read and follow, the HIA team could use visuals (e.g., infographics) as much as possible; color-code outline and sections, maintain consistent flow (e.g., use the same framework/ features in each chapter).

HIA reports include scientific information, data and industry-specific terminology. HIA practitioners are tasked with sharing this information in an engaging and easy-to-read manner. Several strategies can be used to improve the communications value of HIA reports.

The first strategy is a strategic use of visuals (e.g., maps, charts, graphs, table, pictures and infographics). This strategy allows for the display of large amounts of information in ways that are easy to understand and help establish relationships between decision impacts and health outcomes. The Potential Health Effects of Legalizing Medical Marijuana in Kansas report includes several infographics (*Figure 11*) that describe the potential impact of legalizing medical marijuana.

The second strategy is to create a color-coded reader's guide (*Figure 12*, page 68). This strategy can help to provide for easy navigation of the HIA report contents.

The last strategy is to maintain a consistent structure of each chapter by including the same sections. This approach will help readers follow each section and compare findings and recommendations. For example, all KHI HIA reports structure sections related to potential health impacts, as follows:

- Issue/impact;
- Portion of the pathway diagram related to the impact discussed in this section;
- Key findings and recommendations;
- Impact on health;
- What we learned from literature;
- What we learned from data;
- What we learned from stakeholders; and
- Conclusion (includes a characterization of impacts section).

Figure 11. **Post-Legalization National Rate of Marijuana-Related Traffic Fatalities**
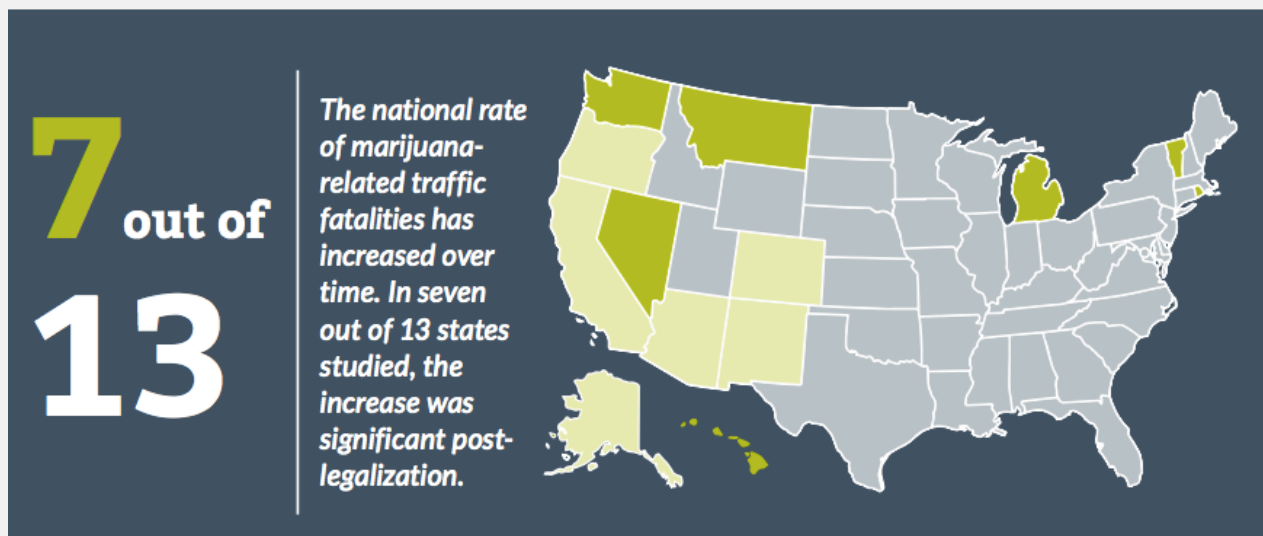
Source: KHI Medical Marijuana HIA, 2015.

Figure 12. **Page Avenue HIA—Color-Coded Outline Reader's Guide and Sections**[94]

Reader's Guide

The Page Avenue Health Impact Assessment is color-coded to provide for easy navigation of its contents. Each page contains a colored sidebar which indicates what component of the HIA one is looking at and to whom the content of that page is pertinent to.

This sidebar indicates that information on this page is relevant to state officials, county officials, developers, municipal officials, and residents.

This tab color indicates that you are located on the Reader's Guide page. Additional tab colors and their respective subjects are provided here:

Executive Summary   **Reader's Guide**
Summary of Recommendations
Introduction   **Overview of Redevelopment Area**
Project HIA Methodology
Priority Issues   **Challenges and Opportunities**
Identifying Redevelopment Options
References   **Appendices**   **Additional Resources**

Source: Page Avenue HIA Project, 2012.

HIA Resources Available to Address this Challenge

Several resources were developed by HIA practitioner organizations to address this challenge. The table below highlights resources by author and recommended content. Please click on the *Authors* link to access the original resource when reading the online version of this *Handbook*.

Resource	Authors	Recommended Content
Challenge 1. *The report is too lengthy or too complex.*		
Health Impact Assessment: A Guide for Practice[95]	Rajiv Bhatia, M.D., M.P.H.	**Use various communication strategies to share the HIA results —** *Health Impact Assessment: A Guide for Practice* (page 43) lists potential communication formats that may be appropriate for different audiences. The accompanying narrative can help practitioners select and justify the chosen format.
HIA Report Guide[96]	Human Impact Partners	**Develop an outline —** *HIA Report Guide* provides an example of an outline that can be used to guide the report writing. This strategy can help to prioritize information for the report.
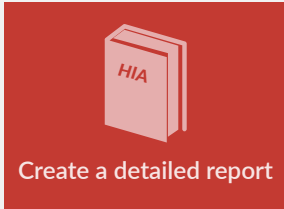
Challenge 2. *The report takes too long to write.*

Create a detailed report

What Would an HIA Practitioner Do?

A. Create an outline.

B. Create and follow writing standards.

C. Write report throughout the HIA process.

D. Avoid researching new information during the *Reporting* step.

Overview of the Challenge

To be effective, HIAs need to be completed during the decision-making process.[97] In many instances, HIA practitioners are able to complete four out of six steps of the HIA process but do not have enough time to develop the HIA report before the decision is made. The report development may take between several weeks and six months. Although the HIA team can still provide findings, recommendations and supporting evidence in a different format, absence of the HIA report could limit practitioners' ability to share all the evidence and make a compelling argument. Another issue to consider is that the longer the report development phase, the greater the amount of resources invested in writing the report. This issue could result in several negative consequences such as limited resources (time and funds) available to HIA practitioners for implementing the HIA recommendations and conducting evaluation efforts. Given time and resource constraints, HIA practitioners are often required to move to other projects and leave the implementation of recommendations largely in the hands of stakeholders and decision-makers.

> *Start creating the report during the HIA process to reduce the overall time.*
>
> *– Survey Respondent*

SOLUTION A: Create an outline.

