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Number 1

Strategies for institutionalizing HIA

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Health Impact Assessment Discussion Papers

There is now clear recognition that policies in many social and economic sectors influence the underlying factors leading to poor health and to the unacceptable and growing inequalities in health observed across Europe. The World Health Organization (WHO), through its health for all policy, and the European Union (EU), through its new strategy for public health, have highlighted the need to create partnerships across sectors in order to deal with this situation.

One way of creating synergy, so that policies and programmes in different sectors add value to each other and avoid damage to health, is through the process of health impact assessment (HIA). A number of countries, at both the national and the local level, are already trying to implement the HIA concept.

There are ethical, political and complex process and technical issues to be addressed regarding when, by whom and how HIA should be carried out. It will not be possible for countries to examine the potential health impact of every proposed policy, programme and project, nor will it be necessary to carry out an in-depth HIA in all cases. Nevertheless, rapid health impact appraisals must be credible if they are to be effective in influencing policy development. New information, processes, training and financial resources must be quickly put in place if HIA is to be regularly implemented in countries.

To speed this process, WHO's European Centre for Health Policy (ECHP) has established this series of HIA discussion papers. These papers are intended to encourage the sharing of information and ideas and to promote further thinking on the options for implementing an HIA approach in Europe. Although responsibility for their content remains that of their authors, before being included in this series they are sent for comments to an HIA e-mail group of more than 200 people in 30
 countries. In this way, they attain wider ownership.

The HIA concept is quite complex. Through this series of papers we hope to keep adding a small piece to our overall understanding of how HIA can become an important means of tackling inequalities in health and promoting sustainable development.

These papers and further information on the work of the ECHP can be found on our web site (http://www.who.dk/hs/ECHP/index.htm).

Dr Anna Ritsatakis
Head, European Centre for Health Policy

"The general proposition that I wish to put to you is that the solution to many of today's medical problems will not be found in the research laboratories of our hospitals, but in our Parliaments. 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,
Minister of Health of Great Britain,
in a speech at the Fourth Conference on Tobacco
and Health *(1)*

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Strategies for institutionalising Health Impact Assessment

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1. Introduction

For a very long time, public health has recognized the importance of factors determining health that are influenced by actors outside the health sector. On the international level, the Conference of Alma-Ata in 1978 *(2)* led to the health for all movement, integrating these types of determinant into health policy. The Amsterdam Treaty of 1997 introduced the responsibility of the European Community to ensure a high level of health protection in the definition and implementation of all Community policies and activities *(3)*. Through the introduction of this responsibility into the Treaty that forms the basis of the European Community, health impact assessment (HIA) is now at the forefront of the public policy agenda in Europe. The public health community must use this unique window of opportunity in the most efficient way in order to realize its dream of effective healthy public policies.

Scott-Samuel & Barnes *(4)* provide the following description of the benefits of HIA:

"HIA's strength lies in providing a tool which enables informed policy decisions to be made based on a valid assessment of their potential health impacts, at the same time adding health awareness to policy-making at every level. In the longer term it has the potential to make concern for improving public health the norm and a routine part of all public policy development."

The routine and accepted integration of HIA into all levels of the decision-making process represents the ideal. The present document aims to provide perspectives on the process of institutionalization necessary to attain this ideal.

To influence decision-making about policies, programmes and projects, we must have a good understanding of the nature of these decisions and their place in the policy and planning process. HIA produces information on the expected impacts of decisions on health and health determinants in all public and private sectors. This information may be used in different ways. It can be

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part of traditional public health advocacy or it can be conceived as knowledge transfer from information producers to decision-makers. If HIA is to become a routine part of the policy and planning process, its practice must become sustainable for all those involved. Strategies must be developed to institutionalize HIA as a normal and routine part of decision-making. The history of HIA in British Columbia provides an interesting example of this strategy; in this particular case, however, the window of opportunity closed before HIA could be institutionalized.

The objectives of HIA are diverse. The processes and actors may differ in the cases of projects, programmes and public policies, especially on national and supranational levels. Policies, unlike projects and programmes, are usually not delimited in terms of time schedule and resources. By focussing on the decision-making process as the common denominator of all HIA, the present document intends to open some perspectives on the integration of HIA into existing institutionalized decision-making processes. It aims to provide a preliminary framework and stimulate discussions on how to create conditions suitable for institutionalization, as a prerequisite for the effective and sustainable practice of HIA. The document provides a short review of the development of HIA, but does not set out to present an overview of current efforts towards institutionalization in different countries. By providing a conceptual framework and by describing the history of HIA in British Columbia, it aims to provide an opportunity to reflect on the currently very active developments in Europe. The main purpose of the document is to stimulate thought.

