



Differing forms, differing purposes: A typology of health impact assessment

Ben Harris-Roxas^{*}, Elizabeth Harris

Centre for Health Equity Training, Research and Evaluation (CHETRE), part of the UNSW Research Centre for Primary Health Care and Equity, School of Public Health and Community Medicine, University of New South Wales, Sydney, Australia

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ABSTRACT

There is currently considerable diversity in health impact assessment (HIA) practice internationally. Historically this diversity has been described as simple dichotomies, for example the differences between HIAs of projects and policies. However these distinctions have failed to adequately describe the differences that can be observed between different forms of HIAs. This paper describes the three historical and disciplinary fields from which HIA has emerged – environmental health, a social view of health, and health equity. It also puts forward a typology of four different forms of HIA that can be observed in current HIA practice: mandated, decision-support, advocacy, and community-led HIAs. This paper argues that these different forms of HIA serve different purposes and are not necessarily in competition; rather they allow HIA to be responsive to a range of population health concerns and purposes.

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1. Introduction

The use of health impact assessment (HIA) has grown rapidly in recent years. The past twenty years have witnessed increased calls for HIA's use (Acheson, 1998, Birley and Peralta, 1992, ECHP, 1999, enHealth, 2001, NHMRC, 1994, PHC, 1995), from groups as diverse as the World Health Organization (WHO, 1997, 2006, 2007, 2008a, b, WHO Europe, 2009) to the International Finance Corporation (IFC, 2006). Many nations and jurisdictions now have legislation and regulations that support or require HIA's use, and several have invested in programs of capacity building to ensure there is sufficient organisational and workforce capacity to undertake HIAs (Banken, 2001, Harris-Roxas and Simpson, 2005, Harris, 2006, Morgan, 2008, National Assembly for Wales, 2001, New Zealand Ministry of Health, 2009, Welsh Health Impact Assessment Support Unit, 2004).

If we look internationally we can see that HIA is currently taking different forms, even within specific jurisdictions. These differences often relate to the type of proposals HIAs are undertaken on, the drivers for the HIA to be undertaken, and even the methods used to identify and assess potential health impacts. These differences have often been dichotomised in the past as being due to differences between:

- (i) HIAs of projects and policies (Mahoney and Durham, 2002, Mahoney et al., 2007),
- (ii) tight and broad definitions of health (Harris, 2005, Kemm, 2000, Veerman et al., 2006b),
- (iii) quantitative and qualitative methods (Love et al., 2005, Mindell et al., 2001, O'Connell and Hurley, 2009, Veerman et al., 2005),
- (iv) legislated and voluntary HIAs (Bhatia and Wernham, 2008, Harris et al., 2007a, Salay and Lincoln, 2008), and
- (v) rapid and comprehensive HIAs (Furber et al., 2007, Harris, 2005, Lester and Temple, 2004).

These dichotomisations seem to have arisen at specific times in response to perceived limitations in HIA practice. They appear to be of limited use in describing current HIA practice and may be less relevant now than at past stages in the development of HIA as a field. In the past they have been helpful in explaining why differences in practice have arisen, but may not currently allow a full appreciation of the forms of HIA practice and the purposes for which HIAs are being conducted. These dichotomisations may also have led to a stricter notional delineation than has existed in practice, for example many HIAs incorporate both qualitative and quantitative assessment methods, and many comprehensive HIAs include rapid or desk-based assessments as part of their scoping step. Further, this dichotomisation may have engendered an “us-and-them” attitude amongst HIA practitioners, limiting the potential for learning across different settings and even engagement with the wider field of impact assessment, such as environmental impact assessment and social impact assessment practitioners.

Despite these differences there are areas of HIA practice where consensus has been achieved. There has been a degree of harmonisation in relation to the procedural steps of HIA, namely screening,

Abbreviations: EIA, Environmental impact assessment; ESHIA, Environmental, social and health impact assessment; HIA, Health impact assessment; IIA, Integrated impact assessment; NGO, Non-governmental organisation.

^{*} Corresponding Author. CHETRE, LMB 7103, Liverpool BC NSW 1871, Australia. Tel.: +61 2 9612 0779; fax: +61 2 9612 0762.