An outline could assist HIA practitioners in prioritizing their writing efforts. It could also help to limit the length of the report by setting the number of pages per section. For a more detailed discussion of the outline, see Solution B on page 66.

SOLUTION B: Create and follow writing standards.

HIAs are usually conducted by a team. Although the size and composition of the team varies depending on the organization conducting the HIA, many teams include between two and four members. Each team member has a specific role

and is typically responsible for writing part of the HIA report. Having multiple authors might pose one key challenge—incorporating various perspectives and writing styles in one final, cohesive document. However, this challenge can be addressed by establishing and following writing standards. Writing rules will help ensure consistency in the report format and messaging, and should decrease the time needed for editing. The standards could discuss rules for: voice and tone, paragraph structure, verb tense, balance of words and images, among others.

SOLUTION B EXAMPLE
Example from KHI Writing Guide

Voice. KHI's publications are written in third person voice. Third person uses a more general voice that reflects neither the writer nor reader specifically, using words like "students" and "participants" and pronouns such as "he," "they" and "it." Good writing typically begins in one point of view and retains that perspective throughout in order to avoid confusion for the reader.

Tone. Because KHI is nonpartisan, it is crucial that the tone of our publications is clear and free of directives, like ""should" or "must," as well as opinions and advocacy. We provide expert analysis and contextualize material for the state of Kansas and its policy environment, so language might include, "analysis has shown...," or "policymakers could consider..." (*Figure 13*).

Keep it Simple. KHI content can be complex and, as a research organization, we are naturally compelled to explain all of the data and findings. However, if we do that, our audiences can quickly lose interest (unless they love data or are researchers themselves). It is critical that we cut extra words and explanations and get to the point, while preserving the science from the research.

When we begin to draft, we sometimes resort to **common but wordy expressions**. These clutter your writing, so prune them as you revise.

Empty expressions like "to all intents and purposes", "in fact" and "the fact is" and "in the process of" carry no information, so you should delete them.

"The passengers were ~~in the process of~~ boarding the plane when ~~in fact~~ the flight was canceled."

Figure 13. **Example of "Tone" for Nonpartisan Policy Analysis**

Policy Options for Reducing Food Insecurity in Kansas

Food assistance programs serve as a vital first line of defense in alleviating food insecurity and preventing hunger. However, many Kansas families who are eligible to receive food assistance are not getting it. For example, Kansas had one of the lowest state participation rates (69 percent) in the Supplemental Nutrition Assistance Program (SNAP, formerly called Food Stamps), in 2011, ranking 44th in the nation. That means that nearly one-third of individuals (31 percent) who are eligible do not receive SNAP benefits. Greater participation in this federally sponsored food assistance program could help to reduce food insecurity and hunger while also providing economic benefit to Kansas. The U.S. Department of Agriculture estimates that every $5 in SNAP benefits generates $9 in economic activity.

$47,453,630

Private Sector[4,5]
$66,901,638

School & Summer Meals[1,2]
$142,075,396

SNAP[1]
$591,518,300
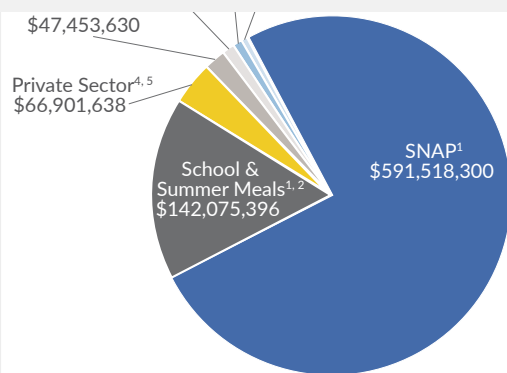
Source: 1) U.S. Department of Agriculture, Food and Nutrition Services program data. 2) FRAC, Profile of Hunger, Poverty and Federal Nutrition Programs, Kansas, 2012. 3) U.S. Department of Health & Human Services, Administration for Community Living, Administration on Aging (AoA) State Program Reports. 4) Feeding America "Hunger in America 2014," Kansas report. 5) Expenses from organizational annual reports with Kansas share prorated based on number of counties in service area. All data are the most recent that were available at the time of this report.

Source: KHI Issue Brief: Food Insecurity, 2015.

SOLUTION C: Write report throughout the HIA process.

Over the duration of the HIA process, practitioners create various documents, including a description of their HIA project, a baseline profile, an overview of the HIA methodology, history of the decision or a policy under consideration. To decrease the length of the report-writing phase and streamline the process, HIA practitioners could develop this information with the final report in mind. During the *Reporting* step, HIA practitioners would be able to incorporate this information into the HIA report with minor adjustments. To ensure effectiveness of this strategy, HIA practitioners should consider developing and finalizing a framework or an outline for each section. This approach would allow avoiding potential changes in the sections' content during the *Reporting* step.

SOLUTION D: Avoid researching new information during the Reporting step.

As practitioners assemble an HIA report, they recognize that some of the sections might benefit from additional information or research. This issue often arises in instances when stakeholders or an HIA team developed recommendations that do not align with findings or have adequate evidence to support them. Under these circumstances, some HIA teams decide to conduct additional research. Engagement in new assessment work during the *Reporting* step can substantially impact the project timeline and jeopardize the timely release of the report. In general, HIA practitioners should avoid researching new information during the *Reporting* step. However, this decision should be made after considering the potential added value of new information and the extent to which exclusion of this information from the report will impact the success of an HIA.

Key steps for developing HIA materials throughout the project

√ During the *Scoping step*, identify parts of the report that can be developed during the HIA process.

√ Assign HIA team members to certain parts of the report.

√ Train HIA team on the "writing guide standards."

√ Create a detailed outline for each document/section.

√ Insert documents/information into the HIA report.

> "
> *During the Reporting step, we identified that several of our HIA findings didn't have enough supporting evidence [...] we embarked on new research, and at the end of the day, didn't meet our critical timeline [...] will fight our temptation next time.*
>
> – Survey Respondent
> "

HIA Resources Available to Address this Challenge

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Resource	Authors	Recommended Content
Challenge 1. *The report takes too long to write.*		
HIA Report Guide[98]	Human Impact Partners	**Develop an outline —** *HIA Report Guide* provides an example of an outline that can be used to guide the report writing. This strategy can help to prioritize information for the report.
Improving Health in the United States: The Role of Health Impact Assessment[99]	National Research Council	**Develop the report throughout the HIA process —** *Improving Health in the United States: The Role of Health Impact Assessment* (page 73) describes how to report HIA information throughout the HIA process. Information shared throughout the HIA process can be incorporated in the HIA report without additional effort.

Challenges and Solutions

The table below includes challenges and solutions that HIA practitioners might experience during the *Reporting* step of the HIA. The light bulb icon 💡 means that this challenge was discussed in detail in the *Reporting* section.

