

Evaluating Health Impact Assessment (HIA): A rapid review of the literature

Introduction

Health Impact Assessment (HIA) is “a combination of procedures, methods, and tools by which a policy, program, or project may be judged as to its potential effects on the health of a population, and the distribution of those effects within the population” (European Centre for Health Policy, 1999: pp. 4). The purpose of HIA is to minimize health loss and maximize health gain (Winters, 1997). Specifically, HIA aims to influence decision making to ensure that policies, projects, and programs lead to improved population health, or at the least, do no damage to population health (Kemmer, Parry & Palmer, 2004).

The purpose of this review is to summarize the existing literature on the evaluation of HIA to help inform development of an evaluation framework for the Ontario Ministry of Health and Long-Term Care’s Health Equity Impact Assessment (HEIA) tool.

Scope of the review

This review includes both published, academic, peer reviewed literature and grey literature (e.g. government reports).

The search strategy was developed in consultation with a CAMH librarian. Searches were conducted through the Queen’s University Library Summon Search Engine, Scopus, Web of Science, Medline, PsychInfo and Google Scholar, using various combinations of the following words: health; impact; assessment; HIA; process; effectiveness; validation; outcome and evaluation. No limit was placed on the date of publications searched. Backward tracking was conducted to identify additional sources.

Despite its importance, formal evaluation of the HIA approach has received little attention (Quigley & Taylor, 2004; Cunningham, Signal & Bowers, 2010). There is a dearth of literature on how to evaluate a HIA. Of the relevant articles identified, a few provide conceptual frameworks for conducting HIA evaluations (Harris-Roxas, 2008; Harris-Roxas & Harris, 2013; Parry & Kemmer, 2005; Quigley & Taylor 2004), and some report on completed evaluations (Harris et al, 2013; London Health Commission, 2003; Mathias & Harris-Roxas, 2009).

Purpose of Evaluating HIA

The main purpose of evaluating HIA is to determine “the value and worth of HIA” – whether HIA influenced decision and implementation of a planned policy, program or project resulting in maximizing the positive impacts on health and health equity (Harris-Roxas & Harris, 2013; Health Development Agency [HDA], 2002; Parry & Kemmer, 2005; Quigley & Taylor, 2004; Cunningham, Signal & Bowers, 2010). Evaluation is essential to assess if the HIA recommendations were implemented, if they contributed to reducing health disparities, and if

not, the reasons for it (HDA, 2002). Taylor, Gowman & Quigley (2003) identified the three key reasons on why evaluating HIAs matters:

1. To improve practice by providing the HIA community with information on what works well, and what modifications might be necessary to optimize the HIA approach.
2. To demonstrate the contribution, both individually and collectively, that HIAs make to healthier public policy development, and to show the value of the tool.
3. To create accountability to multiple stakeholders by tracking how recommendations were received and acted on.

HIA Evaluation Framework

Evaluation of HIA is concerned with answering the following questions: “Did the HIA add value to the decision-making process?”, “Was the HIA fit for the purpose?”, “What is the process to which HIA is meant to be fit?” and “What is the purpose for which HIA is meant to be fit?” (Parry & Kemm, 2005). It is important to make a distinction between evaluating a HIA, and evaluating the initiative that is “the subject of an HIA” (Taylor, Gowman & Quigley, 2003).

In order to properly evaluate HIA, the aims and objectives of the HIA must be clearly defined, including identification of what the HIA is trying to achieve, with whom, and by when (Quigley & Taylor, 2004).

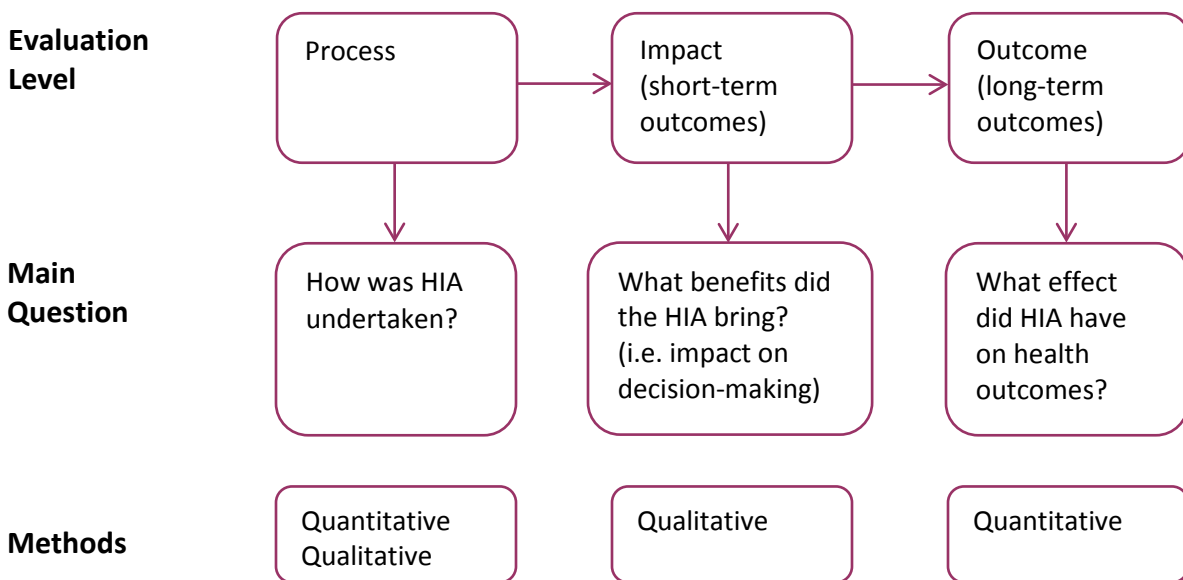
To determine the effectiveness and quality of the HIA approach, it is necessary to evaluate the process, impact, and outcome of HIA (Taylor & Quigley, 2002). The process evaluation examines why and how the HIA is undertaken (Taylor & Quigley, 2002; Taylor, Gowman & Quigley, 2003). It is used to assess whether the HIA achieved its objectives, to identify critical success factors and opportunities for improvement of the process, and to understand the amount of resources expended in the process (Mathias & Harris-Roxas, 2009; Taylor, Gowman & Quigley, 2003). Process evaluation questions would include: “What information sources were used?”; “Why or how were recommendations formulated and prioritized?”, or “How were decision makers involved during the HIA process?” (Parry & Kemm, 2005; Quigley & Taylor 2004).