E-mail addresses: b.harris-roxas@unsw.edu.au (B. Harris-Roxas), e.harris@unsw.edu.au (E. Harris).

scoping, assessment, decision-making and recommendations, and follow-up (Harris et al., 2007b), though these are sometimes broken up into sub-steps and may be described using different terms. There is also now a broad consensus that HIA is most usefully undertaken as an ex ante procedure prior to a proposal being finalised and implemented. Past arguments about “retrospective” and “concurrent” HIA appears to have been resolved (Kemm, 2003).

Given that HIA is currently at something of a crossroads, with increasing calls for its use and demands on existing capacity (IFC, 2009, UCL, 2010, WHO, 2008a), we require a better understanding of the current forms of HIA and the purposes for which they are being undertaken. This will allow us to more clearly address capacity requirements and appraise the quality of HIA reports. It is increasingly clear that simple dichotomisations will not allow us to explain the current nature and diversity of HIA practice; a more sophisticated understanding is required.

This article puts forward a typology of four different forms of HIA that can be observed in current practice internationally and situates them in a historical, multi-disciplinary context. This typology both (i) more accurately describes current practices and forms of HIA, and (ii) enables an understanding that different forms of HIA are conducted for different purposes.

2. Diverse origins of HIA

In order to understand the current HIA practice it is important to understand its origins. This is because its origins shape its current practice and explain why there are several forms of HIA currently in use.

The development of HIA as a field can be traced back to three distinct but related sources. This may be confusing when compared to other forms of assessment, which tend to have each arisen in relation to a specific issue of concern or due to a perceived weakness in practice. For example, biodiversity impact assessment (BIA) emerged in response to concerns about how biodiversity was being addressed in impact assessments, and strategic environmental assessment (SEA) came about, in part, due to a recognition of the limitations of project-level assessment (Simos, 2006).

Several different concerns have shaped the development of HIA as a field, though these have not necessarily led to the development of distinct forms of impact assessment. As such there are currently very different practices that describe themselves as HIAs. The concerns can be characterised as:

- environmental health;
- a social view of health; and
- health equity.

2.1. Environmental health

The *environmental health* approach to HIA can trace its roots back several hundred years to the origins of public health as a discipline. It is concerned with the aspects of the physical environment that can influence human health, and gains in environmental health have accounted for much of the decrease in mortality that has been observed globally over the past century (Morris and Novak, 1976).

Many of the environmental disasters that gave rise to regulatory environmental impact assessment (EIA) and environmental social movements came to public attention because of their impact on human health (Caldwell, 1988). Some of these are outlined in Fig. 1. As such human health has always been a key consideration within EIA (Martin, 1986, WHO, 1979), though there has been considerable criticism of the shortcomings of this in practice (Harris et al., 2009).

Environmental health has traditionally conceptualised health more narrowly within HIAs (Divall, 2008, Harris, 2005, Mindell et al., 2008), with a focus on individual and physical environmental

determinants of health. The focus has been on building a health component within EIAs, or other mandated assessments, rather than necessarily undertaking HIAs as “stand-alone” assessments (Martin, 1986).

The use of HIA within environmental health has relied on scientific evidence and predictive methods. These have tended to be based on epidemiological and toxicological approaches broadly, and health risk assessment specifically. HIA within environmental health can be broadly characterised as positivist in its approach to evidence and causality (Cashmore, 2004, Kuhn, 1962).

2.2. A social view of health

In the past forty years there has been an increasing recognition of the role that social, as well as physical, environments play in determining health. This can be seen in documents such as the Declaration of Alma Ata (WHO, 1978) and the Ottawa Charter (WHO, 1986), and even in the definition of health in the original World Health Organization Constitution that describes “health [as] a state of complete physical, mental and social wellbeing and not merely the absence of disease or infirmity” (WHO, 1948).

Increasingly this *social view of health* approach, has seized upon HIA as a practical mechanism for promoting improved health outcomes. It has promoted HIA's use by other, non-health sectors to ensure that the potential health consequences of their planning and decision-making are considered (Krieger et al., 2003, Lock and McKee, 2005, Mathias and Harris-Roxas, 2009, Nilunger Mannheimer et al., 2007, PHAC, 2007a). This use of HIA has tended to focus on policies or programs, rather than the assessment of projects that has characterised much of the work in environmental health (Mahoney and Durham, 2002, Turgeon et al., 2008).