Challenge	Potential Solutions
It is unclear how to structure the report.	• Review model reports available through SOPHIA, UCLA HIA Clearinghouse and Health Impact Project. Determine key sections that the report should have. • Utilize Microsoft Office tools such as the table of contents.
💡 *The HIA report is too big or too complex.*	If HIA report is too big: • Set page limit; • Create an outline that helps to prioritize information; and • Create more than one product—a short, summary product (1–2 pages) and a longer technical report. If the HIA report is too complex: • Use visuals (infographics) as much as possible; • Include a color-coded reader's guide (page 68) and sections; • Maintain consistent flow (e.g., use the same framework/features in each chapter); and • If possible, seek input from a communications expert.

Challenge	Potential Solutions
The HIA report takes too long to develop.	• Create a clear outline. • Create and follow writing standards. • Write report during the HIA process. • Avoid changing scope during the *Reporting* step. • Create a timeline and adhere to it. • Reduce the number of people involved in the report production.
There is a lack of communications staff or expertise to create the report.	• Think about communications needs at the beginning of the HIA so that budget considerations can be made for communications assistance. • Utilize partners, interns, etc.

It is unclear how to disseminate HIA findings to audiences of interest.	• Identify how these audiences are communicated with.
	• Talk to various organizations or individuals that know the needs of the audience: legislators, lobbyists, legislative staff, community organizers, service organizations.
	• Consider what format is most appropriate for intended audience. For example:
	  – Legislators: short, product, (e.g., memo, testimony, two-page summary);
	  – Community stakeholders: videos/webinars;
	  – Stakeholders: webinars; and
	  – Researchers: short and long technical reports.

It is unclear how to inform decision-makers of the HIA report and/or findings and recommendations.	• Identify if there is an open process for public input to present or provide information. • Create a plan for communicating recommendations during the *Screening* step. • Identify opportunities for interacting with decision-makers. • Leverage the contacts and relationships of partners.
The key audiences of the HIA report are difficult to determine.	• HIAs ultimately need to end up in the hands of decision-makers or those whose opinions the decision-makers value. • Review documentation that describes who was historically engaged in the process. • Another key audience for the HIA report is those who would be impacted by the decision.

Overview of the Monitoring/Evaluation Step

Monitoring/Evaluation is the sixth step of an HIA process. This step helps determine future health impacts resulting from policy changes and assesses the HIA process, results and lessons learned.

According to several national resources,[100] [101] [102] the following tasks should be performed during the *Monitoring/Evaluation* step:

- Conduct process, impact and outcome evaluations;

- Develop a monitoring plan; and

- Make monitoring and evaluation results available to the public.

Figure 14 describes key elements that need to be considered during the *Monitoring/Evaluation* step of an HIA.

Figure 14. **Key Elements of the Monitoring/Evaluation Step of a Health Impact Assessment (HIA)**

STEP 6: MONITORING/EVALUATION

Examine effectiveness of the HIA design and process

Understand the HIA impact on decision and decision-making process

Communicate results to decision-makers, community and stakeholders

Set up a plan to capture the effect of decision on health outcomes

Source: KHI HIA Handbook for Practitioners, 2017.

Understand the
HIA impact on decision and
decision-making process

Challenge 1. *It is difficult to assess the impact of the HIA on the decision, implementation or outcomes.*

What Would an HIA Practitioner Do?

A. Include monitoring of the HIA decision implementation in the organization's strategic plan or work with other organizations to undertake this activity.

B. Conduct evaluation throughout the process and use a variety of data-gathering methods (e.g., conversations with decision-makers and/or a media content analysis to capture any change in conversation on the subject).

Overview of the Challenge

There are multiple reasons for evaluating HIAs. For example, researchers emphasize the need for "assessing whether they provide the expected impacts, improving methods, identifying positive and negative unintended consequences, and justifying requests for future resources."[103]

However, many HIA practitioners wrestle with how to meaningfully measure the influence of health impact assessments on decisions and their subsequent results. Factors that contribute to this challenge include:

- Difficulty in attributing decisions' outcomes to HIA findings and recommendations;

- Timeliness of the decision implementation. The implementation of the decision could take from several months to several years. In these instances, it might not be feasible to carry out evaluation efforts due to availability of resources. In addition, organizations who conduct HIAs have to move to other projects after the HIA is completed and have limited ability to continue to monitor the implementation of the HIA-relevant decision and its results; and

- Changes in determinants of health and health outcomes take a long time.

While the HIA field has not yet fully resolved these challenges, HIA practitioners should continue to identify opportunities for measuring HIAs' impacts, capturing their successes and lessons learned. This information can help to inform the field.

SOLUTION A: Include monitoring of the HIA decision implementation in the organization's strategic plan or work with other organizations to undertake this activity.

Building relationships with organizations that are well-positioned to monitor the decision's impacts takes time. HIA practitioners should consider starting this process during the *Scoping* step of the HIA. Although specific metrics for future monitoring are usually determined during the last step of the HIA, HIA practitioners, in collaboration with partners, could identify the existing processes that can include monitoring of the HIA's results. In addition, HIA practitioners could also explore opportunities for incorporating monitoring activities into their organization's work plan or strategic plans. In such a case, monitoring might not be affected by employee turnover.

SOLUTION A EXAMPLE
KHI Health Impact Assessments
Organization: Kansas Health Institute

Since 2010, KHI has conducted six health impact assessments. These HIAs included process and impact evaluation. In general, the evaluation conducted during these HIAs was able to measure the fidelity to which HIAs were conducted according to established practice standards. These standards measure the degree to which HIAs have increased stakeholder understanding of the relationship between decisions and health, and in some instances, the impact of HIAs on discussion around the issue and implementation of the HIA recommendations. After completion of the HIAs, KHI had to embark on other projects and was not initially able to monitor any further impacts. However, it made a strategic decision to incorporate monitoring into ongoing activities. For example, KHI committed its own resources to a project called "HIA in Action." This project is dedicated to maintaining contact with key decision-makers and implementers of the decisions on which KHI conducted HIAs. This allows KHI to keep updated on the progress of the decision implementation and to track adoption of various recommendations.

In addition, KHI regularly monitors committee hearings during the Kansas legislative session. This strategy allows KHI to identify opportunities for providing testimony when bills related to previous HIAs emerge.

SOLUTION B: Conduct evaluation throughout the process and use a variety of data-gathering methods (e.g., conversations with decision-makers or a media content analysis to capture any change in conversation on the subject).

Conducting an evaluation throughout the HIA process can help provide timely data and make sure that future HIA activities are informed by these results. For example, HIA practitioners can administer short surveys during each step of the HIA process to assess stakeholder satisfaction with the process, including their level of participation, inclusiveness in the decision-making process, and changes in knowledge and awareness about health impacts. In addition to surveys, HIA practitioners can examine communication content of the media as related to the plan/project/policy, and understand to what degree the HIA is shaping or changing the narrative around the issue. A media content analysis can also help to capture decision-makers' action related to HIA recommendations. (For more information about how to conduct the media content analysis, please see page 27.) As HIA practitioners implement various evaluation strategies, it is important to keep in mind that decision-makers can play a critical role in understanding to what degree the HIA results have helped inform the decision. To capture decision-maker perspectives, HIA practitioners can include them in the formal assessment processes (e.g., key-informant interviews, surveys, focus groups) or regularly meet with them to capture just-in-time feedback.

