

Review of international policy level HIA for the Public Health Advisory Committee.

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'For the prospective patient, the answer may not be cure by incision at the operating table, but prevention by decision at the Cabinet table'.

Sir George Young, British Health Minister.

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Executive Summary

The Public Health Advisory Committee (PHAC) is a sub-committee reporting to the Minister of Health through the National Health Committee. In March 2004 PHAC launched 'A guide to health impact assessment: a policy tool for New Zealand' and provided recommendations to the Minister of Health about the future direction of health impact assessment (HIA) in New Zealand.

This review of HIA in New Zealand and internationally describes developments in HIA for the evaluation subsequently required by the Minister of Health.

The evaluation was carried out using relevant published articles between the dates of 1996 and December 2004, and 'grey literature' (from HIA-specific websites and health/government/education websites), as well as a questionnaire to cover the following required aspects:

- examine the reasons that agencies picked up, or did not pick up HIA;
- the positive and negative experiences that agencies had in undertaking HIA
- the impact HIA has had on the policy process.

The report is categorised by region or country, as each has its own specific context in which the research questions can be answered. HIA practice is well developed in many of the countries covered in this review and so they provide numerous examples and information to inform the Ministers questions.

Why agencies have picked up or did not pick up HIA?

There is significantly more information available about why agencies have picked up HIA, rather than why they have not. Common reasons for picking up HIA have included:

- Addressing inequalities in health and the determinants of health
- The practical benefits of doing an HIA
- A dedicated HIA unit that has sustainable funding
- A national tool available for use
- Strong international and national policy frameworks that describe the importance of inequalities; the determinants of health, the role that non-health sector policies have in protecting health, and the direct or indirect promotion of HIA as an approach to assess policies for their population health impact.
- Public health legislation is useful for embedding HIA.
- Non-legislated processes including memorandums of understanding between key agencies (supported by dedicated units) is useful.
- Health considerations built into government-wide policy making requirements.
- National and international crises leading to HIA being used as a tool to deal with complex multi-sector issues.
- HIA training of individuals and organisations.
- Sector-specific HIA leads, combined with sector specific training and regional networks of practitioners.

The European Union work, complemented with other countries experiences best describes why HIA may not have been picked up, and this includes:

- vertical government structures
- lack of understanding about how non-health sector policies may impact on health by other sectors
- the idea that health is strictly the responsibility of the health sector
- competing demands for time

- lack of understanding of the HIA approach has led to misunderstandings and inaccurate assumptions about the approach.
- confusing jargon
- lack of capacity to support or undertake HIAs
- lack of training and promotion of HIAs
- lack of dedicated HIA support units
- gaps in the evidence about the interrelationships between policy areas
- static organisational cultures.

Positive and negative experiences that agencies had in undertaking HIA:

Sweden's experience suggests that a large proportion of government policies are likely to impact on the determinants of health, or directly on health outcomes. A checklist applied by a core group of experts with diverse backgrounds was a useful tool for deciding if an HIA should be undertaken. The experience of British Columbia shows that broad partnerships are required for sustainable HIA.

Common negative experiences in undertaking HIA were:

- Lack of support from various countries Ministry's of Health.
- Major gaps in understanding of HIA by non-health sector agencies
- The use of HIA on ill-defined policies, or on policies that affect few people or affect few determinants of health
- HIAs undertaken too early in the policy process or too late in the process.
- Policy HIAs did not typically lend themselves to easy quantification of impacts..
- Lack of time, resources and skilled personnel.
- Gaps in the evidence base and the need for 'off-the-shelf' evidence bases.
- Gaining involvement of policy makers in the HIA if they did not request it be carried out.

Common positive experiences in undertaking HIA were:

- Large and complex policies were assessed by focussing on important policy elements. Choosing the right policy to carry out the HIA on was critical (the first step in the HIA approach).
- The flexible nature of the HIA tool in use was critical.
- Structured periods of testing the HIA approach were considered more beneficial.
- Seen as a practical tool that can work to time and other resource limitations.
- Policy level HIA was more suited to the social determinants approach of HIA concerned with population health, than a health protection approach.
- Involvement and use of HIA champions, well developed networks and stakeholders was a common benefit.
- Use of a multi-disciplinary team in the HIA leading to robust and rigorous assessments.
- Taking extra time to engage sectors not used to dealing with health issues was worth the effort.
- Convincing planners and policy makers to be involved was critical to getting the recommendations taken up.
- Training was seen to negate many of the barriers perceived by agencies and individuals.
- A mix of qualitative and quantitative evidence was often used, becoming particularly useful when there are gaps in the quantitative evidence.

Impact HIA has had on the policy process:

The evaluation of HIA and its impact is occurring slowly and steadily. Over the many countries considered in this review the impacts of HIA are:

- Many member states of the EU (particularly England and the Netherlands) and Thailand were aware of changes to policies developed or implemented as a result of information provided by an HIA, backed up in some cases by independent evaluations.
- Increased awareness of health amongst those outside the health sector, and increased political awareness and debate of health issues.
- Increased partnership working, cooperation and coordination between health and non-health sector agencies
- Confidence to undertake HIA, and confidence in the value it added to the policy process increased.
- Provided a systematic way of working and thinking through the policy development process.
- HIA built into the EIA process has been successful in Canada at protecting health (but only in Canada, not elsewhere).

A description of each country is included in the table below.

Region / Country	Current Situation	Main Learning Points
England	HIA is practiced at a local, regional and national level. It is supported in government departments by non-mandatory directives and tools available for use because the Government is committed to assessing how policies impact on health. Evidence of effectiveness is available from independent evaluations showing changed ways of working, greater cooperation and partnership, health being placed on the agenda and changed policies. Support units have been set up across the country and are funded by regional health organisations.	<ul style="list-style-type: none"> • Experience shows HIA works • There is talk from government about a statutory requirement for HIA • Strong government direction, along with grass-roots enthusiasm for the approach has led to HIA being picked up.
Netherlands	Plan of action on HIA sent to Parliament in 1995 which resulted in annual funding of HIA support and promotion unit. Extensive experience of policy-level HIA backed by sustainable annual funding provided by Parliament to a dedicated support and promotion unit. Parliamentary documents and advisory reports at the national level screened using a HIA checklist. Twenty five policy level HIAs carried out. Evidence of changes to policies provided.	<ul style="list-style-type: none"> • Independent support unit was beneficial for pick up of HIA. • Ministry of Health does not encourage other Ministry's to take on HIA recommendations resulting slowed development of HIA. • HIA works
Thailand	HIA is a basic tool being used to help the Government address underlying social issues about the lack of trust between Government and society. This has occurred due to a paradigm shift in the	<ul style="list-style-type: none"> • A comprehensive and systematic programme can contribute significantly to major government

	<p>Thai health services and society at large. The Health Systems Research Institute (HSRI) runs a comprehensive HIA programme. Over 30 HIAs on policies, programmes and projects carried out. Significant contribution to policy arena made by specific HIAs. Highly successful HIA implementation. Significant funding and multi-disciplinary staffing of HSRI. Sector-wide policy networks set up and headed by HSRI staff member. Gap between health evidence and policy making for each sector bridged. Sector specific training given.</p>	<p>issues that may not initially be considered a health issue. The flexible nature of HIA and its principle of involving the community in decision making have strongly encouraged pick up of HIA in Thailand.</p>
European Union (EU)	<p>Amsterdam Treaty for Member States encourages the use of HIA to protect population health in policy. 22 member states included in report, 6 consider health systematically. Significant gap in understanding of health and HIA between Health Ministries and other government departments. Member states aware of changes to policies based on HIAs. Sustainable resources for HIA support units set aside in 14 of the 22 states.</p>	<ul style="list-style-type: none"> • Strategies that detail the role of other sectors and their influence on health have supported HIA development. • Barriers stem from lack of skills, understanding and resources in agencies that consider or attempt to pick up HIA. • Structure use of HIA was more beneficial than one-off assessments for development of HIA skills.
Sweden	<p>Both local (local authority and county council) and national level HIA have been undertaken. The Public Health Bill required policies to assess impact on health. Screening of Government documents was piloted.</p>	<ul style="list-style-type: none"> • Used to produce equity in outcomes. • Time and resource constraints were considered an issue. • Little evaluation of impact but viewed positively.
Canada (national)	<p>HIA began in the 1980s with solid progress nationally. National provincial support units, comprehensive tools and dedicated individuals support HIA and its continued pick up.</p>	<ul style="list-style-type: none"> • Building HIA into EIA process at a national level has been successful. Vigilance required at provincial level to ensure HIA stays a useful policy tool and not a bureaucratic step.
British Columbia (Canada)	<p>Policy-level HIA one of the first systematic examples in the world, instituted in 1989. By 1999 no longer active due to lack of high-level support (a</p>	<ul style="list-style-type: none"> • Cabinet level directives initially successful. • Lack of a legal basis

	change of government) and ‘dedicated individuals’ being disbanded. Now successfully rebuilding HIA on a stable base with a dedicated support unit.	<ul style="list-style-type: none"> contributed to decline. Change in political climate and reliance on a small number of key individuals was detrimental. Support units formed as partnerships are valuable for providing vigilance and support to HIA. Evaluation of HIAs critical to show its value.
Quebec (Canada)	Public Health Act states that Minister of Health shall be consulted on any Act or regulation that could impact on population health. A dedicated support unit carries out policy level HIAs across Ministries.	<ul style="list-style-type: none"> Public Health Act important for HIA pick up. Dedicated HIA support unit successful. Strong basis for institutionalisation of HIA.
Wales	Strong base for policy-level HIA with support from National Assembly for Wales. Central government has HIA supportive policies and strategies. Welsh HIA Support Unit set up by Minister of Health and Social Services. Practical guide produced by the Support Unit. Policy training course planned to include HIA and support more systematic use of HIA.	<ul style="list-style-type: none"> Central government policies, a support unit and a national guide provide a strong base for future pick up of HIA at the policy level.
Australia	Government funded research programme supports HIA. System confidence about the capacity to undertake HIA present. Australasian Collaboration for Health Equity Impact Assessment carrying out HIA programme. HIA framework/tool developed and available for use. New South Wales Centre for Health Equity Training, Research and Evaluation established to develop capacity and pilot HIAs.	<ul style="list-style-type: none"> Using the social determinants of health model is a good basis for policy level HIA. Learning by doing is good for building capacity but choosing appropriate HIAs is critical in proving overall value of approach.
Republic of Slovenia	Pilot HIA undertaken in response to requirements prior to joining EU. Complex multi-sector environment and timing of HIA an issue. Future EU negotiations improved by increased inter-sectoral awareness of health linkages.	<ul style="list-style-type: none"> Resulted in strengthened relationships between ministry’s. Increased awareness of public health issues in policy. HIA training of agency practitioners must

		occur early.
Scotland	Policy statements support HIA and request Directors of Public Health to assist local authorities. HIA has not 'taken off' in Scotland unlike other countries in the UK. Pilot HIAs have provided considerable practical experience.	<ul style="list-style-type: none"> • No dedicated unit or individuals employed to carry out or support HIA. • Significant misunderstanding of HIA due to lack of training and promotion. • HIAs undertaken have resulted in better working relationships across sectors.
Ireland and Northern Ireland	Central Government policy documents support consideration of public health in public policy. Institute of Public Health in Ireland has HIA unit separately funded to increase HIA capacity and support pilot HIAs, and the unit offers HIA training programmes to agencies.	<ul style="list-style-type: none"> • Lack of understanding about HIA requires development of knowledge to prevent inaccurate assumptions about the approach. • Individual HIA champions within each sector require support and capacity building.
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Background

The Public Health Advisory Committee (PHAC) is a sub-committee reporting to the Minister of Health through the National Health Committee. Its role is to provide independent advice on public health issues, including:

- factors influencing the health of people and communities
- the promotion of public health
- the monitoring of public health.