HIA within a social view of health is often seen as being used by other sectors, but not necessarily by the health sector itself to assess the potential health impact of its own proposals (Mannheimer et al., 2007, Nilunger Mannheimer et al., 2007). This is because emphasis is placed on working intersectorally on large scale policy issues that may affect health (Signal and Durham, 2000), rather than proposals that may have more straightforward impacts on health, or a series of smaller, cumulative impacts.

A characteristic of the social view of health is that a broader definition of health underpins HIAs, drawing on understandings of the community, social, mental and spiritual factors that determine health (Coggins et al., 2007, Mahoney et al., 2007, New Zealand Ministry of Health, 2007). Evidence of what constitutes evidence of potential impacts also tends to be more broadly defined, and often includes data on more speculative impacts.

HIAs conducted with a social view of health see the way they HIA itself is conducted as important, in order to facilitate organisational partnerships and learning (Greig et al., 2004, Hughes and Kemp, 2007, Ison, 2000). They tend to be social constructionist in their approach to evidence and causality (Burningham and Cooper, 1999, Crotty, 2003).

2.3. Health equity

Health equity has emerged as a specific issue of disciplinary and policy concern since the late 1980s (Whitehead, 1990, Wilkinson and Marmot, 2003), though health inequities have existed historically (Milanovic et al., 2007). Action to redress and reduce health inequities is concerned with reducing preventable and avoidable differences in health outcomes (WHO, 2008a), in particular those that impair individuals' and groups' opportunities for health (Sen, 2004).

A number of national and international inquiries have identified HIA as an important mechanism for addressing potential health inequities that may arise from proposals (Acheson, 1998, WHO, 1997, 2006, 2008a), in particular public policies. Health equity is often conflated with a social view of health in relation to HIA, but it is