> " *Interviews with decision-makers are effective to a degree, but I wonder if this needs to happen throughout the process. Not long interviews, but 'check-in' type interviews. So much changes during the process that a final interview does not really capture the total impact the HIA has on the minds of the decision-makers.* "
>
> – *Survey Respondent*

HIA Resources Available to Address this Challenge

Several resources were developed by HIA practitioner organizations to address this challenge. The table below highlights resources by author and recommended content. Please click on the *Authors* link to access the original resource when reading the online version of this *Handbook*.

Resource	Authors	Recommended Content
Challenge 1. *It is difficult to assess the impact of the HIA on the decision, implementation or outcomes.*		
UCLA HIA — Clearinghouse Learning Information Center — Completed HIAs[104]	UCLA HIA Clearinghouse	**Review similar HIAs —** *UCLA HIA — Clearinghouse Learning Information Center — Completed HIAs* includes an online collection of completed HIAs. This resource can be used to review evaluation frameworks, tools and outcomes.
Improving Health in the United States: The Role of Health Impact Assessment[105]	National Research Council	**Use various data gathering methods** — I*mproving Health in the United States: The Role of Health Impact Assessment* (page 78) articulates this challenge to demonstrate impact. Additionally, it discusses potential ways to indicate the influence or contributions of the HIA to the decision-making process.
HIA Summary Guides[106]	Human Impact Partners	**Discuss opportunities for funded evaluation** — Extending the funded timeframe of the project can ensure that adequate resources are available to assess the impact of the HIA on decisions, implementation, and outcomes. The *Essential Tasks* listed in this resource speak to this as well.
A Health Impact Assessment Toolkit: A Handbook to Conducting HIA[107]	Human Impact Partners	**Use various data gathering methods** — *A Health Impact Assessment Toolkit: A Handbook to Conducting HIA* lists types of sources that can be used to capture the impact of an HIA (page 85).
A Health Impact Assessment Toolkit: A Handbook to Conducting HIA[108]	Human Impact Partners	**Review data sources used in other HIAs** — *A Health Impact Assessment Toolkit: A Handbook to Conducting HIA* includes a broad array of data sources and resources for initiating or conducting an HIA (Appendix E, page 1). This resource can be used to inform the monitoring plan.

Challenges and Solutions

The table below includes challenges and solutions that HIA practitioners might experience during the *Monitoring/Evaluation* step of the HIA. The light bulb icon💡means that this challenge was discussed in detail in the *Monitoring/Evaluation* section.

Challenge	Potential Solutions
The difference between process, impact and monitoring plan is unclear.	• Review HIA-specific guidance on evaluation.
It is unclear if you need approval from an Institutional Review Board (IRB) for completing the evaluation.	• Complete Protecting Human Subjects Training. • Review funder's IRB requirements. • Contact local academia for guidance. • Consider doing IRB as the best practice.
It is unclear how to structure the monitoring plan.	• Review examples of HIA monitoring plans. • Determine which common elements of HIA monitoring plans are most appropriate to the project. • Create the monitoring plan with stakeholders. • Create a data inventory for the project and use it to determine measures/data sources for the monitoring plan.
It is unclear how to use the results from the evaluation.	• Determine evaluation goals at the beginning of the project. • Decide from the beginning how the results will be used. • Conduct process evaluation several times during the process to improve the project as you go. • Use the final process evaluation results to improve future HIAs. • Share evaluation results with other HIA practitioners.
It is unclear how to write meaningful evaluation questions.	• Create clear goals for the HIA evaluation. • Use HIA standards to develop questions. • Review evaluation questions from other HIAs.
The evaluation step is required to be completed too close to the end of the HIA project.	• Assess short-term impacts (e.g., changes in knowledge, attitudes about health and the social determinants of health). • Discuss opportunities with the funder to extend the timeline for the evaluation. • Identify best available measures. • Use a variety of data-gathering methods (e.g., media analysis to capture any change in conversation on the subject). • Review and adapt methods used in national studies.
💡 ***It is difficult to assess the impact of the HIA on the decision, implementation or outcomes.***	• Include monitoring of the HIA decision implementation in the organization's strategic plan or work with other organizations to undertake this activity. • Conduct evaluation throughout the process and use a variety of data-gathering methods (e.g., conversations with decision-makers and/or a media content analysis to capture any change in conversation on the subject).

Issues to Address in Future HIA Publications

As part of the development of this resource, a survey was conducted to solicit input from the broader health impact assessment community. This survey was used to prioritize a list of challenges presented in this resource, so that the challenges featured in this *Handbook* could represent common experiences from across the field. Next, the authors of this *Handbook* reviewed HIA-related documents (e.g., guides, toolkits, articles) to identity resources that can inform these challenges. In general, most of the identified challenges could be somewhat addressed through existing resources. However, several challenges could benefit from additional discussion and/or research. *Figure 15* can be used to inform the focus of future publications.

Figure 15. **Challenges that Can Benefit from Additional Discussion in Future Publications**

HIA Step	Challenge
General	• Existing HIA tools are under-utilized. • HIA budget does not align with the needed resources. • HIAs sometimes do not follow practice standards. • Some HIAs are conducted with a purpose to advocate for a specific issue(s).
Screening	• "Reinventing the wheel" instead of using existing screening tools. • Stakeholders disagree about what the proposed plan/project/policy would do. • HIAs identified before screening and the *Screening* step becomes irrelevant.
Scoping	• HIA projects need to be identified early (before the decision is on the horizon). • It is unclear what to do with issues that the community have prioritized, but were scoped out of the HIA. • Not enough time is spent on understanding the environment before "jumping" in to conducting an HIA.
Assessment	• Data are not publicly or electronically available. • The way the data are broken down differs across data sets. • HIA findings are not specific (there is no standard for HIA findings). • It is unclear how to quantify the number of people that might be impacted by the proposed plan/project/policy.
Recommendations	• It is unclear what processes and/or policies already exist that are relevant to the proposed plan/project/policy.
Reporting	• It is unclear how to structure an effective report.
Monitoring/Evaluation	• Limited number of available evaluation and monitoring examples.

Source: KHI HIA Handbook for Practitioners, 2017.

Crosswalks

Several additional tools and processes have been developed to help communities across the country transform and improve their health. Hospitals and local and state health departments have been engaged in community health (needs) assessments (CHA) and community health improvement planning (CHIP) processes. Nationally, states are exploring the feasibility of defining and providing foundational public health services, a suite of skills, programs/activities that must be available in state/local health departments system-wide.[109] KHI researchers found that as of 2016, eight states have identified models for providing foundational public health services. Many public health organizations have also been undertaking quality improvement (QI) efforts in order to improve their operations, programs and achieve measurable results. All of these efforts, including HIAs, share a common goal of improving community health. However, these processes are usually implemented separately from conducting health impact assessments. HIAs can play an important role in these efforts to improve community health.