In March 2004 PHAC launched 'A guide to health impact assessment: a policy tool for New Zealand' and at the same time provided recommendations to the Minister of Health about the future direction of health impact assessment (HIA) within New Zealand. In response to the PHAC recommendations on HIA, the Minister has asked PHAC to undertake an evaluation of HIA in New Zealand and international policy contexts which would:

- examine the reasons that agencies picked up, or did not pick up HIA;
- the positive and negative experiences that agencies had in undertaking HIA
- the impact HIA has had on the policy process.

This review attempts to describe international developments in HIA with particular reference to the three aspects of evaluation required by the Minister above.

Methods

A Medline search for relevant articles was carried out between the dates of 1996 and December 2004. Keywords used included health impact assessment, policy, evaluation, strategy, plan, experience, and practice.

A search of the grey literature using HIA-specific websites and health/government/education websites was undertaken as it was recognised that grey literature was likely to provide the majority of the material. Websites searched were:

- WHO HIA website
- Health Impact Assessment Research Unit
- IMPACT
- HIA Connect
- HIA Gateway
- HIA Database
- WHO Europe (ECHP)
- WHO Europe (HMS)
- London Health Commission
- National Institute of Public Health, Sweden
- Thai Health Systems Research Institute
- Minnesota Department of Health
- Institute of Public Health in Ireland
- MRC Scotland
- National Assembly for Wales
- Welsh HIA Support Unit
- Department of Health UK
- European Union
- Health Canada
- Health Development Agency

To complement this work, a basic questionnaire was sent to HIA listserv groups and people were asked to complete it. Five questionnaires were returned. Selected experts from specific countries have also been asked to review their country's part of this review.

The report is categorised by region or country, as each has its own specific context in which the research questions can be answered. Information from the questionnaire is identified in the body of the document, whereas literature identified from the searches is referenced.

Findings

England

HIA in England is practiced at a local, regional and national level on plans, policies and strategies. The drivers for HIA in England come from a range of European and national policies and strategies. For example, at the European level Article 152 of the Amsterdam Treaty calls for the EU to examine the possible impact of major policies on health (European Commission, 1999). As with other countries, the Government has clearly signalled its acknowledgement of the importance of the determinants of health, the impact of the non-health sector on health outcomes, and the Government's commitment to promoting HIA at a policy level (Quigley et al, 2005).

While there is no current statutory requirement for HIA in the UK, the Government has indicated the potential for HIA to become a statutory requirement within the Health Select Committee's Third Report (on obesity) stating that 'Major planning proposals and transport projects are already subject to environmental impact assessment; we believe that it would be appropriate if a health impact assessment were also a statutory requirement. This would enable health to be integrated into the planning procedure and help bring about the sort of creative, joined-up solution which is required (paragraph 321)' (House of Commons, 2004).

The Government has also started to address its commitment that all major new Government policies should be assessed for their impact on health. To achieve this, the Regulatory Impact Assessment Guidance has been strengthened to highlight the need for policy makers to assess health impacts (Cabinet Office, 2004). For policies which require a Regulatory Impact Assessment, a separate health impact assessment does not need to be undertaken. However, policy makers must now consider health impacts at all the appropriate stages of policy development within the Regulatory Impact Assessment (Cabinet Office, 2004). To assist this, the Department of Health has set up web-guidance to assist policy makers determine if their policy has a significant impact on health (screening questions). If two out of three of the screening questions indicate a likely significant impact, then a health assessment must be carried out (an assessment process quite similar in approach to an HIA) (Department of Health, 2004b).

Policy level HIA within England is also promoted across government as part of integrated policy appraisal where it is one of thirteen impact categories to be considered (Department for Transport, Local Government and the Regions, 2002), and as a stand-alone approach to supplement the standard HM Treasury guidance on 'Appraisal and Evaluation in Central Government' to support policy makers consider health issues (Department of Health, 2004).

Regional support units for HIA have been set up in certain areas (London, West Midlands, Plymouth and Northumbria), partly out of the acknowledgement that the

capacity of individual health authorities was low. These have been funded largely by National Health Service funded regional health organisations, sometimes in conjunction with university departments. In the case of the West Midlands unit this has meant that a balance between winning contracts and being available to carry out HIAs at short notice has had to be struck (Kemmm, 2004). There is no official national support unit for HIA, but the Department of Health has a single policy analyst allotted part-time to HIA, and the Health Development Agency has between one to three people allotted part-time to HIA.

Very few of the hundreds of HIAs carried out in England have been evaluated (but this is still better than all other countries), both for evaluation of process and impacts. So data to inform the positive and negative experiences that agencies had in undertaking HIA and the impact on the policy process is correspondingly low. However an analysis of the evaluations that have been undertaken, and the individual policy-level HIAs reported shows that:

- Health is typically firmly placed on the agenda of agencies, and health participants become more aware of the social policy agenda (Fleeman and Scott-Samuel, 2000; Opinion Leader Research, 2003; Quigley et al, 2005b).
- Assessment matrices were good at providing a systematic discussion on the broad categories of health affected by each policy measure. (Fleeman and Scott-Samuel, 2000; Opinion Leader Research, 2003; Close, 2001; Quigley et al, 2005b).
- HIA is a pragmatic process that can work to time restrictions (Opinion Leader Research, 2003; Abdel-Aziz, 2001).
- HIA engages a wide range of stakeholders who otherwise would not be involved in the process (Opinion Leader Research, 2003; Close, 2001; Quigley et al, 2005b).
- A minority of stakeholders question the value of a predictive approach and consider the assessment relies too much on stakeholder views (evidence) while discounting typical research evidence, though commissioners of HIAs typically highly value such evidence (Opinion Leader Research, 2003).
- Where multidisciplinary teams undertook the HIA, there was a good skill mix and access to multiple resources (Opinion Leader Research, 2003).
- Having multi-disciplinary input into the HIA from all relevant stakeholders is critical (Opinion Leader Research, 2003; Quigley et al, 2005b).
- Evidence and information were collected in structured and systematic ways (Close, 2001; Quigley et al, 2005b).
- Bringing health issues to the fore at an early stage of drafting allowed incorporation of these issues more easily (Land Use Consultants, 2002).
- Terminology and understanding gaps between the different players can lead to misinterpretation and confusion (Land Use Consultants, 2002).
- Quantitative evidence at the policy and strategic level are difficult and 'direction of change' may be more appropriate (Land Use Consultants, 2002).
- Inequalities in health were targeted for assessment to attempt to address equity issues (Fleeman and Scott-Samuel, 2000; Opinion Leader Research, 2003; Quigley et al, 2005b).
- Changes attributable to the HIA on the policy being assessed were described. Examples from these include:
 - 'Greater London Authority strategy development staff report that they have taken health into account during the drafting stage because they knew it would be subjected to a HIA and that they have revised the strategy as a result of the HIA report' (Opinion Leader Research, 2003).

- 'As a result of this [HIA] process, the Cambridgeshire Structure Plan as it is drafted now, reflects many of the comments made. The Plan is now more sensitive to social and health issues, which is important as it acknowledges that the Structure Plan is able to influence a range of policy objectives beyond solely the use of land for development' (Land Use Consultants, 2002).
- Westminster City Council commissioned the appraisal before the design stage and recommendations from the integrated appraisal were taken into account when the local authority decided which development option to pursue (Quigley et al, 2005b).
- When reviewing strategic aims overall rather than specific project proposals it was difficult to tease out a sharply focussed action plan during the course of a rapid HIA process (Barnes et al, 2003).
- Technical information and evidence collected in other related assessments (such as EIA) were useful for predicting health impacts (Abdel-Aziz, 2001).
- Ensuring that planners and developers recognized the importance of the HIA (and were informed of its progress) helped to take the recommendations forward (Abdel-Aziz, 2001).

Main learning points from England:

The reasons agencies picked up or did not pick up HIA:

As with other countries, the Government has clearly signalled its acknowledgement of the importance of the determinants of health, the impact of the non-health sector on health outcomes, and the Government's commitment to promoting HIA at a policy level. For the first time there is even talk of a legislative requirement for HIA within government. These policies are further supported by EU wide treaties that support an HIA approach. Policy level HIA is supported across government departments by HIA being built (not mandatory) into policy appraisal within the HM Treasury's guidance, and Regulatory Impact Assessments; and through a non-mandatory component of the DTLR integrated policy appraisal tool. Support units have been set up across the country, funded largely by regional health organisations. All of the above measures encourage agencies to pick up HIA.

Positive and negative experiences that agencies had in undertaking HIA:

Evaluations in England of HIAs have shown the following positive and negative experiences of undertaking HIA:

- Health is typically firmly placed on the agenda of agencies, and health participants become more aware of the social policy agenda.
- Assessment matrices were good at providing a systematic discussion on the broad categories of health affected by each policy measure.
- HIA is a pragmatic process that can work to time restrictions.
- HIA engages a wide range of stakeholders who otherwise would not be involved in the process.
- A minority of stakeholders question the value of a predictive approach and consider the assessment relies too much on stakeholder views (evidence) while discounting typical research evidence. Commissioners of HIAs, however, typically highly value such evidence.
- Where multidisciplinary teams undertook the HIA, there was a good skill mix and access to multiple resources.
- Having multi-disciplinary input into the HIA from all relevant stakeholders is critical.
- Evidence and information were collected in structured and systematic manner.

- Bringing health issues to the fore at an early stage of drafting allows incorporation of these issues more easily.
- Terminology and understanding gaps between the different players can lead to misinterpretation and confusion.
- Quantitative evidence at the policy and strategic level are difficult and 'direction of change' may be more appropriate.
- Inequalities in health were targeted for assessment to attempt to address equity issues.
- When reviewing strategic aims overall rather than specific project proposals it was difficult to tease out a sharply focussed action plan during the course of a rapid HIA process.
- Technical information and evidence collected in other related assessments (such as EIA) were useful for predicting health impacts.
- Ensuring that planners and developers recognised the importance of the HIA (and were informed of its progress) helped to take the recommendations forward.

Impact HIA has had on the policy process:

In the UK for policy level HIAs there has been considerable evidence of positive experience. Changes attributable to the HIA on the policy being assessed and the policy process used were described in all of the evaluated HIAs and many others (Opinion Leader Research, 2003; Quigley et al, 2005b; Fleeman and Scott-Samuel, 2000; Land Use Consultants, 2002).

Netherlands

The Netherlands has extensive experience of policy level HIA as a way to look at intersectoral policy and action. The development of HIA in the Netherlands mirrors other countries with a strong HIA presence, where over several years there was a growing interest in how factors outside the health sector had an influence on health. This was seen in multiple government policy documents outlining the importance of the determinants of health, the need for intersectoral policy action, and the growing health inequalities. The Netherlands commissioned an expert report in 1993 that recommended a start be made on the experimental screening of national policy proposals so that questions of process and barriers of concern could be considered (Varela et al, 2001; Roscam-Abbing, 2004).