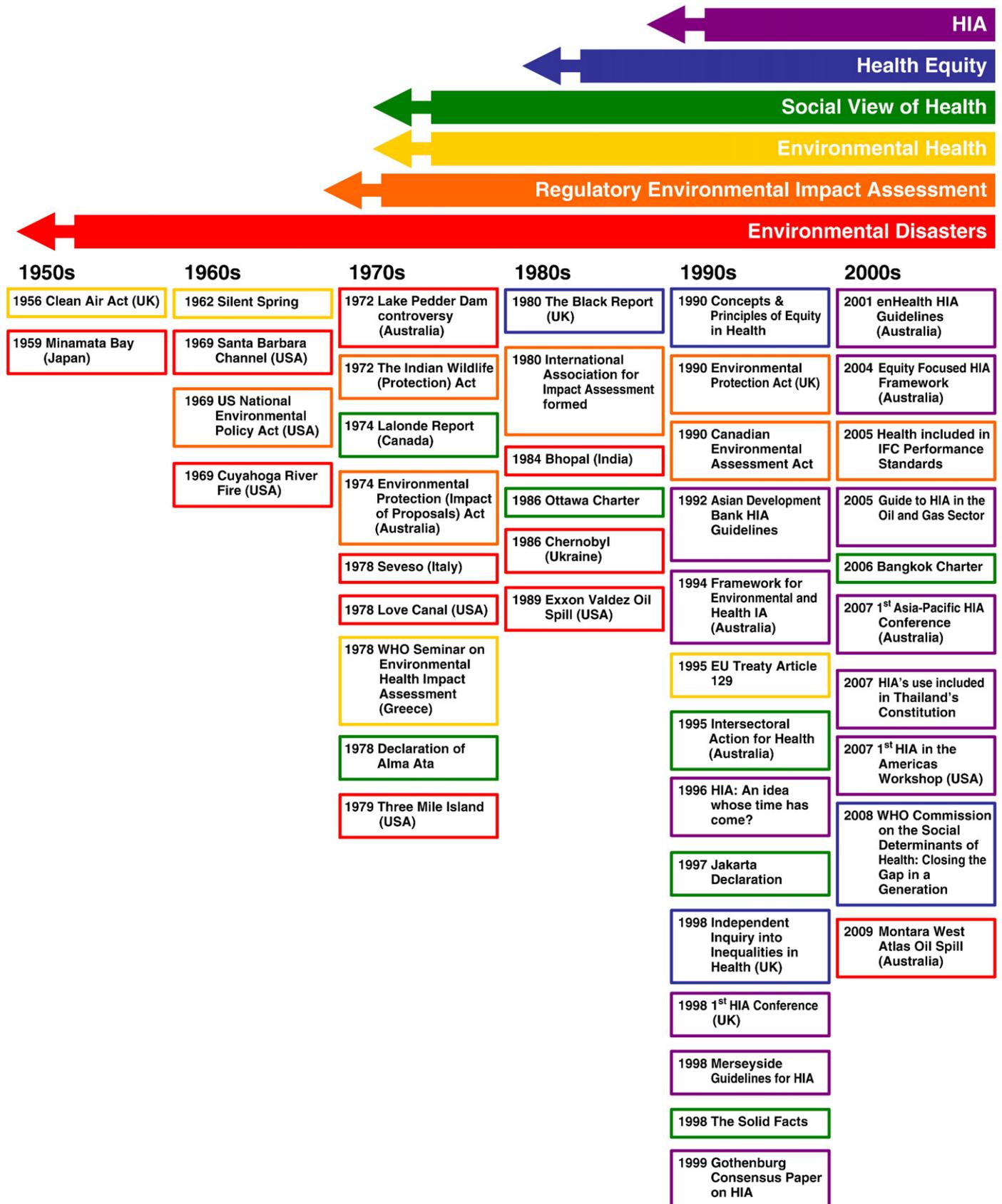


Fig. 1. Selective timeline of the development of health impact assessment. Documents referred to in figure include Acheson (1998), Birley and Peralta (1992), Carson (1962), ECHP (1999), Harris et al. (1995), IFC (2006), IPIECA (2005), Lalonde (1974), Mahoney et al. (2004), NHMRC (1994), Scott-Samuel (1996), Scott-Samuel et al. (1998), UK Department of Health and Social Security (1982), Whitehead (1990), Wilkinson and Marmot (1998), WHO (1978, 1986, 1997, 2006, 2008a). NB: The arrows pointing left indicate that there was activity in all these fields prior to what is indicated in this diagram.

possible to look at social health without considering the differential impacts of a proposal. In fact many HIAs treat impacts as homogenous across populations, not necessarily because of a lack of concern for health equity but because it adds a layer of complexity to what may already be a demanding task. Additionally, the data required to make an assessment of equity impacts may not be readily available.

Health equity in HIA forces a greater discussion of values as part of the process, as determinations have to be made about what constitutes a differential impact and whether these can be avoided, even if questions of fairness are ceded to decision-makers rather than assessors (as suggested by Kemm, 2006). Participation within health equity HIAs is often valued and afforded status as evidence to be included within the assessment. The importance of equity and the consideration of vulnerabilities has not been limited to proponents of HIA within a social view of health; environmental health has also recognised the importance of assessing vulnerability for several decades (Kasperson, 1983). Health equity HIAs have tended to be social constructionist or structuralist in their epistemological orientation.

These three origins have converged in the past twenty years to result in the current field of HIA. Given these differences in origin it should be no surprise that there is disagreement about why, how and when HIAs should be conducted.

3. A typology of health impact assessment

Much of what has been written on HIA to date has focused on a priori statements about the values or principles underpinning HIA's use and the procedural steps involved in undertaking HIAs. The purpose of HIA has been under-emphasised however, with comparatively little analysis of how forms of HIA serve different purposes.

There is a tendency, particularly when we consider the three concerns from which HIA originates, for each to think that their approach to evidence and knowledge should have primacy and is undervalued by other disciplines. Public health in general and HIA in particular are multi-disciplinary fields, and as such there is often disagreement over how to construe the purpose of HIA, define health and value evidence (Bhatia and Wernham, 2008; den Broeder et al., 2003; Mahoney et al., 2007; Mindell et al., 2004).