Health Impact Assessments and Quality Improvement

Many entities (e.g., public health departments, hospitals) that are a part of the public health system recognize the role of QI in improving performance, efficiency and outcomes. Although there are a number of QI processes that exist, such as Six Sigma,[110] Lean,[111] Kaizen,[112] Plan-Do-Study-Act,[113] many of these processes include similar approaches.

In general, quality improvement includes several steps. It usually starts with diagnosing the situation by collecting baseline data. During the next phase, intervention plans are developed and implemented. It is critically important to collect and analyze post-intervention data in order to measure change (improvement) and determine the need for adjusting the intervention.

HIA practitioners could benefit from integrating QI into the HIA process. This strategy would allow HIA practitioners to timely identify and understand the ways in which the HIA could be improved and make enhancements throughout the HIA process. Additionally, QI tools such as Affinity Diagram or Brainstorming can be used during the HIA *Screening* step to identify a decision and the "Five Whys" exercise can be used during the HIA *Scoping* step to identify potential impacts. Furthermore, a *Plan-Do-Study-Act* (PDSA) cycle can be conducted within each step of the HIA process or between the steps.

Example — PDSA incorporated in the HIA *Scoping* step:

- (Plan) Develop a scoping approach;
- (Do) Identify impacts;
- (Study) Review identified impacts with stakeholders and communities; and
- (Act) Make changes based on their feedback.

Example — PDSA incorporated between the HIA steps:

- (Plan) Develop and execute the *Scoping* step of an HIA (e.g., identify impacts, create a pathway diagram);
- (Do) Conduct analysis of the identified impacts during the *Assessment* step;
- (Study) Share findings with stakeholders and communities; and
- (Act) Make changes based on their feedback.

Figure 16 on page 81 shows how PDSA cycle can be incorporated between *Scoping* and *Assessment* steps, as well as QI tools that can be used during each HIA step.

"Quality Improvement in Public Health is the use of a deliberate and defined improvement process, such as Plan-Do-Check-Act, which is focused on activities that are responsive to community needs and improving population health. It refers to a continuous and ongoing effort to achieve measurable improvements in the efficiency, effectiveness, performance, accountability, outcomes, and other indicators of quality in services or processes which achieve equity and improve the health of the community." [114]

Figure 16. **Incorporating Quality Improvement (QI) in Health Impact Assessments**

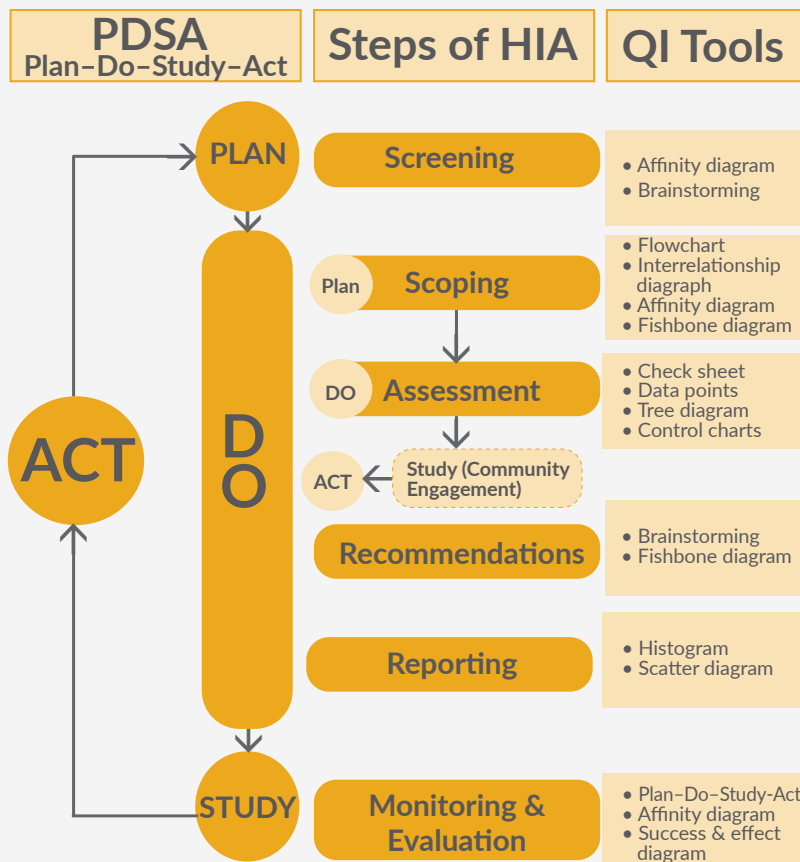| Why QI in HIA? |
| --- |
| HIA is a tool that intends to maximize positive health outcomes of a policy or project. QI aids this process by maximizing efficiency, effectiveness, and quality of the HIA process. |
| Both are multi-step processes that align well (see figure below). |
| QI can help make HIA more efficient by including potential cost-saving measures by cutting out unnecessary steps. |
| QI can minimize mistakes by providing timely feedback. |
| HIA work is continuous through its monitoring of past projects and potential new HIA topics—both of which lend themselves to QI. |

Incorporating QI into HIA:

PDSA Plan–Do–Study–Act	Steps of HIA	QI Tools
PLAN	Screening	• Affinity diagram • Brainstorming
	Plan — Scoping	• Flowchart • Interrelationship diagraph • Affinity diagram • Fishbone diagram
	DO — Assessment	• Check sheet • Data points • Tree diagram • Control charts
ACT — DO	ACT ← Study (Community Engagement)	
	Recommendations	• Brainstorming • Fishbone diagram
	Reporting	• Histogram • Scatter diagram
STUDY	Monitoring & Evaluation	• Plan–Do–Study-Act • Affinity diagram • Success & effect diagram

Source: KHI HIA Handbook for Practitioners, 2017.

Health Impact Assessments and Community Health Assessment

According to the Centers for Disease Control and Prevention (CDC), a community health assessment identifies key health needs and issues at a state, tribal, local, or territorial level through systematic, comprehensive data collection and analysis.[115] The main goal of a community health assessment is to develop strategies to address the community's health needs and identified issues.[116]

Over the past several years, many hospitals and health departments across the county have conducted Community Health Assessments (CHA) or Community Health Needs Assessments (CHNA) (herein after referred to as CHA). Hospitals efforts in this area began due to the statutory requirement for non-profit hospitals to conduct CHNA under the Patient Protection and Affordable Care Act (ACA).[117] In the meantime, local and state health department CHAs have also been driven by the accreditation requirement under the Public Health Accreditation Board.[118]

As hospitals and health departments continue to complete CHA, they can maximize these efforts by drawing upon tools and approaches that are available in other fields, such as the health impact assessment field.

- *Option 1:* Conduct HIAs or incorporate separate HIA steps into CHA process conducted according to the Mobilizing for Action through Planning and Partnerships (MAPP) framework. By conducting HIAs or their steps, hospitals and local health departments can develop or enhance skills that are required for CHA. As a result they will have the full benefit of a completed HIA and enhanced skills.