In 1995 a plan of action on HIA was sent to Parliament, from which €230,000 was made available to carry out the plan on an annual basis. A separate institute (Intersectoral Policy Office) was set up within the Netherlands School of Public Health, headed by a university professor and supported by a small steering committee. The role of the office is to commission HIAs and develop HIA methodology, and build HIA capacity. The staff have grown from two staff members and a secretary in 1996 to four staff members and two secretaries in 2001, with a budget of €340,000 per annum, with an additional €95,000 for actually carrying out HIA. The office is funded by the Ministry of Health, but has independent control of its budget (Varela et al, 2001; Roscam-Abbing, 2004).

The office sits within the National School of Public Health and this was considered beneficial because:

- the development of HIA was still considered experimental
- commissioning HIAs from an independent organisation was considered more acceptable to those being assessed.
- it maintains strong networks with academic institutes, non-governmental organisations, research institutes

- not being a research institute reduces risk of favouring itself with tenders for the HIA.

Both the Ministry of Health and the Intersectoral Policy Office are able to screen proposals, but in reality this mostly falls to the Office. Between 1996 and 2003 the Office has carried out 25 policy level HIAs on the Ministry of Health's own policies, but with a gradual shift towards other ministries policies. The complexity of HIAs has also increased from rapid assessments to comprehensive reviews. Early work concentrated on finding cases for HIA, with the goals of influencing policy deliberations in favour of health, increasing long term awareness of the impact of policies on health, agenda setting, and increasing the probability of health interests receiving structural attention (Varela et al, 2001; Roscam-Abbing, 2004).

Influence outside the Ministry of Health to promote HIA was essential for the development of HIA in the Netherlands, as the daily reality for ministry officials was that they were typically occupied with 'urgent matters'. This was noted to remove responsibility of HIA from the Ministry of Health, which was not ideal, as strong support from Health is required to encourage other ministries to have their policies assessed, and act on HIA recommendations. This lack of support from the Ministry of Health is believed to have held back the development of HIA in the Netherlands. Organisational improvements to the Ministry of Health have been made by the Netherlands Council for Health and Care. The Dutch HIA experience of multi-sectoral screening of parliamentary documents and advisory reports concludes that the Ministry of Health should be responsible for assessing the health effects of national policies even outside of the health domain (Varela et al, 2001; Roscam-Abbing, 2004).

Experience in the Netherlands has shown that timing is imperative. Where a proposal moves past a draft version to become a formal proposal, opportunities for changing the proposal are generally closed, despite the proposal still officially being open to change. However, before this point, the Netherlands experience suggests that many proposals remain as vague and abstract ideas, and then form and change rapidly near the end of the process. Unfortunately, near the end of the process the time and willingness to participate in an HIA may also dissipate. In such situations the Netherlands have noted that if an HIA is to occur, it must have support at the highest levels of the Ministry of Health if it is to hope to affect policy change once finished (Varela et al, 2001; Roscam-Abbing, 2004).

The Minister of Health in 1995 stated that HIAs should not be limited to easily assessable and quantifiable issues where causal relationships are clear. The Minister described that it was clearly possible to base HIAs on health effects described in a qualitative or tentative way using case studies or well-reasoned assumptions. In practice this has been difficult, as quantitative data has often been required to convince other parties of potential negative health effects or benefits (Varela et al, 2001; Roscam-Abbing, 2004).

The screening of parliamentary documents and advisory reports at the national level is carried out using a HIA checklist. The checklist was developed as a practical tool to evaluate specific policy proposals with regard to their relevance to health and their potential health effects. The National School of Public and Occupational Health and the Inter-Sectoral Policy Office and the Ministry of Health are jointly responsible for the screening process of policy proposals coming from ministries other than the Ministry of Health. Three different kinds of documents are selected; governmental documents (50-100 per day are screened by title), the national budget (screened annually) and ministry advisory reports. The National Budget provided a good idea of

incoming major governmental policies that might be relevant to health, whereas screening ministry advisory reports was only considered meaningful if the ministry concerned took over and considered an assessment, which unfortunately was not the case. Since 2003 the Intersectoral Policy Office has moved from the National School of Public Health to the National Institute of Public Health and Environment (RIVM) (Varela et al, 2001; Roscam-Abbing, 2004).

One example described from the Netherlands outlines Cabinet reconsideration of budget allocation to strengthen the position of the chronically ill and disabled in terms of income rebates for a regulatory levy on energy. The fixed rate deduction for these groups raised from D.fl. 511 to D.fl. 1532, and the tax allowance for these groups and the elderly was increased by 50%. Other impacts on a policy to discourage smoking, the licensing act and housing forecast for 2030 were described (Varela et al, 2001; Roscam-Abbing, 2004).

Main learning points from the Netherlands:

The reasons agencies picked up or did not pick up HIA:

A supportive policy scene was set over many years, where inequalities in health and an understanding of how health is affected by the non-health sector are reflected in multiple policy documents. Sustainable annual funding provided by Parliament allowed the setting up of an independent unit to support agencies pick up HIA. The unit works independently of the Ministry of Health, and this has advantages and disadvantages. The unit provided influence outside of the Ministry of Health, and this was considered essential for the development of HIA in the Netherlands, though it partly removed responsibility of HIA from the Ministry of Health – a negative influencing factor. This general lack of support from the Ministry of Health towards HIA is believed to have held back the development of HIA in the Netherlands.

Positive and negative experiences that agencies had in undertaking HIA:

The independent unit commissioned HIA and this was considered more acceptable to all stakeholders. Timing of the HIA was considered is critical, balancing between having something concrete to assess, and having a policy too fixed to change easily (and acting in much shorter timeframes at the later stages of development). The Netherlands HIAs had a significant quantitative focus to them to assist in convincing decision makers about health benefits and negatives, though the Minister of Health wants HIAs carried out on less tangible topics as well, and using qualitative evidence to inform the recommendations. Screening the national budget was considered a useful way to alert the unit to new policies.

Impact HIA has had on the policy process:

The Netherlands has experienced some success at influencing the policy process, particularly the Cabinet reconsideration of budget allocation for a regulatory levy on energy HIA. Overall however, successes have also likely been held back by the lack of support from the Ministry of Health due to their lack of high level support to encourage proposing ministry's to take on board the HIA recommendations.

Thailand

The Health Systems Research Institute (HSRI) runs a comprehensive HIA programme that attempts to promote civic empowerment to allow meaningful participation in the public policy process. Six sector-wide policy networks have been set up (for example, transport, international trade, etc), and each is headed by a HSRI staff member who attempts to bridge the gap between health evidence and policy making for that sector, and run sector specific training. The HSRI also has an

over-arching coordinating team to support HIA work within Thailand, and regional networks of practitioners are now flourishing as well (Sutipanwihan, 2003).

Under the guidance of this programme, Thailand has made significant progress in the promotion and practice of HIA, having carried out over 30 HIAs on policies, programmes and projects (Sutipanwihan, 2003).

Thailand has adopted HIA because in 1997 the country's political reform coincided with an economic crisis that raised a strong demand for extended societal restructuring, which finally triggered off a paradigm shift in the health sector. As described by Phoolcharoen 'In the midst of this drastic evolution, the health impact assessment (HIA) has emerged to be basic apparatus in reconciliation of the conflict from untrustworthy attitude between government and the civil society. (The) Government of today is faced with difficult problems that do not have easy solutions. The problems and issues to deal with are complex and cannot be viewed in isolation or within authoritative mentality, where one approach to a problem is considered sufficient. Collaboration with broader stakeholders has been undergone, as citizens, businesses, and governments, to build a sustainable development of the future. Thus, policy-makers must seek a balance rather than competition among priorities when making decisions' (Phoolcharoen, 2003).

- This programme has the direct support of the Prime Minister and the Thai Government has invested more than US\$ 3 million in last 2 years to mobilise a holistic process of learning in Thai society in order to rethink and redesign the health system. One of the key drivers for success in Thailand has been the involvement of all stakeholders. Even though HSRI has identified the government sectors as the main users of HIA process, the academic community and civil society have been recognised as key stakeholders in the drive for healthy public policy (Phoolcharoen, 2003). HIA has made significant contributions to the policy arena in Thailand (Sukkunloed, 2003).

Recent experiences in Thailand (Phoolcharoen et al, 2003) have concluded that the effectiveness of an HIA process depends on:

- appropriate analytical frameworks for a participatory learning process being devised
- an effective institutional structure being designed to facilitate HIA implementation and to influence HIA process, impacts, and outcomes in public policy-making
- a critical mass of technical experts and activists being formed to support HIA
- an enabling environment being established for the learning process, and for advocating for healthy public policy.

The challenges experienced in Thailand when undertaking HIA (Phoolcharoen et al, 2003; Phoolcharoen et al 2003b) have been:

- incomplete knowledge and information on both environmental and health issues, especially their social and spiritual health aspects
- limited time and resources available for the HIA process
- vast differences in capacity for information and technical access between different stakeholders in the impact assessment process
- inequalities that have lead to both social exclusion and mistrust in the decision-making process
- that HIA was a new concept introduced into Thailand, and to use the identical frameworks from other countries would have been a mistake. HIA had to function within Thai culture

- the need for many knowledge areas to carry out a full impact assessment, therefore the personnel were not only in medical science or public health, and so human resource development was an obstacle
- HIAs that focussed on solving a 'problem' as described by the community did not typically provide sufficient health evidence to move the policy. Thailand now attempts to link with other problems in the problem stream, such as economic, social, or political aspects, within each specific case to help move the policy
- strong partnerships and full participation alone are not enough to guarantee a successful change towards healthy public policy.

Main learning points from Thailand:

The reasons agencies picked up or did not pick up HIA:

The Health Systems Research Institute (HSRI) has been instrumental in encouraging agencies throughout Thailand to pick up HIA. It runs a comprehensive HIA programme including sector-wide policy networks and sector specific training. The HSRI has a significant level of funding and a large number of staff dedicated to HIA, including an over-arching coordination team to support HIA work within Thailand. The staff of the HIA unit cross multiple disciplines and are purposefully not restricted to public health and medical fields. Regional networks supported by HSRI further encourage the uptake of HIA. The reason Thailand has invested so heavily in HIA is that the country's health sector has undergone paradigm shift where HIA has emerged as the basic apparatus in reconciliation of the conflict from an untrustworthy attitude between government and the civil society.

Positive and negative experiences that agencies had in undertaking HIA:

One of the key drivers for success in Thailand has been the involvement of all stakeholders. This is combined with an HIA approach developed to suit the individual Thai culture. Experience has suggested a number of barriers that must be overcome:

- incomplete knowledge and information on both environmental and health issues, especially their social and spiritual health aspects
- limited time and resources available for the HIA process
- vast differences in capacity for information and technical access between different stakeholders in the impact assessment process
- inequalities have lead to both social exclusion and mistrust in the decision-making process.

Impact HIA has had on the policy process:

HIA has made significant contributions to the policy arena in Thailand, both in providing a different and systematic way of working to solve complex problems at the base of the Thai community, but also at an individual policy level where multiple policies have been informed by specific HIA.

European Union

A number of countries within the European Union (EU), and the EU itself have adopted and investigated HIA. Often it is difficult to disentangle the two, but this section largely relates to European-wide work rather than member-state work.

Across the broad membership of the EU there is an increasing recognition by governments of the social, economic and environmental determinants of health. This is reflected by Article 152 of the Amsterdam Treaty for Member States which encourages the use of HIA to ensure that human health is protected in EU policy development and implementation. The European Commission Public Health Strategy

also supports the use of HIA to assess the health impact of community policies and actions (IMPACT, 2004).

A survey of all member states of the EU was commissioned to investigate national government level HIA practices. Twenty-two countries returned questionnaires, showing the breadth of HIA practice within the community (Breeze, 2003).