The impact evaluation assesses whether the HIA’s recommendations were implemented and what changes to decision making and implementation occurred as a result of completing the HIA. It is also used to determine what indirect impacts occurred as a result of the HIA, such as changes in cross-sectoral relationships, community engagement, and knowledge and understanding of social determinants of health, health inequities and the HIA tool (Mathias & Harris-Roxas, 2009).

The outcome evaluation determines the effect of HIA on the health of the population; i.e., whether the adoption of the HIA recommendations resulted in measurable health improvements (Taylor & Quigley, 2002; Taylor, Gowman & Quigley, 2003). Health outcome evaluation requires that data for the necessary indicators be collected at baseline. Baseline measures are necessary to determine if any improvement or deterioration in health outcome indicators occurred after the proposal was implemented, and requires prior planning (Quigley & Taylor, 2004). HIA outcome evaluation is constrained by the fact that health outcomes can have

multiple causes, and each cause can have a larger number of health determinants. Further, identifying if and how much the HIA affected the outcome is challenging (Quigley & Taylor, 2004; Taylor, Gowman & Quigley, 2003). Long-term outcome evaluation of HIAs is a complex process requiring in-depth planning, extensive resources, data and long term commitment. Outcome evaluation may not be a priority for HIA evaluation. It is suggested that the HIA approach focus on process and impact evaluation (Lock, 2000; Quigley & Taylor, 2004; Taylor, Gowman & Quigley, 2003).

Note: Although current program planning and evaluation models typically view “outcomes” as preceding “impact”, the international HIA literature reviewed here refers to the *impact* of HIA on the decision-making process (“impact evaluation”) as preceding the influence of HIA on health *outcomes* (“outcome evaluation”).



Evaluation methods

Both qualitative and quantitative methods should be considered when planning HIA evaluation. Qualitative methods are considered particularly useful for collecting the data required for process and impact evaluation (Quigley & Taylor, 2004). A particular strength of qualitative techniques (e.g. one-to-one interviews, focus groups) is that they help to answer how and why certain processes work in a given context. They provide descriptive narratives of the processes and impacts experienced.

Quantitative scoring checklists can be a valuable tool in process evaluation to measure completion of the HIA and the quality of the work performed. In order to develop such a scoring tool, the directions for completing a HIA need to be explicit including how much and what type of information is expected. There needs to be an ideal in terms of a “perfect” HIA set in order to create a standard in which to measure against. One such quantitative checklist created by Ben Cave and Associates uses a previously established set of standardized criteria for a specific context to rate the quality of the completed HIAs (Fredsgaard, Cave & Bond,

2009). It is the only known quantitative scoring measure for HIAs.

Quantitative techniques are also considered the best method for determining the long-term effects on health outcomes. In general, the steps to complete a quantitative evaluation of HIA are to: (1) identify your potential impacts; (2) obtain the baseline evidence for these impacts; (3) estimate the size of the population affected by the impact; (4) develop your statistical model; and (5) quantify the health impacts and associated uncertainty (Mesa-Frias, Chalabi, & Foss, 2014; Mindell et al. 2001).

Challenges in evaluating HIA

In general, the existing literature on evaluation of HIA is limited (Quigley & Taylor, 2004; Cunningham, Signal & Bowers, 2010). Most HIA reports do not contain the information required for them to be sufficiently quantitatively evaluated (Parry & Kemm, 2005). HIAs at different levels, such as a large policy HIA compared to a local project HIA, vary in scale, scope and process (Parry & Kemm, 2005). As such, the information that should be included in a HIA report varies depending on its context. Stating the methods used to complete the HIA transparently is necessary to allow decision makers to understand the challenges and successes of the HIA, and how the HIA process may have led to the observed impacts (Parry & Kemm, 2005).

Some of the main reasons for HIA practitioners not having engaged in evaluation activities include a lack of (Quigley & Taylor, 2004: 545):

- Funding
- Skills in evaluation methods and approaches
- HIA specific guidance on monitoring and evaluation materials available
- Time (people moving on to new projects before monitoring and evaluation commence)
- Consensus on what to evaluate (e.g. whether to evaluate the quality of the HIA process, whether HIA recommendations informed the decision-making process, or the effect of the HIA on health outcomes, etc.).

Despite the challenges, evaluation should be a core component of any HIA. Both HIA process and impact evaluations are possible, reasonable and informative. Although measuring the direct effect that HIA has on desired health outcomes is a complex and resource-intensive undertaking, HIA process and impact evaluation helps to identify how HIA can change decision making and program/policy implementation. It also provides insights into the indirect impacts HIA has on relationships, the determinants of health and how and what processes influence the system (Harris et al. 2013). Overall, evaluating HIA helps to assess the value of the HIA process and inform future HIA application in policy, program, and project planning.

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