- *Option 2:* Incorporate HIA tools/approaches into CHA process. HIA offers a unique set of tools that can be adapted for CHA needs. For example, the HIA Pathway Diagram approach and tool can be used during two to four phases of the CHA (MAPP) process to identify and describe community themes and strategic issues.

- *Option 3:* Use information included in local HIAs or those completed in other states to inform various phases of CHA, including its assessment efforts. Although HIAs usually assess specific issues, they include comprehensive information related to these topics. For example, an HIA that focuses on a transportation plan would include data related to traffic mortality, accidents, air quality, and physical activity, among others. Agencies conducting CHA can use this data analysis to inform their CHA data collection efforts. If local HIAs are not available, public health agencies can use existing HIA reports to identify potential sources of data, indicators, analytical approaches, example of survey questions, and effective strategies, among others.

Figure 17 (page 83) provides a crosswalk between the CHA (MAPP) process and HIA skills and steps. Specifically, the crosswalk describes:

- CHA-relevant skills that public health professionals can gain by participating in each HIA step; and

- HIA tools/approaches that can be used during the CHA process.

Figure 17. **Crosswalk Between Community Health Assessment (CHA) and HIA**

Legend:

Blue boxes – Highlight skills that are necessary to perform both process CHA (MAPP) and HIA. By participating in HIA or HIA steps, public health professionals can enhance these skills.
Green boxes – Highlight HIA tools, steps and processes per HIA step that can be used to support each phase of the CHA (MAPP) process.

Community Health Assessment Process	HIA Skills and Tools that Can Be Used To Support CHA (MAPP)	Applicable HIA Step	*Description of how HIA steps can be used to inform CHA efforts*
Phase 1. Organize for Success & Partnership Development Organizing the planning process and developing the planning partnership.	• Project management, ability to engage stakeholders/communities/decision-makers		*– During the HIA **Screening Step***, it is essential to develop a project plan and establish collaboration with decision-makers, stakeholders and communities. By engaging in this step, public health professionals will be able to increase their skills in project management and authentic engagement of various groups. *– During the HIA **Scoping Step***, goals are finalized and impacts are recorded in a Pathway Diagram. HIA tools such as Pathway Diagram can be used during two to four phases of the CHA MAPP process to identify and describe community themes and strategic issues. *– The HIA **Assessment Step*** includes the development of a baseline profile and data analysis. This information can be used to inform the CHA assessment. By participating in this step, public health professionals will also increase their skills in qualitative and quantitative research.
	• HIA screening tools can be used to identify stakeholders • HIA-involved audiences can be well-positioned to participate in CHA	*Screening*	
	• Existing HIA reports can be used to identify various types of stakeholders from non-health sectors (e.g., transportation)	*Reporting*	
Phase 2. Visioning Create a shared community vision and common values.	• Ability to develop clear goals/objectives, facilitation skills, consensus building		
	• HIA scoping worksheet/Pathway Diagram can be used for the CHA visioning exercise	*Scoping*	

Community Health Assessment Process	HIA Skills and Tools that Can Be Used To Support CHA (MAPP)	Applicable HIA Step
Phase 3. The Four Assessments • Identify community themes and assets • Identify component, activities and competencies of health system • Assess community health status via primary and secondary data collection • Identify forces of change (e.g., legislation, technology)	• Ability to identify issues • HIA Pathway diagram can be used to identify and describe possible indicators	*Scoping*
	• Knowledge of data sources, ability to analyze and summarize secondary data, ability to create surveys and questions for key-informant interviews and/or focus groups	*Assessment*
	• HIA baseline population profile can provide some secondary data for the CHA community health status profile • Findings from the HIA data collection efforts (e.g., surveys, stakeholder engagement) can be used to inform CHA • HIA's focus on health equity and vulnerable populations is an important consideration in the CHA	*Reporting*
	• Knowledge of data source and indicators, ability to track measures over time • Indicators from the monitoring/evaluation plan can be incorporated into the assessment of community health status	*Monitoring/ Evaluation*

– During the HIA *Recommendations Step*, evidence-based strategies to improve health and mitigate potential health risks and developed. By participating in this step, public health professionals will learn how to set criteria for developing recommendations and create strategies that are actionable, feasible and align with findings. Furthermore, recommendations included in existing HIA reports could be adapted to address issues identified during CHA.

– During the HIA *Reporting Step*, findings and recommendations are summarized in the detailed report. Information included in the HIA report can be used by public health professionals involved in CHA to identify stakeholders, issues, data sources, data methodology and recommendations.

– The HIA *Monitoring/ Evaluation Step* includes process, impact and outcome evaluation and the development of a monitoring plan. By participating in this step, public health professionals would increase their skills in creating a monitoring plan for CHA and conducting an evaluation.

Community Health Assessment Process	HIA Skills and Tools that Can Be Used To Support CHA (MAPP)	Applicable HIA Step
Phase 4. Identify Strategic Issues Identify potential strategic issues by reviewing the findings from the Visioning process and the four MAPP Assessments	• Ability to prioritize issues, strategic thinking	*Scoping*
	• HIA Pathway diagram can be used to identify strategic issues • Process of prioritizing impacts can be useful in identifying strategic issues from the four assessments	
	• HIA characterization matrix can be used to rate issues in terms of their direction, magnitude and distribution	*Assessment*
	• HIA issues that have been identified in the report can be incorporated into CHA prioritization process	*Reporting*
Phase 5. Formulate Goals and Strategies Formulate goal statements related to identify issues	• Ability to conduct literature review	*Assessment*
	• HIA approach to using literature to identify evidence-based strategies can be adapted for the CHA needs	
	• Ability to identify and create clear strategies	*Recommendations*
	• Recommendations from past HIAs (local or others) could be used to create CHA goals or to identify strategies	
Phase 6. Action Cycle Implement selected priorities and evaluate results	• Ability to conduct an evaluation	*Monitoring/ Evaluation*
	• HIA monitoring plan template can be used to track the implementation of recommendations/strategies • Monitoring plans from existing HIAs can be used to track progress of selected indicators	

Source: KHI HIA Handbook for Practitioners, 2017.

Health Impact Assessments and Foundational Public Health Services

The Foundational Public Health Services (FPHS) is a suite of skills, programs and activities that should be available in every community through state or local agencies as basic components to keep the public safe and healthy. The FPHS are primarily population-based preventive health services that are best addressed by governmental public health and may be mandated by state or federal law. The model consists of Foundational Areas and Foundational Capabilities.[119]

The Foundational Areas are the substantive areas of expertise and program-specific activities that are provided by state or local public health agencies. Each Foundational Area has components that further define the activities within that area. In certain cases, the role of public health agencies is to assure that people have reasonable access to certain services.[120]

The Foundational Capabilities are cross-cutting skills and capacities needed to support the

Foundational Areas and other program activities. Presence of these capabilities is key to protecting the community's health and activities. Like the Foundational Areas, each Foundational Capability has components that further define the Capability.[121]

There are many different ways in which public health agencies can advance activities within Foundational Areas and build Foundational Capabilities. HIA work presents one option for advancing these efforts. Specifically, public health agencies can:

- Build Foundational Capabilities by conducting HIA or separate HIA steps; and

- Adapt and use HIA tools and approaches for implementing foundational activities.