In all but four countries health was seen as a theme that cuts across all policy areas. All but one said that health is considered as something that might be relevant when policies and programmes in other policy areas are in their early stages of development or review. Though health is only considered sometimes (14 respondents) or rarely (7 respondents). Systematic consideration of health occurred in six countries whereas the remainder noted that health was only considered opportunistically. The responsibility for considering the relevance of health to policies rested with the Ministry of Health (or equivalent) in two-thirds of countries, with the ministry responsible for the proposal in five countries, and no-one was specifically responsible in the remaining three countries (Breeze, 2003).

The survey concluded that there was a significant gap in the understanding of health and HIA between health ministries and other government departments. To inform why agencies have begun to use HIA the survey asked the main reasons countries used HIA, they were as a:

- tool for policy development and review
- general way of thinking about policies and wider impacts
- overall approach to policy development.

To further explain the reasons why agencies have begun to use HIA, the survey described the main uses HIA has been put to as part of the government processes, including:

- develop more integrated policies/programmes
- generate more evidence
- ensure health is not overlooked
- develop intersectoral action
- for a better understanding of how health relates to other policies
- to quantify impacts on peoples health
- to inform decision making
- to identify opportunities to protect and improve health.

Just over half of all respondents believed that quantifying impacts on people's health was one of its main uses. In practice this can be done for only a limited number of subjects. Yet this lack of quantification does not necessarily reduce the value of HIA at identifying opportunities for improvements and the wider implications of a policy (Breeze, 2003).

Actual use of HIA within the member states varied. Seven said there was government-wide commitment to its use, and a further three said the commitment only extended to their Ministry of Health. The majority, seventeen countries, reported HIA had been or was being undertaken, and 12 had produced specific guidance on the approach. Seven countries had set aside specific resources inside their government for HIA in the form of a dedicated team or unit, and a further seven had established resources outside of government in a national institute or agency.

Regarding the affect on policies, just over one-third of countries said they were aware of changes that had been made to policies developed or implemented as a result of

information provided by an HIA. Other reported benefits was an increased awareness of health amongst others outside the health sector, increased political awareness and debate, and cooperation and coordination between officials in health and other policy areas (Breeze, 2003).

The survey also cited barriers, or negative experiences encountered, to using HIA in government policy making. In order of importance these were:

- lack of relevant skills
- lack of awareness/understanding
- lack of resources
- no recognised tool or method
- lack of political support
- lack of time and other priorities getting in the way
- not convinced of benefits
- gaps in the evidence base.

Many of these were considered inter-related. For example, a lack of awareness and understanding is likely to affect views on the availability of a recognised tool or method. Similarly, a lack of skills is likely to prevent the chances of HIA being tested, which is essential if governments are to determine its usefulness (Breeze, 2003).

Since the survey was undertaken the EU has gone on to develop a standard generic methodology for HIA of EU policies (IMPACT 2004). During its development it was applied to the European Employment Strategy by different member states as a pilot process to help refine and develop the methodology. This methodology goes some way to addressing one of the main barriers cited in the survey above – a lack of a recognised tool or method.

The EU guide notes that the majority of rapid or desk-top assessments, once informed by a broad steering group of stakeholders, should be able to be done in-house by trained personnel. In-depth assessments are believed to require the skills of an external public health expert to draw a larger project together (IMPACT, 2004).

The EU guide makes a useful contribution by discussing the potential ‘units of analysis’ that can be undertaken for policy level HIA. This is important as the populations affected can vary considerably. It describes:

- Europe-wide level where the health impacts could be estimated for the European population as a whole.
- Regional assessment where ‘southern’, ‘northern’ or ‘eastern’ Europe should be assessed as the socio-economic and health contexts are so varied that the impacts are also likely to be different.
- Nation state level where it is considered the significance of the policy or variability across states requires this unit of analysis.

Such considerations of the ‘unit of analysis’ relevant to New Zealand would usefully inform policy level HIA here.

The development of this EU Guide involved carrying out pilot HIAs in four countries and at the wider EU level (Abrahams et al, 2004). Due to the breadth of the policy – the HIAs had to focus on specific components of the policy to make it manageable. Different countries used different forms of evidence to inform the recommendations, ranging from modelling to participative workshops to key stakeholder interviews. In Germany, mathematical models were used to inform the recommendations. The modelling scenarios noted a number of barriers including the complicated

relationships attempting to be modelled, lack of data, and the need to simplify scenarios to allow modelling to occur. The lack of data also prevented sub-populations of interest being modelled. However it did provide magnitude and direction of impact data that was considered useful. The authors noted that quantitative methods can provide a useful starting point for further discussions with stakeholders and policy makers. The German experience in this HIA also noted that because the policy makers did not initiate the HIA, achieving their participation was difficult and this hindered the HIA.

The UK experience also noted similar difficulties to Germany, with a lack of access to stakeholders, availability and accessibility of data, and the difficulty in generating quantitative data by modelling.

All of the HIAs above were evaluated and these generated further lessons relevant to this review:

- The methodology must be flexible so that appropriate methods can be selected to prevent misconceptions that it is necessary to carry out all steps in the method.
- To enable busy policy makers the ability to undertake HIAs quickly, a rapid HIA methodology was also developed.
- Due to gaps in data, the importance of stakeholder workshops, interviews and other qualitative methods to collect data was emphasised.
- Participatory methods where stakeholders are involved in conducting the assessment were considered important – to aid collection of data, promote ownership of the HIA and raise policy-makers awareness of health issues.
- The direct involvement of affected population groups in the HIA was considered ideal, but due to time and resource constraints those involved were often representatives of groups.
- Policy proponents and policy makers must be involved in the process. This was difficult to achieve in these HIAs since the proponents did not request the HIA be undertaken.

HIA at the World Health Organization (WHO)

The WHO is promoting HIA because a number of recent developments have set the groundwork to promote HIA uptake:

- An increasing awareness by the public of environmental effects on health.
- Concern that local environmental issues is often related to effects on the health of the local population only, instead of wider consideration.
- A broader move towards understanding and acknowledging the link between health and other policy areas, and for assessing policies for health impacts; as set out in the Amsterdam Treaty, the World Health Report 2000, and the WHO Commission on Macroeconomics and Health.
- Consideration of health within the Convention on Environmental Impact Assessment in a Transboundary Context (for strategic environmental assessment of policies, programmes and investment).

WHO has acknowledged through its work, a survey of Health Ministries, and discussion with networks that factors that typically inhibit the take-up of HIA are:

- vertical government structures
- lack of awareness of health by other sectors
- the idea that health is strictly the responsibility of the health sector
- competing demands for time
- confusing jargon
- gaps in the evidence about the interrelationships between policy areas

- static organizational cultures (WHO Europe, 2002).

WHO Europe (2002) concludes that 'HIA can play a key role in promoting health, not only through policies at local level but also in strategic decisions at the EU policy-making level'.

Similarly, a number of factors identified by European Health Ministries involved in HIA have been used to promote HIA:

- fostering political commitment and leadership
- recognising health as a high-level objective
- identifying those institutional structures that HIA requires
- establishing arrangements for the implementation of HIA
- establishing arrangements for systems and processes that encourage links across departments and functions
- giving examples of successful practice (WHO Europe, 2002).

HIA of the EU common agricultural policy

This HIA was carried out nearly ten years ago to inform Sweden joining the EU, and the requirement for Sweden to adopt the EU common agricultural policy (Andreasson et al, 1996). This HIA split this vast EU policy into manageable portions by focussing on specific regimes of clear significance to public health (fruit and vegetables, tobacco, alcohol and milk products). The report makes a number of recommendations about how the common agricultural policy could be altered, but no analysis of the success of the HIA in generating change in these is provided.

Main learning points from the EU:

The reasons agencies picked up or did not pick up HIA:

International treaties and strategies support the development of HIA, and acknowledge the role of other sectors and their influence on the wider determinants of health. Because of this, health is widely seen by many EU member states as a theme that cuts across all policies (but this does not necessarily mean they all act on this knowledge). Health Ministries describe that member states have picked up HIA because HIA:

- is seen as a tool for policy development and review
- is a general way of thinking about policies and wider impacts
- generates more evidence
- informs decision making and identifies opportunities to protect and promote public health
- fosters political commitment and leadership
- health is recognised as a high-level objective.

To assist agencies to pick up HIA, the majority of EU member states (14 of 22 surveyed) had set aside sustainable resources for dedicated HIA units either within or outside government.

Reasons Health Ministries cited agencies did not pick up HIA were:

- vertical government structures
- lack of awareness of health by other sectors
- the idea that health is strictly the responsibility of the health sector
- competing demands for time
- confusing jargon
- gaps in the evidence about the interrelationships between policy areas
- static organisational cultures (WHO Europe, 2002).

Positive and negative experiences that agencies had in undertaking HIA:

Despite acknowledging that health cuts across all policies, the majority of EU member states only consider health opportunistically, and member states acknowledge the major gap in understanding of HIA both within and external to the health sector. Quantification of assessments was often not possible but this was not seen to necessarily reduce the value of HIA for identifying improvements to policies, as qualitative data can often provide this. It was considered that the majority of assessments should be able to be done by trained in-house personnel. Due to the size and complexity of assessments, HIAs had to focus on specific components of the policies to make them manageable, and different countries use different types of evidence to inform assessments – each with their own positive and negative aspects. Getting policy makers who did not initiate an HIA to become involved was difficult, as was the involvement of all stakeholders, particularly the public. Use of a flexible tool was considered essential for a positive HIA outcome. Action to try out the approach is essential – single assessments were useful but a structured period of testing would be more beneficial. A strategy to persuade others to take health into account was required to ensure positive experiences.

Barriers and negative experiences across government agencies of HIA were:

- lack of relevant skills
- lack of awareness or understanding within their government
- lack of resources
- no recognised tool or method
- lack of political support
- lack of time and other priorities
- not convinced of benefits
- gaps in the evidence base.

Impact HIA has had on the policy process:

One third of member states were aware of changes that had been made to policies developed or implemented as a result of information provided by an HIA. Other reported benefits were an increased awareness of health amongst others outside the health sector, increased political awareness and debate, and cooperation and coordination between officials in health and other policy areas.

Sweden

In Sweden, both local and national level HIA has been developed and implemented. The two agencies responsible for this are the Swedish Federation of County Councils and the Association of Local Authorities (Nilunger et al, 2002/03).

Half of all County Councils and one sixth of local authorities are using HIA for predicting health consequences of political decisions and proposals. An evaluation of its use in this way by one County Council found that both civil servants and politicians were 'pleased with the way the process was working and the achievements of HIA', that the HIA process was being constantly modified and improved, but that for the HIA process to be successful there had to be a strong political commitment and support (reference only available in Swedish – Finer et al, 2002). A training manual and a pamphlet for policy makers at the local level is currently being developed.

At a national level the Swedish Government has commissioned and carried out several policy-level HIA - on topics such as the EU common agricultural policy; EU trade in alcoholic beverages, and proposed legislation on the age limit on the sale of tobacco. These HIA were not chosen in a systematic fashion. An investigation in

2001 to study the implications of using HIA at this level concluded that HIA practice required more evaluation before conclusions could be drawn (Nilunger et al, 2002/03).

Making HIA an integrated part of the policy process has since been piloted in Sweden, where a systematic process to choose which national policies should have an HIA undertaken (called screening) has been trialled. The National Institute of Public Health created a checklist to screen which fledgling governmental policies in the ten main Ministries should have an HIA (all ministries supported this work). Policies early in their development process were chosen because they allowed a fair chance for any HIA to influence the outcome; and the fledgling policies were publicly available.