Whilst there is widespread discourse about wholistic approaches to health and wellbeing within HIA (Corburn and Bhatia, 2007; Krieger et al., 2003; Mindell et al., 2008; Ward, 2006) at the point where HIA is actually applied, practitioners usually follow the methods and approaches they know best, often drawing on narrower disciplinary methods and approaches. An example of this is the so-called “environmental health areas” model that is followed in many industry-funded major project assessments (IPIECA, 2005) and advocated by the International Finance Corporations guidance on HIA (IFC, 2009), which sets out 13 areas of potential health impacts (see Table 1). This approach tends to focus on a narrow range of environmental health risks and under-emphasises the role of the

social determinants of health by relegating them to the status of a subset of psychosocial factors, which may be antithetical to a broader understanding of health. This may be highly appropriate in some settings but less relevant in other contexts in which HIA is used.

HIA is broader in its use and application than it is usually characterised in guidance and the literature. As mentioned in the Introduction, practice is often more complex than simple dichotomisations or guidance would lead us to believe.

We put forward a typology for HIA that includes four separate forms of HIA that can be observed in current practice. Table 2 sets out the typology in detail, including the description of the purpose, origins, role of values and judgements, roles and type of learning for each form. The “type of learning” refers to the learning that takes place through the process of conducting an HIA and is based on the three types described by Glasbergen (1999), namely:

- *technical learning*, which involves searching for technical solutions to fixed objectives;
- *conceptual learning*, which involves redefining goals, problem definitions and strategies; and
- *social learning*, which emphasises dialogue and increased interaction between stakeholders (this is distinct from the concept of social learning used in psychology).

Every HIA is undertaken to learn *something*, though the nature and purpose of that learning is rarely articulated and constitutes one of the key distinguishing features of each of the different forms of HIA described in the typology.

3.1. Mandated HIAs

Mandated HIAs are undertaken to fulfil a statutory or regulatory requirement and tend to place more importance on following a tightly prescribed process, with considerable emphasis on the scientific nature of methods used to identify potential health impacts. They usually adhere to more traditional positivist scientific conceptualisations of what constitutes evidence. They may also notionally be subject to legal challenge, though the extent to which this has happened to date is unclear and will likely vary in future depending on the jurisdiction in which they are undertaken. This form of HIA is most often conducted on major project proposals under environmental protection legislative requirements or regulations, although increasingly there is also provision for its discretionary use under public health legislation through powers granted to public health agencies (Parliament of Victoria. Victorian Public Health and Wellbeing Act, 2008).

As the use of mandated HIA grows it will have considerable implications for practice. Practitioners will likely have to be accredited and the roles, responsibilities and accountabilities of proponents, regulators and practitioners will have to be more clearly articulated. Quality guidelines for the conduct and reporting of HIA will have to be developed, or strengthened where they already exist (Bhatia et al., 2009; Fredsgaard et al., 2009; Winge Fredsgaard et al., 2009). The triggers for various levels of HIA, i.e. rapid, intermediate or comprehensive HIAs (Harris et al., 2007b, IPIECA, 2005), will have to be formalised. Concerns may arise over the quality of procedures and reporting. Capacity issues will also arise because there is no clear role for public or corporate institutions in training HIA practitioners.

3.2. Decision-support HIAs

Decision-support HIAs are usually undertaken voluntarily by, or in partnership with, the organisation responsible for developing the policy, program or project that is being assessed. The process for undertaking decision-support HIAs is often less formalised than for mandated HIAs, with a degree of flexibility around the methods and what is regarded as acceptable evidence of impacts. Whilst this form of HIA is usually undertaken on policies, plans or programs, there are

Table 1
Environmental Health Areas Model.
Source: IFC (IFC, 2009) Page 54

1.	Vector-related diseases
2.	Respiratory and housing issues
3.	Veterinary medicine/zoonotic issues
4.	Sexually transmitted infections
5.	Soil- and water-borne diseases
6.	Food- and nutrition-related issue
7.	Accidents/injuries
8.	Exposure to potentially hazardous materials
9.	Psychosocial
10.	Cultural health practices
11.	Health services infrastructure and capacity
12.	Noncommunicable diseases (NCDs)

Table 2
Typology of Health Impact Assessment.