Figures 18 and *19* (page 87 and 91) provide a high-level overview and examples of how HIA work, tools and approaches can support the implementation of activities within the Foundational Areas and build Foundational Capabilities.

> " *By using tools and experiences from different fields, public health professionals can produce more impactful results.*
>
> *– Survey Respondent* "

Crosswalk Between Foundational Areas and HIA Steps

To accomplish activities within each Foundational Area, public health agencies will need to identify tools and templates. Over the years, experts in the HIA field have developed a suite of tools and approaches that can be also used to advance activities across Foundational Areas. For example, under the Environmental Health Foundational Area, public health agencies are encouraged to participate in land use planning and sustainable development (e.g., consideration of housing, urban development, recreational facilities and transportation). In some instances, public health professionals might find it challenging to understand how to bring health considerations into decisions around land use planning and urban development, among others. By using the HIA *Screening Step* framework, public health professionals would be able to determine which decisions on these topics can impact health. Furthermore, tools (e.g., Pathway Diagram) available through the HIA *Scoping Step* can help public health professionals identify and describe the potential impacts and resulting health effects of these decisions. The information gathered through these steps can help public health agencies meaningfully engage with land use planners and other stakeholders and bring health considerations into decisions around these issues.

Figure 18 provides a more detailed explanation on how HIA steps can support the implementation of activities within each Foundational Area. It is important to note that some of these activities might be supported by more than one HIA step. *Figure 18* highlights only one key HIA step per Foundational Area activity, as it was developed to provide a high-level picture of potential synergies and therefore, does not serve as a comprehensive map of all potential connections.

Figure 18. **Activities within Foundational Areas that Can Use Framework/Tools from Selected HIA Steps**

Activities within Foundational Areas that Can Use Framework/Tools from Selected HIA Steps	Applicable HIA Step	Description of How HIA Steps Can be Used to Inform Foundational Areas
Foundational Area 1: Communicable Disease Control Includes programs and activities to prevent and control the spread of communicable disease.		– *Screening Step* tools/ framework (e.g., screening checklist) can be utilized to identify plans/programs/ policies that can impact areas of interest (e.g., land use, healthy eating, health living, tobacco use, substance abuse). In certain cases, public health agencies might consider conducting a full HIA to examine health impacts of these issues and/or meaningfully engage with sectors outside of health (e.g., housing).
• Conduct disease investigations, including contact tracing and notification, in accordance with national, state, and local mandates and guidelines. • Identify assets for communicable disease control.	*Assessment*	
• Develop and implement a communicable disease control plan prioritizing important communicable diseases.	*Recommendations*	
• Provide timely, accurate, and locally relevant information on communicable diseases and their control, including strategies to increase local immunization rates.	*Reporting*	
• Advocate and seek funding for communicable disease control policies and initiatives.	*Monitoring/ Evaluation*	

Activities within Foundational Areas that Can Use Framework/Tools from Selected HIA Steps	Applicable HIA Step
Foundational Area 2: Health Promotion and Chronic Disease and Injury Prevention Includes programs and activities for health promotion and chronic disease and injury prevention.	
• Work to reduce rates of tobacco use through policies and programs that conform with local, state and federal laws and recommendations. • Work to increase statewide and community rates of healthy eating and active living that utilize evidence-based practices that are aligned with local, state and federal guidelines. • Work to reduce rates of substance abuse in the community.	*Screening*
• Identify assets for health promotion and chronic disease and injury prevention.	*Assessment*
• Work with partners to identify evidence-based, population-based interventions that utilize valid evaluation results. • Develop and implement comprehensive community-based health promotion strategies to address common risk factors and chronic diseases. • Develop and implement a health promotion and chronic disease and injury prevention plan.	*Recommendations*
• Provide timely, accurate, and locally relevant information on health promotion and chronic disease and injury prevention.	*Reporting*
• Advocate and seek funding for health promotion and chronic disease and injury prevention policies and initiatives.	*Monitoring/ Evaluation*
Foundational Area 3: Environmental Public Health Includes programs and activities to present and reduce exposure to environmental hazards.	
• Participate in land use planning and sustainable development (e.g., consideration of housing, urban development, recreational facilities, and transportation).	*Screening*
• Identify and address notifiable conditions and environmental hazards.	*Scoping*

–*Scoping Step* tools/framework can be used to identify and describe impacts (e.g., identify and address notifiable conditions and environmental hazards) in a Pathway Diagram. The Pathway Diagram can serve as a roadmap for Foundational Area activities.

–*Assessment Step* tools/framework can be used to conduct analysis of issues identified in Foundational Area activities (e.g., map assets for maternal and child health). The HIA *Assessment* step would also allow to characterize analysis findings by direction, magnitude and likelihood, among others.

–*Recommendations Step* framework/criteria (e.g., actionable, enforceable, feasible) for developing HIA recommendations can be used to develop new strategies. In addition, recommendations included in existing HIAs can inform the development of evidence-based strategies and plans across the Foundational Areas.

–*Reporting Step* tools (e.g., example HIA reports) can be used to create effective communications products. Information and data included in existing HIA reports can provide the background context for practitioners working on providing timely, accurate, and locally relevant information on various topics, including communicable diseases, maternal and child health trends.

Activities within Foundational Areas that Can Use Framework/Tools from Selected HIA Steps	Applicable HIA Step
• Identify assets for environmental public health. • Prevent or reduce environmental public health hazards and assure abatement of nuisances.	*Assessment*
• Develop and implement environmental public health plan to prevent and reduce exposure to health hazards in the environment.	*Recommendations*
• Provide timely, accurate, and locally relevant information on environmental public health issues and health impacts from both toxic and common exposure sources.	*Reporting*
• Advocate and seek funding for environmental public health policies and initiatives.	*Monitoring/Evaluation*
Foundational Area 4: Maternal and Child Health Includes programs and activities for the prevention of developmental impairments and life-threatening illnesses in mothers and children.	
• Identify assets for maternal and child health.	*Assessment*
• Identify, disseminate and promote evidence-based information about interventions in the prenatal period and early childhood period that optimize lifelong health and social-emotional development. • Identify, disseminate and promote evidence-based information about interventions in the prenatal period to lower infant mortality and pre-term birth outcomes. • Develop and implement a prioritized maternal and child health prevention plan using life course approaches and an understanding of health priorities.	*Recommendations*
• Provide timely, accurate and locally relevant information on emerging and ongoing maternal and child health trends.	*Reporting*
• Advocate and seek funding for emerging and ongoing maternal and child health policies and initiatives.	*Monitoring/Evaluation*

–*Monitoring/Evaluation Step* tools (e.g., process, impact and outcome evaluation approaches) can be used to assess the Foundational Area activities' progress and monitor changes over time. The results of evaluation described in existing HIA reports can also be used to advocate for funding and issues related to these Foundational Areas.