The checklist questioned how the policy would affect the determinants of health¹; and how the policy would impact on different groups of society, particularly by gender and vulnerable groups.

HIA screening in Sweden suggested that over one-third (39%) of all governmental policies should consider using an HIA as health impacts were expected – based on the assumption that at least one or more health determinant was affected by the policy. The authors acknowledged that resource constraints made this level unfeasible, so further prioritising was required to target those policies with the largest possible health impacts (and determining how to do this was an ongoing piece of work). Also, the authors noted that this did not mean that all of these 39 per cent of governmental policies needed a complete HIA. Instead, it should be interpreted to mean that 39 per cent of the inquiries should include health expertise in the process of developing policy proposals. In the best-case scenario, this would lead to a proactive role of the public health sector much earlier in the decision-making process than is usually the case.

To give an indication of the government departments that had governmental inquiries that indicated health would likely be affected, the Swedish breakdown is presented below.

Number of terms of references potentially affecting Swedish health objectives.

Ministerial jurisdiction	Total no of terms of reference	No of references affecting health objectives
Finance	15	5
Defence	12	0
Justice	16	6
Agricultural, Food and Fisheries	6	1
Culture	8	1
Environment	7	5
Health and social affairs	18	14
Education and Science	8	4
Foreign Affairs	6	1
Industry, employment and communication	23	10

¹ Within Sweden, the determinants of health include: participation and influence in society; economic and social security; safe and favourable growing up conditions; healthy working life; physical activity; eating habits and safe food; and prevention of infectious diseases, etc.

Total	119	47
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In most cases, the potential health impacts that were identified applied to the whole population, but groups such as children, disabled persons, students and people in specific geographical areas were also frequently identified.

The screening process was not considered to be difficult, but a core group of experts with different backgrounds (government officials plus public health experts) was required to reach consensus on whether an HIA should be undertaken. Such a group was considered to be essential because without public health input there was considered to be a risk of HIA being rejected on the basis of a lack of knowledge in public health. The group also had a positive side effect where health awareness was raised and partnerships facilitated. In practice, time and resource constraints often set a limit to the quality of the screening process and a suitable compromise between available resources and the level of comprehensiveness of the screening process had to be found. (Nilunger et al, 2002/03; National Institute for Public Health, 2003).

Practitioners recommended that HIA had to be integrated throughout ministries and made a part of the daily work of all ministries. The screening work showed that it was a practical way of achieving this, allowing health impacts to be considered during the policy-drafting process (the process taking months to years) and therefore providing a good opportunity for HIA to be performed. However, at the end of the pilot systematic screening was not continued as the screening process was part of a larger piece of work gathering information about how to do HIA, and the next stages of HIA – scoping and appraisal, were the future focus of the project.

Instead, the current situation (without screening) is that inquiries are finalised and eventually sent to the National Institute for Public Health for consultation for possible health impacts. Health may already be considered in some of the reports, but this is rarely done in a systematic way as required by HIA-methodology. By the current procedure, health impacts are therefore considered very late in the process leaving little time for improvement (National Institute for Public Health, 2003).

Within the Public Health Bill, from which much of the above work has been driven, the government emphasised the importance and need for:

- further development of HIA methodology
- identification of policies of importance to public health to conduct relevant HIAs
- use of HIA in the monitoring and evaluation of the public health policy
- further investigation whether or not HIA is to be made statutory in Sweden as is the case for environmental impact assessment (National Institute for Public Health, 2003).

The Public Health Bill has placed health impact assessment on a strong footing in Sweden as improved public health is a central goal for all Swedish government policy. The main purpose was to achieve a more equal level of public health with regard to social class and gender, by influencing all relevant areas of policy and action. The public health bill contains eleven public health objective domains based on the main socio-economic, behavioural and environmental determinants of health covering both up-stream and down-stream determinants. It is stated that successful public health efforts require initiatives in several policy areas and that this will require all public agencies and authorities whose operations and tasks affect public health to consider and report on the effects of their work on public health – therefore requiring HIA. (National Institute of Public Health, 2002). Such a situation arose out of the consultation on the national strategy for public health where HIA was given more

prominence following significant support for it from public health, county councils and municipalities, particularly as an answer to address inequalities in health (Ostlin and Diderichsen, 2000).

Main learning points from Sweden:

The reasons agencies picked up or did not pick up HIA:

HIA was used in Sweden to produce equity in outcomes and to meet government requirements that public agencies report on how their work impacts on public health. Swedish agencies have a strong rationale for undertaking HIA at a policy level due national-level policy commitments, a new Public Health Bill (highly supportive of HIA) and an Institute with a mandate to support HIA. The Public Health Bill is specifically promoting HIA to address health inequalities.

Positive and negative experiences that agencies had in undertaking HIA:

Screening in Sweden worked – showing a high proportion of policies (39%) across many sectors, should at least include health expertise in the development process; but can it apply to the NZ policy process? Experience suggested that different backgrounds of people are required for the screening group. It was not considered difficult and positive side-effects were that partnerships were developed and health awareness raised. Time and resource constraints meant compromise was essential for screening. Screening did not continue at the national level in Sweden and further analysis of subsequent HIAs showed that health is rarely considered, and when it is, policies are well developed and difficult to change.

Impact HIA has had on the policy process:

Little evaluation of impact, but at the local level civil servants and politicians were 'pleased with the way the process was working and the achievements of HIA'. At the national level screening could be slotted into Swedish policy process.

Canada (national)

Canada has a long and chequered history for the use of HIA beginning during the 1980s and showcasing highly successful examples HIA development and pick up, and less successful examples. At a national level, HIA is solidly built into the environmental impact assessment process, yet at the provincial level in British Columbia there was an unprecedented rise in HIA use, only to be followed by an equally dramatic fall. The province of Quebec has a different story again detailing a steady rise in HIA. The lessons from each are valuable for this work.

In Canada, the practice of HIA is highly variable across provinces and no single process or model exists. This reflects the flexible way in which HIA can be applied to different conditions and needs within what may appear at first to be similar jurisdictions, and so most of the provinces have developed their own unique approach to HIA. Some provinces link HIA to cabinet submissions and the policy development process; other provinces couple HIA with provincial health goals, and several provinces consider HIA within the context of environmental impact assessment (Health Canada, 2005).

National level involvement of health within EIA

EIA within Canada has evolved over a 25 year history and throughout the majority of this time the health aspects considered within EIA have been inconsistently or only partially addressed. Since the mid-1990s, after the setting up of a HIA task force, health considerations are now more systematically considered. The determinants of health have become a cornerstone of the Canadian HIA framework as set out in Health Canada's first version of its substantial HIA Handbook (Health Canada, 1996;

1999). These give national guidance on the integration of health and socioeconomic impact assessment within an EIA.

Canada is also now attempting to form greater linkages with social impact assessment methods. To support HIA in Canada a partnership has been formed between a dedicated health assessment unit within Health Canada and a HIA support unit at the University of Quebec. These two groups work cooperatively to provide expertise for addressing specific HIA problems and implementing training (Kwiatkowski, 2004). The unit provides direction on all activities carried out under the Canadian Environmental Assessment Act. The Act requires an environmental assessment of federal projects, and it is the primary responsibility of the dedicated unit to ensure that human health is a component of environmental assessment.

This scenario is specific to Canada, as it is important to note that the HIA practiced here is a form of integrated impact assessment, but it still falls under the definition of HIA because of its rigorous approach based on the wider determinants of health. Apart from in Canada, most EIAs carried out around the world (and in New Zealand) use an environmental health or risk assessment model as their basis and typically only use quantitative toxicological data in their assessments, and these would not meet the usual values of HIA.

Within this specific national context, Health Canada has used HIA because it is legislated that health should be a consideration in environmental assessments. This is also the case in New Zealand, but unfortunately current practice in New Zealand does not reflect this.

In comparison with policy-level HIA in Quebec, the Task Force rejected the concept of developing a separate legislated HIA process to complement the EIA process, and has instead integrated HIA within the existing legislated federal or provincial EIA process. The HIA Handbook is used by stakeholders to guide them through the integration of health into their EIAs, and this has been reported as a 'successful in assisting decision makers to guide and direct policy, programme and project development so that these initiatives are protective of human health' (Kwiatkowski, 2004).

This report will also look at two provinces in particular, British Columbia and Quebec as that is where the majority of literature exists.

British Columbia (Canada)

Policy level HIA in British Columbia was one of the first systematic examples anywhere in the world. It was instituted in 1989 when the Ministry of Health of British Columbia created an 'Office of Health Promotion' who drew on the public health debate at the time identifying government policies as needing assessment of health impacts. As is common in such situations, the work was driven by several dedicated individuals who managed to get the idea of institutionalising HIA as a tool for delivering healthy public policies into official health policy. Through the Deputy Minister of Health and support from the Premiers office contacts were made with the Cabinet Planning Secretariat, and the integrating HIA into the formal process of policy analysis at cabinet level was accepted. The 'Guidelines for preparing cabinet submissions and documentation' were altered accordingly, and training was provided to all policy analysts across government. Shortly afterwards in 1995, guidance for lower-level planning was also developed and distributed over a series of 86

workshops and 26 presentations to 2000 service providers, educators, managers and community health councils (Banken 2004b).

By 1999 HIA was no longer active in British Columbia. The beginning of the end began before the peak in 1995, when in 1994 two key individuals left the Office of Health Promotion, and after that time training of policy analysts in HIA was not followed up with actual HIA practice at cabinet level. From this point on, the wording for cabinet guidelines submissions was now interpreted as optional rather than mandatory – despite the wording not actually changing. From 1996 the re-elected government also radically changed the direction of health care towards ‘spending money in accordance with accepted accounting practices and providing services as efficiently as possible’, rather than citizen empowerment. The Ministry of Health underwent an obligatory major restructure which eventually disbanded the Office of Health Promotion and the majority of the remaining dedicated individuals who had promoted and implemented HIA left the Ministry (Banken, 2004b). A review of HIA in 1998 (carried out by the Province of Victoria), several years after HIA influence had waned concluded that ‘there is no reliable evidence to date that the HIA process in place in other jurisdictions are creating policy or program changes consistent with the determinants of health perspective’.

The lessons are clear, if not a little frightening, dedicated individuals acting within a supportive policy environment can achieve outstanding gains; but once these individuals leave it is all too easy for what appears to be institutionalised practice to cease, particularly when the health paradigm is moving. The change of assessing health impacts in Cabinet submissions from a ‘requirement’ to an ‘optional’ component was also clearly important – investigating ways to avoid this happening in future settings is crucial. Interestingly, availability of evidence or tools did not hold back development of HIA, nor did it prevent its eventual decline. Such experiences are perhaps why some HIA practitioners are interested in legislative solutions.

The Office of Health Promotion was the sole institution working on and advocating for HIA, without the involvement of other key public health institutions, such as the Public Health Association or the academic departments of public health. Clearly, broad support and involvement would strengthen HIA by providing independent checks on the process, support for key workers, and resistance to the waning influence of HIA within government. Finally, Banken (2004b) notes that the lack of a legal basis also contributed to its demise in British Columbia. Interestingly, the Victorian review of HIA did not record early successes of HIA, showing the vital importance of evaluating HIA to showcase its effectiveness.

A health impact assessment is still required by government ministries as part of the cabinet submission process, but it is optional. And so all proposed policies, regardless of the ministry of origin, may be reviewed for potential impact upon the health of British Columbians. The HIA tools developed have been adjusted to deliver the Health Goals for British Columbia and HIA is now being undertaken from this optional base.