	Forms of health impact assessment			
	Mandated	Decision-support	Advocacy	Community-led
Description	Occurs in the context of an environmental impact assessment (EIA), integrated impact assessment (IIA) or environmental, social and health impact assessment (ESHIA) and is done to meet a regulatory or statutory requirement	Conducted voluntarily by, or with the agreement of, organisations responsible for a proposal, with the goal of improving decision-making and implementation	Conducted by organisations or groups who are neither proponents or decision-makers, with goal of influencing decision-making and implementation	Conducted by potentially affected communities on issues or proposals that are of concern
Purpose	<ul style="list-style-type: none"> • Meeting a regulatory or statutory requirement • Minimising negative health impacts 	<ul style="list-style-type: none"> • Improving decision-making and implementation • Minimising negative health impacts • Maximising positive health impacts 	<ul style="list-style-type: none"> • Ensuring under-recognised health concerns are addressed in design, decision-making and implementation • Minimising negative health impacts • Maximising positive health impacts 	<ul style="list-style-type: none"> • Ensuring the community's health-related concerns are identified and addressed • Enabling greater participation of communities in decisions that affect them • Minimising negative health impacts • Maximising positive health impacts
Origins	Environmental health	Environmental health, social view of health, health equity	Social view of health, health equity	Social view of health, health equity
Role of values and judgements	Almost no role for values in assessment, judgements often not acknowledged	Implied role for values and judgements	More explicit role for values and judgements	Driven by community values and judgements
Conducted by	Consultants	Government agencies, consultants	Non-governmental organisations (NGOs), universities, other agencies	Communities, often aided by HIA practitioners in NGOs, universities or other agencies
Resourced by	Proponents	Government agencies	Varied	Communities themselves
Overseen by	Proponents	Government agencies	Varied	Communities themselves
Role of stakeholders	Providing technical information	Informing the assessment	Guiding the assessment	Controlling and conducting the assessment
Type of learning	Technical	Technical/conceptual	Conceptual/social	Social
Examples	Basslink IIA (Duncan, 2003), Nam Theun 2 IIA (2004), Chad–Cameron Pipeline Project HIA (Jobin, 2003, Utzinger et al., 2005)	Lower Hunter Regional Strategy Social Impact Assessment (SIA, Wells et al., 2007), Equality Impact Assessment of <i>Healthcare for London: consulting the capital</i> (LHC, 2008), Christchurch Urban Development Strategy HIA (Mathias and Harris-Roxas, 2009, Stevenson et al., 2007)	HIA of the Northern Territory Emergency Response (AIDA, 2010), EU Common Agricultural Policy HIA (Veerman et al., 2006a), Oak to Ninth Avenue HIA (UCBHIG, 2007)	We Love Tha Chin River Society HIA (Sukkmnoed et al., 2005), Goodooga Equity Focused HIA (The Goodooga Community, 2009), PATH HIAs in Canada and India (Cameron et al., 2011, Gillis, 1999)

examples of decision-support HIAs being undertaken on project proposals as well (Maxwell et al., 2008, Maxwell, 2007).

A major challenge for the use of decision-support HIA is that there is less clarity about who has responsibility for conducting the HIAs and where this responsibility will sit within organisations and government. There are also capacity implications as government agencies have usually been the ones to undertake decision-support HIAs. This is in contrast to how mandated HIA is usually practiced, with a far more circumscribed role for government and their capacity requirements usually restricted to the ability to set scoping requirements or terms of reference, and to reviewing completed HIA reports for quality and compliance.

Decision-support HIA needs to be used selectively and strategically in contexts where the findings will be able to influence decisions but is also useful in contexts where engagement in the HIA process has longer term impacts on the ways in which other stakeholders understand the causes of health and ill-health and how the work of other sectors has direct impacts on health through conceptual learning (Tennant and Newman, 2007). Specifically decision-support

HIA seeks to enhance decision-making and implementation by avoiding potential negative health impacts and maximising positive health impacts.