2. HIA: an idea whose time has come?

In recent years, the concept of HIA has generated a great deal of interest and development activities in many part of Europe. The authorities in England, Wales, Scotland and Northern Ireland have committed themselves to apply HIA to their policies *(5)*. In Sweden, HIA of major political decisions is called for in the National Environmental Health Action Plan *(6)* and HIA has been introduced on the local and regional levels *(7,8)*. The Netherlands has developed tools and experience with screening and assessing intersectoral policies at the national level *(9,10)*. The European Union plans to introduce HIA systematically in order to honour its commitment to healthy public policies *(3,11)*. The World Bank has included HIA in its environmental impact assessment (EIA) process *(12)*. These are a just few examples of recent developments in HIA. The initiatives in different parts of the world, especially in Europe, are too numerous and are evolving too rapidly to be mentioned fully here.

A quote attributed to Victor Hugo goes, "Nothing is more powerful than an idea whose time has come". May this indeed be the case for HIA? Are we at the brink of a new revolution in public health, whereby decisions in all sectors of society are examined as to their possible consequences on health?

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In 1979, McKinlay among others argued, "prevention of disease by social and environmental management offers greater promise than any other means presently available" *(13)*. The 1980s witnessed the development of health promotion and its calls for healthy public policies, as affirmed in the Ottawa Charter *(14)* that resulted from the First International Conference on Health Promotion:

"Health promotion policy requires the identification of obstacles to the adoption of healthy public policies in non-health sectors, and ways of removing them. The aim must be to make the healthier choice the easier choice for policy-makers as well."

The Second International Conference on Health Promotion in 1988 is known as the Adelaide Conference on Healthy Public Policy. A certain number of sectors were identified that should be held responsible for the health impacts of their decisions *(15)*:

"In the pursuit of healthy public policy, government sectors concerned with agriculture, trade, education, industry, and communications need to take into account health as an essential factor when formulating policy. These sectors should be accountable for the health consequences of their policy decisions. They should pay as much attention to health as to economic considerations."

When examining the literature on healthy public policies, partnerships, alliances and coalitions have been proposed as the appropriate tools for influencing the actors in non-health areas. Until very recently, HIA was not on the health promotion agenda of healthy public policies. Leonard Duhl suggested in 1986 that all proposed policies should be accompanied by health impact assessments, taking a lesson from the EIA process *(16)*, but this call has gone unnoticed. Not until 2000, at the Fifth Global Conference on Health Promotion, was HIA proposed as "the key activity required to promote healthy policy-making at the local level". This vision of HIA is justified "on the basis that high-sounding, general calls to improve social responsibility for health are not sufficient to stimulate action" *(17)*.

This recent emergence of HIA as part of a health promotion approach may be based on an increasing awareness of the complexities of intersectoral action for health. In their overview of intersectoral health policies, Ritsatakis et al. *(18)* point to different obstacles to intersectoral collaboration (Box 1).

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Box 1. Obstacles to intersectoral collaboration

- "Awareness and understanding of the determinants of health are inadequate.

- Political will and leadership are lacking.

- The stakeholders appear to have competing interests, which prevents them from recognizing their interdependence.

- The distribution of national and local powers is such that it frustrates intersectoral collaboration. Implicit tension between top-down and bottom-up approaches may hinder effective collaboration.

- Existing mechanisms and processes do not facilitate and strengthen public participation.

- The role of the mass media may not be supportive or conducive of intersectoral action.

- A lack of experience and essential expertise leads organizations to stick to the status quo."

The idea of HIA as part of environmental assessments was present from the very beginning of EIAs, which were introduced in the United States in 1969 to force decision-makers to account for environmental impacts when planning federal programmes *(19,20)*. The National Environmental Policy Act of 1969 defined a very wide concept of the environment and the different impacts to be taken into account. It states as its main purposes "to declare a national policy which will encourage productive and enjoyable harmony between man and his environment; to promote efforts which will prevent or eliminate damage to the environment and biosphere and stimulate the health and welfare of man" *(21)*. The history of environmental assessments is discussed in section 5 of this document as an example of a successful strategy of institutionalization. The integration of health concerns into the EIA process has been more or less successful, depending on the national context. In many European countries, this integration may not have progressed as much as in Australia, New Zealand and Canada, especially Quebec.

As we can see, two different conceptual streams have marked the evolution of HIA. The first relates to the assessment and mitigation of unintended environmental consequences of projects that took the form of EIAs; the second has its roots in public health concepts and actions on the importance of social and environmental determinants of health. Nevertheless, both conceptual streams should share the same methodologies and the common aim of institutionalizing HIA in the non-health sector. Box 2 presents a list of some of the milestones in the development of HIA.