Quebec (Canada)

Quebec has a long history of attempting to embed health into the policy process, going back as far as 1987 with a memorandum of understanding between the Ministry of Health and Ministry of the Environment. This led to a systematic and efficient integration of public health concerns into the environmental impact assessment (EIA) process since the early 1990s, similar to that at a national level. Since 2002 though there has been continued progress with the introduction of a

Public Health Act which requires a policy HIA process independent of EIA on all public policies known to have significant health impacts (Banken, 2004, 2004b).

The Public Health Act states that ‘the Minister [of Health] shall be consulted in relation to the development of the measures provided for in an Act or regulation [of any Ministry] that could have significant impact on the health of the population’. Therefore the Quebec HIA process is demand driven as an obligation to the Public Health Law. To implement this Act, Quebec has set up a two-person full-time HIA support unit with a job to support, develop methods and resources, coordinate collaboration, evaluate and research HIA.

To determine which policies have a significant public health impact, a screening tool is being developed that will be a component of a proposed overall approach:

- screening of policy by those proposing the policy
- scoping and rapid HIA if necessary with support from the Ministry of Health
- full HIA if necessary with support from the Ministry of Health
- impact statement from the Ministry of Health
- monitoring of health impacts (Banken 2004b).

In the first 12 months of operation this unit supported 12 assessments from a variety of ministries. The mean response time was just a few days on each assessment, using public health professionals from within the Quebec Ministry of Health. Ministries have been slow to react to the availability of HIA and its potential use. However the limited assessments carried out have resulted in uptake of HIA results by the policy proposing Ministry. This has been because nearly all of the requests have come at the end of the policy process and there has been a tight response time imposed. The HIA unit has also noted difficulty in obtaining expert knowledge, a poor use of the social determinants of health (and instead a reliance on direct health impacts), with little integration of the different health determinants. Leadership from the Ministry of Health in creating open communication channels with other government departments has been noted as a challenge that requires a solution for an efficient HIA policy process.

Banken notes in a personal analysis that HIA can be an innovative tool to bridge the ‘know-do’ gap, the gap between research evidence and decision making. HIA assists in evidence-based decision making becoming institutionalised. Regarding whether policy level HIA should be stand-alone (as is often the case at the community level), Banken believes that on a policy scale, it appears preferable to introduce health and health determinants into existing impact procedures if they exist (Banken, 2004a).

The institutionalisation of HIA into the policy process is well underway, but Banken (2004) notes that ‘vigilance is needed to prevent the process from becoming a bureaucratic tool without real world effectiveness’. But because of the legal basis for HIA, the support from other public health institutions and support within the Ministry of Health, Banken (2004b) believes there is a strong basis for HIA in Quebec. Quebec has applied the learning from the initial demise of HIA in British Columbia to set this base.

Main learning points from Canada:

The reasons agencies picked up or did not pick up HIA:

Canada has developed a comprehensive national guide/tool to assist organisations integrate health into EIA. This is backed up with a dedicated support unit. However for much of Canada’s EIA history, before the above health components were implemented, health was inadequately integrated into EIA. In British Columbia, a

support unit was created to support government agencies with HIA, and this unit had dedicated individuals who placed HIA onto the formal policy process for Cabinet papers. Clearly, key individuals can set up a flourishing process but such non-mandatory processes can easily become optional, and so when writing guidance, efforts to prevent the dilution of that guidance should be investigated.

In Quebec a memorandum of understanding between the Ministries of Health and Environment has led to the systematic and efficient integration of public health into EIA. This has been further bolstered with a Public Health Act requiring a policy HIA process (independent of any EIA) on all public policies known to have a significant health impact. This legal basis is highly influential on HIA uptake by agencies. To support agencies to meet these requirements a two-person HIA unit has been set up. Legislated processes have been useful for embedding HIA. Non-legislated processes have worked within the established EIA sector when supported with dedicated units and partnerships. Vigilance is required to ensure that processes set up are maintained in practice.

Positive and negative experiences that agencies had in undertaking HIA:

In British Columbia HIA failed to remain active. A change of government, closing the single office driving HIA, and scattering of the dedicated individuals were the main reasons for loss, along with the cultural change of health assessments moving from mandatory to optional. If the agency had had a broad partnership this would have institutionalised HIA more fully, providing independent checks on the process (vigilance) and support for key individuals and resistance to the waning influence of HIA within the government of the day. Successful evaluations of effectiveness would have been useful to maintain HIA within the agency.

Within Quebec HIA was being carried out on policies in just a few days as ad-hoc requests were coming in too late in the policy process to allow sufficient time for analysis. Despite wide sector support, leadership and support from the Ministry of Health was lacking, showing the typical illness-oriented nature of such Ministries.

Impact HIA has had on the policy process:A review of HIA carried out in British Columbia concluded that HIA could not demonstrate policy changes consistent with the determinants of health. However this review was carried out several years after HIA had waned in the province, and within an environment devoid of HIA evaluation. In Quebec, the uptake of HIA results has generally been slow by the policy proposing ministry, and while HIA institutionalisation is well underway in Quebec, vigilance is required to prevent HIA becoming a bureaucratic tool. At a national level, building HIA into the EIA process has been successful in assisting decision makers guide and direct policy to protect human health.

Wales

Progress towards policy-level HIA has been building slowly but it is developing a strong base. Wales has been systematically building HIA capacity and developing high-level support for HIA. Cross-government policy documents now place a strong focus on addressing how new commitments may affect the determinants of health – a big step forward in government policy making. The strategic agenda for the Welsh National Assembly is to support the use of HIA in planning, and there is a manifesto commitment to tougher ‘public health assessment’ for new projects. Also the guidance for the new Health and Wellbeing Strategies recommends HIA. This is within a background of improving the health of people in Wales, particularly bringing the health of people with the worst levels of health in Wales up to that of those with the best health. Such policy commitments to improving health, reducing inequalities in health and promotion of HIA within all sectors have been signalled in multiple high-

level policy and strategy documents in Wales. These have set the base for promoting health and HIA across sectors within Wales (National Assembly for Wales, 1999).

The National Assembly for Wales has picked up HIA because it is seen as:

- a means of reinforcing the move towards integrated policies and programmes by ensuring that health is taken into account in planning and decision making
- raising awareness of health across policy areas thus helping to ensure that decisions are informed by consideration of the potential impact(s) on health
- adding value to policy and decision-making processes thus resulting in better decisions in terms of their potential contribution to improving health and identifying new opportunities to promote health across the range of policy and programme areas (National Assembly for Wales, 2000).

While policy level HIA is not undertaken systematically within Wales, several departments other than health are interested in using HIA, though this is acknowledged to be limited to several key players. To expand this interest it is hoped that a new policy training course dealing with cross-cutting issues will include HIA (National Assembly for Wales, 1999).

Recently, the Welsh Health Impact Assessment Support Unit has been set up by the Minister of Health and Social Services to provide advice, guidance, training and support for organisations throughout Wales wanting to implement the approach. On top of supporting multiple organisations with carrying out HIA, the unit has also produced a practical guide to health impact assessment (Welsh HIA Support Unit, 2004).

Wales has carried out policy-level HIA, programme-level HIA and many project-level HIA (Breeze and Hall, 2002). Examples of the pilot-level policy and programme level HIA undertaken in Wales include:

- The health potential of Objective 1 Programme for West Wales and the Valleys: A preliminary health impact assessment (National Assembly for Wales, 2000).
- Health Impact Assessment of the New Home Energy Efficiency Scheme (National Assembly for Wales 2000b).
- Public Procurement Project by the Powys Health Authority.

These were undertaken to ensure health and wellbeing were considered in planning of these proposals, and to build HIA capacity in Wales. A number of practical learning points were noted, drawn from positive and negative experiences of the above HIAs:

- Not setting the structure for the assessment, not identifying stakeholders and not identifying issues that were likely to emerge at the start of the assessment and not identifying or allowing for resources was a mistake in one of the HIAs. Scoping was required.
- Gaining additional views of those directly affected by the policy would have been beneficial for the New Home Energy Efficiency Scheme, and wider involvement of stakeholders in the Objective 1 HIA.
- The scale of the Objective 1 Programme and the breadth and depth of its measures meant that it was not possible to examine the full extent of its impact on people's health.
- Access to 'off-the-shelf evidence' would have been very useful.
- The complexity of the policies made the HIAs challenging, but also provided valuable learning on how to cope with such large proposals.

Main learning points from Wales:

The reasons agencies picked up or did not pick up HIA

A support unit has been set up by the Minister of Health to support HIA development within Wales. This in turn supports the agencies attempting to meet the HIA supportive policies and strategies released by central Government. A practical guide is available and this guide reflects the main reasons the National Assembly for Wales has picked up HIA:

- To put health on the agenda of decision makers
- Add value to the policy process
- To reduce inequalities in health and the determinants of health.

Positive and negative experiences that agencies had in undertaking HIA:

The pilot nature of the policy level HIAs produced a number of valuable learning points for the National Assembly for Wales around the *practical* process of undertaking HIAs.

Australia

Australia has used a risk-based assessment form of HIA within an EIA framework for several years and the National Environmental Health Strategy included a commitment to strengthening HIA processes within EIA (National Environmental Health Forum, 1999; Wright, 2004). However, population health is not adequately considered within these processes (Thomas, 1996; Mahoney and Durham, 2002). Given the risk-based focus of the National Public Health Partnership's definition of HIA '...estimating the potential impact of a chemical, biological, physical or social agent...', their work is not further reviewed in this paper (National Public Health Partnership and EnHealth, 2001). However acknowledgement of the social model of health is strengthening within the environmental context in which these organisations work.

HIA based on the social model of health is also underway in Australia. A review understanding how policy level HIA might be undertaken in Australia has been carried out based on a review of international work, an HIA activity audit and a national forum that brought together key experts. It set out options for how Australia might move policy level HIA forward, but did not specifically answer the questions of interest to this review (Mahoney and Durham, 2002).

Mahoney and Morgan (2001) describe a number of methodological concerns that they have noted in Australian and New Zealand HIA practice of direct relevance to this review. They are:

- The risk-based health protection model of HIA is more widely understood due to its similarities to the EIA approach, compared with the social model of health based HIA which is seen more as a tool for policy development. Policy assessment is not often amenable to the simplistic dose-response or cause and effect rationale in the health protection model of HIA, and so this would be a poor basis for policy level HIA.
- Regardless of the model used, HIA is seen as a stand-alone process that does not look to other impact assessment areas for possible solutions to HIA issues.
- Policy level HIA has many similarities to Strategic Environmental Assessment and could in fact be re-named to 'strategic health assessment' to reduce confusion between policy and project level HIA.
- That HIA cannot solely be about determining health impacts and that HIA be used for the long term achievement of healthy public policy.

A significant HIA programme of work is the Australian Government's Public Health Education Research Programme funded 'Equity Focused HIA Framework', being carried out by a consortium of organisations under the title of the Australasian Collaboration for Health Equity Impact Assessment (ACHEIA). This project has developed an HIA framework suitable for use on policies, programmes and projects and is available from http://chetre.med.unsw.edu.au/files/EFHIA_Framework.pdf. The drive to assess potential health inequalities impacts of new proposals is behind this work, and six case studies have been carried out (Simpson and Harris-Roxas, 2004). Two case studies were on policies, one on a New Zealand policy (described in the New Zealand component of the PHACs evaluation for the Minister) and the other on the South Australian Breastfeeding Action Plan. This HIA was undertaken to raise the profile of the HIA Framework, and to add a focus of the social determinants of health to this policy.