Decision-support HIAs often entail significant involvement in the assessment on the part of proponents, assessors and other stakeholder. This often leads to a degree of incremental learning through the assessment process, which can make it difficult for participants to see a dramatic “value add” of the HIA when compared with existing planning processes. This is because many of the potential impacts identified through decision-support HIAs take the form of under-considered impacts or design considerations, and are often incremental rather than revelatory in nature. In many settings this has led to pressure to make the decision-support HIAs (i) easy to do conduct in (ii) brief time periods with (iii) limit expert knowledge.

There is a strong and understandable concern that by undertaking the HIA at the stage when the proposal has been developed it is too late to influence the basic conceptualisation, values and assumptions that have driven the planning or policy process prior to that point (Bekker, 2007; Sukkmnoed et al., 2007). This has made it difficult to

identify how to build HIA systematically into government processes or what the triggers should be for decision-support HIAs to be conducted. Recent experience suggests that use of a rapid health or health equity filter (Health SA, 2008; New Zealand Ministry of Health, 2004) as part of the screening (Harris et al., 2007b) or scoping of decision-support HIAs may provide decision-makers with a clearer idea of what might be achieved through conducting an HIA. It may also help facilitate discussion on the role of values and assumptions in assessing impacts, and the ways in which differing kinds of evidence will be used. It also assists a more formal process for “screening out” plans, programs or policies from conducting HIAs.

Relationship building across and within sectors has been consistently identified as a major outcomes of engaging in decision-support HIA but once these relationships are built there may be other ways in which stakeholders will decide to work together, for example through the development of planning checklists, MOUs between organisations and engagement of the health sector earlier in other sectors' planning processes.

Given their voluntary nature, decision-supports HIA may work best at the local or sub-regional level where it is possible to influence implementation in practical ways, rather than with more abstract proposals.

3.3. Advocacy HIAs

AS HIA has become more widely understood there is increased interest in the use of HIA as an advocacy tool. Advocacy HIAs are undertaken by organisations and groups who are neither proponents nor decision-makers with the goal of influencing decision-making and implementation. Advocacy HIAs seek to reframe or challenge decision-making by ensuring that under-recognised health concerns are addressed in the design, decision-making and implementation of the proposal, in particular where the views of those most likely to be directly impacted have been under-represented. These HIAs usually take a clear position on the role of values and the ways in which “evidence” will be valued.

In order to be credible advocacy HIAs need to retain a close link to evidence gathered through the assessment process, and to take care to present differing or opposing evidence. Systematic and transparent processes for gathering and assessing evidence is important and those undertaking the HIA need to be open to findings that do not support views held prior to the HIA being undertaken. The pre-existing agenda of those undertaking the HIA should be articulated, though to date this has only been done rarely.

It is not clear if it is feasible or desirable to engage decision-makers formally in advocacy HIAs, though this will vary depending on context. At a minimum they have an important role in providing information and as stakeholders.

3.4. Community-led HIAs

One of the emerging areas of practice internationally are those HIAs conducted by communities to help define or understand issues and contribute to decision-making that impacts directly on their health. The purpose of community-led HIAs is to ensure the community's health-related concerns are recognised and addressed. It is seen as an evidence-informed and practical by way in which communities can contribute to decisions — moving beyond a simple reliance on consultation to seek community views.

Community-led HIA is a democratic and political process, rather than a technocratic or rational process. Depending on the issue it is important to recognise that this type of HIA may not be formally recognised and have no control over, or input into, decision-making, beyond a community's rights as citizens. Community values will play a strong role in the assessment of evidence. The process of making these values transparent may lead to significant social learning for the

community, allowing them to develop a deeper understanding of the issues from a variety of stakeholder views and allow the community to move from an adversarial role to a dialogue with decision-makers about alternative solutions. The role of HIA practitioners in community-led HIAs is often quite different to other HIAs, as it is usually to provide technical assistance and facilitation rather than direction.

Community-led HIAs are unlikely to be bound by disciplinary traditions of practice or treatment of evidence, which may allow greater assessment of underlying social, economic and political forces that may be shaping the development and implementation of the proposal. While most community-led HIAs are in reaction to a specific proposal, there are increasingly requests for HIA capacity building coming directly from community groups who are interested in more proactive involvement in informing planning and implementation processes (Sukunnoed et al., 2005).