Activities within Foundational Areas that Can Use Framework/Tools from Selected HIA Steps	Applicable HIA Step
Foundational Area 5. Access to Clinical Care Includes programs and activities for assuring access to specific preventive and primary care services.	
• Link community members to existing clinical services, behavioral health services and insurance resources in the community. • Assure access to family planning services, maternal and infant services, STD and HIV testing and treatment.	*Screening*
• Provide timely, accurate, and locally relevant information on access and navigate the health care system.	*Reporting*

Crosswalk Between Foundational Capabilities and HIA Steps

The implementation of activities within each Foundational Area requires many skills that are also needed for the implementation of the six steps of the HIA process.

By conducting HIAs or separate HIA steps, public health agencies can enhance Foundational Capacities and be well-positioned to support the implementation of activities within Foundational Areas of public health. In the meantime, public health professionals who have Foundational Capabilities would be able to conduct HIA steps that require such capabilities. For example, the HIA *Scoping Step* includes identifying, prioritizing and visually describing issues (determinants of health) that might be impacted by plans/projects/policies through a Pathway Diagram. By participating in this HIA step, public health professionals would be able to enhance their capacity to effectively define issues and build a logic model that describes key connections.

Figure 19. **Highlights HIA Steps that Can Build or Enhance the Foundational Capabilities**

Foundational Capabilities that Can be Enhanced by Using Framework/Tools from Selected HIA Steps	Applicable HIA Step
Assessment Includes activities for the collection and analysis of public health data.	
• Ability to participate in the collection of primary public health data. • Ability to access and utilize secondary data from key sources. • Ability to interpret, display and communicate public health data and its analysis. • Ability to identify patterns, causes and effects of chronic and communicable diseases. • Ability to conduct health disparity analysis.	*Assessment*
• Ability to respond to data requests with meaningful reports (e.g., readable by intended audiences).	*Reporting*
• Ability to evaluate efficiency and effectiveness of public health programs.	*Monitoring/ Evaluation*
All Hazards/Response Includes activities critical to prepare for and respond to public health emergencies.	
• Ability to identify, prioritize and address the needs of vulnerable populations in advance of a public health emergency.	*Scoping*

Description of How HIA Steps Can be Used to Enhance Foundational Capabilities

– *Screening Step* involves identifying plans/projects/policies that could benefit from including health considerations. By participating in this HIA step, public health professionals would be able to enhance their capacity to identify and prioritize decisions (public health priorities) for further action that may result in health impacts.

– *Scoping Step* includes identifying, prioritizing and visually describing issues (determinants of health) that might be impacted by plans/projects/policies through a Pathway Diagram. By participating in this HIA step, public health professionals would be able to enhance their capacity

Foundational Capabilities that Can be Enhanced by Using Framework/Tools from Selected HIA Steps	Applicable HIA Step
• Ability to conduct investigations of threats to public health.	*Assessment*
• Ability to develop emergency response strategies and plans.	*Recommendations*
• Ability to promote community preparedness and resilience by communicating with the public.	*Reporting*
Communication Includes activities that ensure a comprehensive communications strategy is developed and implemented.	
• Ability to develop and implement a proactive health education strategy to support good population health.	*Recommendations*
• Ability to maintain ongoing relationships with local media outlets. • Ability to communicate the role of public health to the public and to policymakers. • Ability to communicate specific health or public health issues through written and verbal communication tools.	*Reporting*
Policy Development and Support Includes activities to inform, develop and implement public health policy.	
• Ability to work with partners and policymakers to develop and enact public health priorities. • Ability to utilize health in all policies (HiAP) approaches for all policy development.	*Screening*
• Ability to identify evidence-based public health policy recommendations. • Ability to work with partners and policymakers to support the development of public health administrative rules, regulations, and ordinances.	*Recommendations*
• Ability to enforce public health mandates (e.g., policies, statutes, regulations, ordinances).	*Monitoring/ Evaluation*

to effectively define issues and build a logic model that describes key connections.

– *Assessment Step* involves the collection and analysis of primary and secondary data. By participating in this HIA step, public health professionals would be able to advance their qualitative, quantitative skills and learn how to characterize health impacts (e.g., direction, magnitude, likelihood). The characterization of health impacts could provide more in-depth knowledge about the extent of impacts on vulnerable populations.

– *Recommendations Step* includes the development of evidence-based strategies aim to improve health and mitigate health risks. By participating in this HIA step, public health professionals can build expertise in developing feasible, practical, timely and evidence-based recommendations.

– *Reporting Step* uses various communication tools (e.g., memo, social media, testimony, op-ed, report) to inform communities, decision-makers and stakeholders about HIA findings and recommendations. By participating in this HIA step, public health

Foundational Capabilities that Can be Enhanced by Using Framework/Tools from Selected HIA Steps	Applicable HIA Step
Community Partnership Development Includes activities to improve collaboration and independence within the public health system.	
• Ability to create and maintain relationships with key stakeholders from various sectors. • Ability to engage community members (including those who experience health disparities). • Ability to convene a broad, multi-sector assembly of public health and medical stakeholders.	*All Six HIA steps*
Organizational Competencies Includes activities to support the business, management and leadership functions within the public health system.	
• Ability to define and communicate strategic direction for public health initiatives through agency strategic planning processes.	*Scoping*
• Ability to engage with the public health governing entity to advocate for public health funding and initiatives.	*Reporting*
• Ability to continuously evaluate and improve organizational processes, including using planning tools such as Plan-Do-Study-Act (PDSA) cycles.	*Monitoring/ Evaluation*
Addressing Health Equity and the Social Determinants of Health Includes activities to identify and respond to health disparities and the needs of vulnerable populations.	
• Ability to recognize and understand the determinants of health disparities within the community.	*Scoping*
• Ability to provide public health information for the community that is stratified by demographic characteristics.	*Assessment*
• Ability to develop and advocate for policies that will promote health for all, particularly the most vulnerable.	*Recommendations*

Note: All HIA steps involve the development of close collaboration with communities, stakeholders and decision-makers. By participating in HIA or its steps, public health professionals would be able to increase their ability to authentically engage various groups.

professionals would be able to learn how to effectively communicate research to different audiences.

– *Monitoring/Evaluation Step* includes the assessment of the HIA process, its impacts on the decision and health of the community. By participating in this HIA step, public health professionals would advance their skills in evaluating internal and external processes, monitoring impacts of policy and providing evidence for enacting public health priorities.

APPENDIX

1. Map of *National Health Impact Assessment Projects* (December 2016). The map is developed and maintained by the Health Impact Project, a collaboration between the Robert Wood Johnson Foundation and The Pew Charitable Trusts.

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