Learning relevant to this review was:

- A wide representation of stakeholders on the steering group was crucial to a positive outcome for the HIA.
- Collection of existing evidence came from multiple sources, but no new data was generated specifically for the HIA, and this showed gaps in data for vulnerable groups of concern.
- The HIA confirmed and reinforced many of the issues that the breastfeeding reference group were attempting to address.

Regarding the ongoing and wider use of EFHIA, there has however been no clear decision by NSW Health and/or any other state government agencies to specifically use HIA at the policy level. Further information on this programme of work is available at http://chetre.med.unsw.edu.au/hia/nsw_hia_project.htm

A second major stream of work is that funded within NSW to support the Centre for Health Equity Training, Research and Evaluation (CHETRE), and their efforts to promote HIA, develop capacity and undertake pilot HIAs. Barriers identified by CHETRE for the use of policy level HIA are:

- Concern that HIA would just be another layer of work/bureaucracy and obstacle to policy and program development.
- Lack of understanding and/or clear guidance about how HIA is different to needs assessment, program planning, evaluation and other similar processes.
- A concern that HIA is more work for no real added value, particularly for proposals that affect a small number of people or affect few determinants of health.
- That there are few Australian examples of how policy level HIA has worked or added value.
- Concern about workforce capacity and organisational expectations if HIA was mandated.
- A strong culture of environmental health within New South Wales and other jurisdictions in Australia which has meant that addressing health impacts is considered to be 'owned' within environmental health, and there is scepticism about how policy-level HIA was different or added value.
- Getting overall system commitment to HIA is difficult.
- The time taken to complete HIA when 'learning by doing' can be longer than expected.
- Getting HIA seen as a decision-support tool for the entire health and human services sector ie. it is not just a tool for the health promotion sector and/or

those within the health promotion sector who have an explicit commitment to equity is a challenge.

CHETRE has noted positive experiences of agencies that have undertaken HIA. They were:

- A number of people have now been trained in undertaking HIA.
- People who have undertaken an HIA are less concerned about what it might mean and whether they can do it.
- There have been multiple opportunities for dialogue about other ways of getting health impacts better addressed eg. public health officer trainee placement in a key NSW government planning agency.
- Invitations to discuss and describe equity focussed HIA in forums that are not typically using such approaches.

Regarding the impact the HIAs have had on the policy process CHETRE have noted that at this stage the long-term outcomes of the HIAs are not known and it is difficult to comment on its effectiveness. From a process perspective HIA has been effective in terms of flagging the need to consider the potential health (and in some cases a greater awareness of equity) impacts of a proposal earlier in the planning/policy/program development process. Undertaking some HIAs in NSW has led to some system confidence about capacity to undertake HIA and the value added by the process, because of the improved understanding of HIA. For example, how it is different from needs assessment and evaluation, what the steps of HIA are, why and when to do HIA, and the types of proposals that you might consider for an HIA.

Main learning points from Australia:

The reasons agencies picked up or did not pick up HIA:

A Government funded research programme has stimulated much of the HIA work in Australia, particularly that around the development of the Equity Focussed HIA framework. A second major stream of work is that funded within NSW to support the Centre for Health Equity Training, Research and Evaluation (CHETRE) and their efforts to promote HIA and develop capacity. Both of these have set aside specific funds for individuals to support HIA.

Positive and negative experiences that agencies had in undertaking HIA:

HIA using a health protection approach is seen as both beneficial and detrimental for taking forward the social determinants of health model HIA. It provides scope for broadening practice, but it also leads to confusion between the two different approaches, and population health may be inadequately assessed in the health protection model HIA. Policy level HIA appears more suited to the social determinants of health model HIA. Attempts to link with and integrate with other impact assessment methods should be taken where possible, but also for HIA to develop its own separate approach where appropriate.

Negative experiences and barriers to HIA in Australia include concerns about amount of work/time to do an HIA and workforce capacity, lack of understanding about what HIA is and how it is different from other approaches, and the value of HIA as demonstrated by local examples. Engendering system-wide support for HIA and convincing other sectors to take on health concerns has been difficult. Positive experiences of undertaking HIA in Australia include that training and learning by doing negates many of the above concerns and gives practitioners confidence in HIA, and the increased opportunities to place health and equity on the agenda of various agencies. These experiences reflect the importance of choosing appropriate proposals to carry out HIA on.

Impact HIA has had on the policy process:

Long-term outcomes from the HIAs in Australia are not yet known, though the process impacts are generally positive once people have used the approach. There is also system confidence now about the capacity to undertake HIA, and of the value that HIA adds to proposals.

Republic of Slovenia

Unlike most other countries embarking on policy level HIA, Slovenia had little experience of HIA when it began a pilot HIA of its agriculture and food policies. The development of this pilot HIA occurred within the context of major agricultural events affecting EU member countries, in particular BSE, and foot and mouth disease. Slovenia was also about to join the EU, and therefore be required to adopt the EU common agricultural policy (CAP), placing national agricultural and food systems under the influence of the CAP. The agriculture chapter of negotiations were underway when the HIA work started in Slovenia. The HIA was undertaken to investigate the health concerns as experienced in a complex multi-sector environment where public health had previously been under-represented, and in an environment where population health inequalities were evident. WHO and international experts were able to assist with capacity to carry out the HIA – with the Slovenian Ministry of Health acknowledging the pilot HIA was a major chance to develop national capacity, while also developing the evidence base of health impacts for this type of work (Lock et al, 2003; Lock and Gabrijelcic-Blenkus, 2004).

As with other policy level HIA experience in other countries the policy proposal was not firm, the policy was extremely large and complex, and the many permutations it could have taken when applied to Slovenia made carrying out a detailed HIA difficult. To get around this the focus of the HIA became the broad effects of CAP adoption, particularly for specific commodities such as wine, fruits, vegetables, and dairy. To inform the assessment there was little evidence of health impacts for the complex area being assessed, and this culminated in an inability to quantify the impact of the changes, and so direction of effect was instead produced (Lock et al, 2003; Lock and Gabrijelcic-Blenkus, 2004).

The complex nature of the policy being assessed required extensive cross-governmental working and stakeholder involvement. Slovenia already had relatively good cross-government relationships to draw on – the authors commenting that without this, the HIA would ‘not have been possible’. These intersectoral relationships were further strengthened by the HIA and opened up new lines of communication on issues of public health importance (Lock et al, 2003; Lock and Gabrijelcic-Blenkus, 2004).

HIA training did not occur until 6 months into the HIA, and this was considered a barrier by the authors who believed earlier capacity building was required, especially since for most people involved in the HIA, this was their first experience. Policy workers in Slovenia valued the HIA process, and despite being well-trained and highly motivated, personnel were overstretched with the many other tasks that they were required to perform (Lock et al, 2003; Lock and Gabrijelcic-Blenkus, 2004).

The major benefit from this HIA was not in informing the EU CAP negotiations as these were moving too fast to be able to assess outcomes with certainty. Instead, agricultural policy makers and negotiators have strengthened their understandings of the interaction between health and other policy areas. This has resulted in subsequent negotiations taking a line of producing ‘healthy agricultural policy’ for

Slovenia, with the Ministries of Health and Agriculture supporting each other on policies that are wanted after accession into the EU. As with other countries then, the timing of carrying out an HIA on policies is a problematic issue with no easy answer (Lock et al, 2003; Lock and Gabrijelcic-Blenkus, 2004).

Main learning points from Slovenia:

The reasons agencies picked up or did not pick up HIA:

The backdrop to Slovenia undertaking its first HIA were the major agricultural mishaps within Europe such as BSE and foot and mouth disease, coupled with Slovenia's imminent entry into the EU and the requirement for them to adopt the EU common agricultural policy. HIA picked up because of the complex multi-sector environment under scrutiny, the obvious inequalities in health that were present in Slovenia and the up-to-then under-representation of public health in such a policy setting.

Positive and negative experiences that agencies had in undertaking HIA:

The policy in question was not firm, was large and extremely complex – entailing that carrying out a detailed HIA was difficult. This was further compounded by an inability to quantify the impact of changes due to the lack of quantifiable evidence about health impacts in such a complex area.

Cross-sector working was considered critical to the HIAs overall success, yet earlier training of participants in the HIA approach would have been useful. Participants in the HIA noted how over-stretched they were with the many other tasks they were also required to perform.

Impact HIA has had on the policy process:

The HIA was not able to deliver on the policy in question due to timing issues, but it set a solid foundation for future EU negotiations of agricultural policy due to policy makers and negotiators increased awareness of health linkages with other sectors. The HIA strengthened inter-sectoral relationships and opened up new lines of communication in issues of public health importance.

Scotland

Scotland has a number of policy statements that support HIAs being carried out on evolving national policies, request Directors of Public Health to assist local authorities to prepare HIAs on local proposals and policies, and describe the need for integrated policy appraisal tools (Douglas and Muirie, 2004).

Unlike the other UK countries however, Scotland has no individuals employed solely to carry out or support HIA, despite efforts to acquire funding to set up such a position. As such, HIA is described as 'not having taken off' in Scotland as in other UK countries (Douglas and Muirie, 2004). A questionnaire that looked into the state of play of HIA in Scotland, along with why it may not be being taken up was undertaken, showing:

- There was confusion as to what HIA was, what it involves, and how it should be done. It was also being mixed up with health needs assessment and evaluation.
- Those people who had done HIA, reported poor awareness of HIA amongst colleagues and senior staff.
- Where senior staff were on-board, junior staff required to do the HIA often felt over-burdened, despite a favourable belief in HIA.
- Fear that HIA may raise expectations that could not be met due to resource pressures or competing political agendas.
- Having well-developed networks and willing partners facilitated HIA uptake.

- Local HIA champions were useful for providing support, training and helping to identify resources for HIA.
- Low time-intensive tools that can be easily integrated into the policy process, and adapted easily to local conditions were considered to be highly desirable, though not creating a tick-box exercise was important.
- Where training in organisations had occurred, work on HIA was progressing (Douglas and Muirie, 2004).

Two pilot HIAs included in the above, one on a city-wide transport strategy and the other on an area-wide housing strategy (SNAP, 2000; 2000b) provide learning relevant to this review:

- HIA was selected as a means to influence agencies that have responsibility for the determinants of health; where there was good evidence bases and clear health linkages for each of the topic areas being considered, and where the strategies were timely with respect to having an HIA undertaken.
- Key informants were used to inform the transport HIA, rather than wide public consultation/participation due to the broad scope of the policy, the large number of people affected and the believed difficulty in achieving adequate public participation for such a population (Scottish Needs Assessment Programme, 2000; Gorman and Douglas, 2001).
- Public participation using existing community groups was undertaken, along with interviews with key stakeholders.
- In the housing assessment the elements under assessment were narrowed down and defined as clearly as possible by the working group to assist understanding for those being consulted. More abstract elements of the policy (for example, being able to choose the length of tenure of a rental) were more difficult to assess for both participants and assessors, compared with more tangible elements (for example, installing double glazing) (SNAP, 2000b).
- The transport assessment considered two major population groups (middle class, affluent and predominantly car owning; versus disadvantaged, predominantly non-car owning) that might be affected by the proposal to keep the assessment manageable, but also to highlight the distribution of impacts on different groups.
- Quantification of the health impacts did not occur, for example by estimating the number of people who would bear each impact, as the information was sufficient to describe the health impacts and their distribution. The authors did not believe further quantification would have assisted the development of the recommendations, and they believed that quantification may have overstated the detail of their method and detracted from their key points. Residents qualitative evidence should be collected and used, with every effort made to reassure community interests that their views will be taken into account (SNAP, 2000c)
- The pilot HIAs were sited with actively interested organisations.
- Better working relationships across the disciplines and organisations, and a greater understanding of roles, perspectives and constraints was achieved.
- The timing was good for these HIAs, with the detail sufficient for an analysis, but still with adequate time to inform the strategy.
- National level work to develop the evidence base to inform assessments would have been very useful.
- The process did not occur in a step-wise fashion, there was much returning to previous steps as new information came to light. This flexibility of the approach was considered a major benefit.
- Combined public health, HIA expertise and policy/sector specific knowledge was commented as a useful feature of the HIAs (SNAP, 2000; 2000b).