4. Discussion

HIA is rapidly shifting from the margins of population health and impact assessment to become a credible and established approach for assessing the impact of plans, programs and policies on health and wellbeing. There is increased interest in its role as an approach for promoting equity, democracy and sustainability that combines both technocratic approaches and participatory processes.

HIA is currently at something of a crossroads. If it is an idea whose time has come (PHAC, 2007b; Scott-Samuel, 1996), is there the capacity for it to deliver on its promise? Building capacity for HIA's use internationally requires us to understand that while there is a generic framework for undertaking HIA it is also important that the HIA is “fit for purpose” (Joffe, 2003, Milner et al., 2003). As such is diverse in its applications and takes a number of forms. It is increasingly clear that simple dichotomisations will not allow us to explain the current diversity of practice; a more sophisticated understanding is required. Binary approaches to debates have often arisen because of the flexible nature of HIA, and impact assessment generally, which allows different types of proposals to be assessed using varying methods. These dichotomies, whilst they have helped to explain differences in practice in the past, may not be a helpful way to view the issues being currently debated. This article puts forward a typology of four different forms of HIA that can be observed in current practice internationally and situates them in a historical, multi-disciplinary context. This enables practitioners, commissioning parties such as governments and industries, and reviewers of HIA reports a more nuanced schema for appreciating why HIAs may be conducted differently, and that they often serve quite different purposes.

Though this framework enables a more nuanced understanding of the different forms of HIA it does have limitations. It may not be possible for practitioners and commissioning organisations to simply pick and choose between the different forms described in the typology. This is because each form draws on different disciplinary and epistemological bases, as well as serving markedly different purposes. The different forms of HIA are not simply a matter of nomenclature; they require HIAs to be conducted in a fundamentally different ways. As such this typology needs to be understood as being principally explanatory in nature. The typology may also imply that a neat categorisation of HIAs is possible and desirable. In practice HIAs may at times include elements associated with different forms for example and as discussed previously, there are often considerable overlaps between advocacy and community-led HIAs.

Many of the disagreements, tensions and conflicts that can be observed in HIAs may be due, at least in part, to disagreements about the fundamental purpose of the HIA, the values underpinning the assessment, what constitutes evidence and how interested parties should be involved in the assessment (Harris, 2005). This reiterates the importance of coming to a shared understanding of the purpose and form of the HIA during the screening and scoping steps (Harris et al., 2007b).

5. Conclusion

There are multiple forms of HIA being practiced internationally. Debates have previously focused on the strengths and weaknesses of different approaches. This paper shows that these different forms serve different purposes and are not necessarily in competition; no single form of HIA should necessarily have primacy over others. Rather they allow HIA as a field to be responsive to a range of population health concerns and purposes. As expectations grow there is a risk that HIA may be seen to be promising more than it can deliver, especially in the estimation and quantification of health risks, the quality and qualifications of those undertaking the HIA and in the valuing of evidence from multiple sources.

If done well HIA can have substantial and identifiable impact on the development and implementation of projects, programs and policies in the short and longer term. However as a technical approach and a process for learning and engagement it is still developing.

Competing interests

None.

Authors' contributions

BHR drafted and finalised the manuscript. EH contributed to the conceptualisation and development of the manuscript.

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Ben Harris-Roxas is a Research Fellow at the Centre for Health Equity Training, Research and Evaluation (CHETRE), part of the UNSW Research Centre for Primary Health Care and Equity at the University of New South Wales. He has been involved in more than 20 health impact assessments (HIAs), trained more than 300 people in HIA and teaches a masters-level course on HIA. He organised the inaugural Asia Pacific HIA Conference in Sydney in 2007, edits the International Association for Impact Assessment Health Quarterly and maintains the Asia Pacific email list.

Elizabeth Harris is Director of the Centre for Health Equity Training, Research and Evaluation (CHETRE), part of the UNSW Research Centre for Primary Health Care and Equity at the University of New South Wales. She oversees a research program on interventions to prevent and redress health inequities. She has published extensively in the literature on health equity, primary health care, unemployment and health, early childhood sustained nurse home visiting, disadvantaged communities, intersectoral action for health and HIA.