- Extra effort is required to engage sectors not used to dealing with health, such as economic development, employment and training, etc (SNAP, 2000c).
- The HIAs made a number of recommendations for policy changes, though it is unclear whether these were taken up. A wider benefit from the HIAs was ability to facilitate working in partnership with other sectors, and gaining a better understanding of each others work.

Questionnaire data from Scotland reinforced a common theme surfacing in many of the reported HIAs, where policy language often did not lend itself to systematic appraisal. Many policy documents use suggestive, non-committal, and sometimes metaphorical language to suggest new directions, or support for particular idea, but do not make specific commitments or recommend specific interventions. Such situations challenge the validity of health impact assessments of ill-defined policies – particularly where, whether and when this is possible, and how they should be done, and what sort of data and methods are most suitable.

Main learning points from Scotland:

The reasons agencies picked up or did not pick up HIA:

Scotland has similar government and local level commitment to HIA as other UK countries, but lacks a dedicated HIA unit, and this is believed to be a hindrance to HIA uptake by agencies in Scotland. This has led to a situation where there is still significant misunderstanding of HIA in Scotland. However, where training has been provided in organisations, HIA uptake is progressing, but this is piecemeal across the country and unsustainably relies on local champions. The pilot agencies picked up HIA because it was a means to focus on the determinants of health; where health was clearly linked to the topic, where evidence existed and where the policy timing fitted.

Positive and negative experiences that agencies had in undertaking HIA:

Experiences of agencies undertaking HIA in Scotland included:

- Many staff felt already over-burdened.
- Fear of raised expectations that could not be met.
- Well-developed networks and willing partners facilitated HIA uptake.
- Local HIA champions were useful for providing support, training and helping to identify resources for HIA.
- Rapid tools that can be easily integrated into the policy process, and adapted easily to local conditions were requested.
- Wide public consultation/participation was considered difficult and not undertaken.
- Policies were narrowed down to policy elements, and defined as clearly as possible. Intangible and ill-defined policies are unlikely to be suitable to an HIA.
- Quantification of the health impacts did not occur, and that it did not add much additional weight to the recommendations that were suggested.
- The pilot HIAs were sited with actively interested organisations.
- The timing was good for these HIAs, with the detail sufficient for an analysis, but still with adequate time to inform the strategy.
- National-level work to develop the evidence base would have been very useful as gathering the evidence was resource intensive.
- The process did not occur in a step-wise fashion, there was much returning to previous steps as new information came to light. This flexibility of the approach was considered a major benefit.

- Combined public health, HIA expertise and policy/sector specific knowledge was commented as a useful feature of the HIAs.
- Extra effort is required to engage sectors not used to dealing with health, such as economic development, employment and training, etc.

Impact HIA has had on the policy process:

The HIAs made a number of recommendations for policy changes, though it is unclear whether these were taken up. A wider benefit from the HIAs was ability to facilitate working in partnership with other sectors, and gaining a better understanding of each others roles, perspectives and constraints was achieved.

Ireland and Northern Ireland

Ireland and Northern Ireland have a number of policy documents handed down from central government that make commitments towards considering inequalities in health, acting on social factors that influence health and placing the health of populations at the centre of public policy (Elliot, 2002). Ireland and Northern Ireland have also developed a future plan for advancing HIA which will be of interest to New Zealand (Institute of Public Health in Ireland, 2001). Within the Institute of Public Health, a specific HIA capacity has been formed using a sustainable source of funding. This has greatly assisted those agencies who have piloted the HIA process in Ireland and building other agencies capacity to undertake HIA.

A survey of HIA practice in Ireland and Northern Ireland in 2001 (just as the independent unit was set up) identified that little HIA activity was occurring in Ireland (Institute of Public Health in Ireland, 2001b), and the survey considered issues of relevance to this review:

- There was wide support for the HIA proceeding, both from within and external to the health sector.
- A lack of knowledge about HIA as a term, concept or method has led to confusion and inaccurate assumptions about the approach. The implementation of HIA requires the development of each sectors knowledge base, not the introduction of a completely new one.
- The HIA programme can integrate with and develop current practice rather than be a totally new stand-alone initiative.
- HIA champions within each sector need support.
- Capacity building was a key requirement for HIA success.
- Piloting HIAs was considered a useful way forward.
- Sustainable ring-fenced resources were recommended.

Ireland has recently undertaken a number of policy level HIAs, following up on solid programme and project-level HIAs. Unfortunately these are not yet in the public domain, but will be available in 'early 2005'. These policy-level HIAs include an HIA on planning policy in Donegal and an HIA on the Northern Ireland Air Quality Strategy. To encourage agencies to pick up HIA in Ireland, the Institute of Public Health in Ireland offers an action learning training course where the programme commences with a 2-day introduction followed by a 1-day workshop three months later. During the intervening months participants work on their HIA or case study with support from the Institute. At the end of the course participants have completed a HIA or have obtained the necessary skills to carry one out.

Main learning points from Ireland:

The reasons agencies picked up or did not pick up HIA:

As with other countries, Ireland and Northern Ireland have a number of policy documents promulgated by central government that make commitments towards

considering inequalities in health, acting on social factors that influence health and placing the health of populations at the centre of public policy training methods are interesting. These provide an impetus for agencies to pick up HIA. A specific unit has been set up to promote, undertake and build capacity in HIA. The training methods undertaken in Ireland are of interest.

Positive and negative experiences that agencies had in undertaking HIA:

A lack of knowledge about HIA as a term, concept or method has led to confusion and inaccurate assumptions about the approach. The implementation of HIA requires the development of each sectors knowledge base, not the introduction of a completely new one. The HIA programme can integrate with and develop current practice rather than be a totally new stand-alone initiative. HIA champions within each sector need support and capacity building was a key requirement for HIA success. Piloting HIAs was considered a useful way forward and sustainable ring fenced resources were recommended.

Conclusion

HIA practice is well developed in many of the countries covered in this review and so they provide numerous examples and information to inform the Ministers questions. The context of each country is highly specific, as can be seen, for example, between the context and experiences of Thailand versus that of Canada.

Why agencies have picked up or did not pick up HIA?

There is significantly more information available about why agencies have picked up HIA, rather than why they have not. Common reasons for picking up HIA have included:

- To address inequalities in health and the determinants of health.
- The practical benefits of doing an HIA – such as use and generation of evidence, informing decision makers, involvement of stakeholders and the concept that it is a good tool to inform policy development.
- A dedicated HIA unit that has sustainable funding to support agencies.
- Strong international and national policy frameworks that describe the importance of inequalities; the determinants of health, the role that non-health sector policies have in protecting health, and the direct or indirect promotion of HIA as an approach to assess policies for their population health impact.
- Public health legislation is useful for embedding HIA within those jurisdictions that have gone down that route.
- Non-legislated processes including memorandums of understanding between key agencies (supported by dedicated units) within those countries that have gone down that route.
- Health considerations built into government-wide policy making requirements.
- National and international crises such as BSE, or dramatic changes in the political landscape, leading to HIA being used as a tool to deal with complex multi-sector issues.
- HIA training of individuals and organisations.
- Sector specific HIA leads as experienced in Thailand, combined with sector specific training and regional networks of practitioners.

The EU work best describes why HIA may not have been picked up, and this includes:

- vertical government structures
- lack of awareness of health by other sectors
- the idea that health is strictly the responsibility of the health sector
- competing demands for time

- confusing jargon
- gaps in the evidence about the interrelationships between policy areas
- static organisational cultures.

However a number of other countries have noted the general lack of support from Ministry's of Health for HIA, and this has typically limited agencies pick-up and use of HIA. The lack of a dedicated HIA unit in Scotland is noted as a major reason for HIA 'not taking off' in Scotland.

Positive and negative experiences that agencies had in undertaking HIA:

Sweden's experience suggests that a large proportion of government policies are likely to impact on the determinants of health, or directly on health outcomes. A checklist applied by a core group of experts with diverse backgrounds was a useful tool for deciding if an HIA should be undertaken. Once the pilot screening process of government-wide policy documents in Sweden ended, a subsequent analysis showed that population health was rarely considered within government-wide policy development.

The experience of British Columbia, where HIA failed to remain active once a new government came to power (due to a changed focus in the health system and the single organisation driving HIA becoming disbanded) shows that broad partnerships are required for sustainable HIA.

Common negative experiences in undertaking HIA were:

- Lack of support from various countries Ministry's of Health stifling the uptake of HIA recommendations by other government departments.
- Major gaps in understanding of HIA and terminology across sectors.
- The use of HIA on ill-defined policies, to the point that practitioners should consider working on a different policy rather than an ill-defined one.
- HIAs undertaken too early in the policy process had little to work on and the policy was highly changeable, versus a too late in the process where the policy was largely set and there was little time for the assessment, or little willingness for recommendations to be taken on board.
- Policy HIAs did not typically lend themselves to easy quantification of impacts, and while this was not considered problematic by most countries (as sound recommendations could be based on other evidence), others noted the value of 'numbers' to convince stakeholders.
- Lack of time, resources and skilled personnel.
- Gaps in the evidence base and the need for 'off-the-shelf' evidence bases.

Common positive experiences in undertaking HIA were:

- Large and complex policies were assessed by focussing on important policy elements (making the process manageable).
- The flexible nature of the HIA tool in use was critical.
- Structured periods of testing the HIA approach were considered more beneficial than one-off pilot assessments.
- It was seen as a practical tool that can work to time and other resource limitations.
- Policy level HIA was more suited to the social determinants approach of HIA concerned with population health, rather than a health protection approach concerned with individual exposures.
- Involvement and use of HIA champions, well developed networks and stakeholders was a common benefit, especially of stakeholders who would not normally participate in the policy process.

- The use of a multi-disciplinary team in the HIA leading to robust and rigorous assessments.
- Taking extra time to engage sectors not used to dealing with health issues was worth the effort to get them on board.
- Convincing planners and policy makers to be involved was critical to getting the recommendations taken up.
- Training was seen to negate many of the barriers perceived by agencies and individuals.

Impact HIA has had on the policy process:

The evaluation of HIA and its impact is occurring slowly and steadily. Over the many countries considered in this review the impacts of HIA are:

- Many member states of the EU (particularly the Netherlands and England) and Thailand were aware of changes to policies developed or implemented as a result of information provided by an HIA. These claimed effects on policies are backed up in some cases by independent evaluations of HIAs.
- Increased awareness of health amongst those outside the health sector.
- Increased partnership working, cooperation, coordination and communication between health and non-health sectors.
- Uptake of recommendations by proposing Ministries was sometimes slow, and this was not helped by the lack of support from countries Ministry of Health.
- Confidence to undertake HIA, and confidence in the value it added to the policy process.
- Providing a systematic way of working and thinking through the policy development process.

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