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Box 2. Some milestones in HIA

1981   Establishment of PEEM (Panel of Experts in Environmental Management for vector control) by WHO, FAO and UNEP.[1]

1984   Start of the HIA component as part of annual EIA training at the Centre for Environmental Impact Assessment and Management in Aberdeen (partly sponsored by WHO Europe). Annual sessions continued up to the beginning of the 1990s.[2]

1986   WHO meeting on the Health and Safety component of environmental impact assessment *(22)*.

1988   Analysis of the methodological and substantive issues affecting human health considerations by the Monitoring and Assessment Research Centre, London *(23)*.

1989   First edition of the Guidelines for forecasting the vector-borne disease implications of water resources development by PEEM *(24)*.

1991   Survey on HIA/EIA practice in Canada *(25)*.

1992   Handbook for practitioners on environmental and health impact assessment of development projects *(26)*.

1992   Asian Development Bank guidelines for the health impact assessment of development projects *(27)*.

1993   Quebec Framework for HIA/EIA, including a section on social impact assessment *(28)*.

1994   Australian national framework for environment and health impact assessment *(29)*.

1994   Publication of the German Framework on HIA/EIA *(30)*.

1997   Update on HIA in the Environmental Assessment Sourcebook of the World Bank *(12)*.

1998   Publication on health and environmental impact assessment by the British Medical Association *(31)*.

1998   HIA Section at the International Association for Impact Assessment.

1999   Gothenburg Consensus Paper on HIA *(32)*.

2000   The Canadian handbook on health impact assessment – a work in progress *(33)*.

2000   Memorandum of Understanding between the International Association for Impact Assessment and the World Health Organization.

The current interest for HIA has raised considerable expectations. Kemm asks, "Can health impact assessment fulfil the expectations its raises?" and provides the following answer *(5)*:

"This is certainly a time of opportunity for HIA. Policy-makers are interested in the health consequences of policy and seeking methods to predict those that are simple to use. The message that HIA can provide such a method has largely been accepted. This danger for HIA is that unless it makes good its promise and demonstrates its utility in the near future it will be discarded as yet another fashion that raised expectations but proved to lack substance."

HIA must have something to offer to decision-makers and it must offer some solutions concerning the different obstacles to intersectoral collaboration. HIA

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[1] Martin Birley, Liverpool School of Tropical Medicine, personal communication, March 2001.
[2] G.A. Zapponi, personal communication, June 2001.

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may indeed be an idea whose time has come, if it is supported by political will and if we develop coherent strategies for implementing an efficient and sustainable HIA process (which must include formal frameworks, effective tools, dedicated structures and resources, and capacity-building).

3. Speaking truth to power or making sense together?

The Gothenburg workshop defined HIA as "a combination of procedures, methods and tools by which a policy, programme or project may be judged as to its potential effects on the health of a population, and the distribution of those effects within the population" *(32)*. Understanding the word "judge" is important for defining organizational strategies for HIA. In the Cambridge Dictionary "to judge" is defined as "to form, give or have as an opinion, or to decide about (something or someone), esp. after thinking carefully".[3] In this sense, "judging a policy, programme or project as to its potential effects" refers to decision-making processes.

The overall aim of HIA is to make health considerations an integral part of all decision-making processes. Decisions should not be seen as events happening at a precise point in time, but rather as the result of a process occurring over a period of time and involving a number of actors. These different actors, their institutional context and their interactions are known as policy networks or policy subsystems *(34)*. HIA is contributing to informed decision-making in already existing decision-making processes and systems. If we want to define organizational strategies for an effective and sustainable HIA practice, we must develop a good comprehension of the existing decision-making processes and of the actors involved. We must define not only the methods and procedures of HIA, but also the process of integrating HIA into the existing decision-making processes. This integration will determine in part the methods and procedures of HIA itself.

In the area of social sciences, the term "useful knowledge" has been used to describe types of knowledge that are more appropriate for decision-making. By providing appropriate knowledge for decision-making, researchers are aiming at an increased uptake of scientific information by decision-makers, assuming that greater use leads to improvements in decisions. This has been dubbed "speaking truth to power". The perspective of science claiming ownership of truth has been questioned and alternative concepts have been proposed. The content of more recent models of the interactions between science and policy is captured by the expression "making sense together" *(35)*. The vision of a simple transfer of knowledge from a producer to a user is thus evolving towards a model of exchange or dialogue on the significance of scientific knowledge. In the present document, we will use the expression "knowledge transfer" to designate all the different modes of producing

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[3] *Cambridge international dictionary of English*, available at http://dictionary.cambridge.org/, consulted 15 January 2001.

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information for informed decision-making, regardless of the model of interactions between the producers and users of knowledge.

In the field of medicine, evidence-based approaches known as evidence-based medicine and evidence-based health policy are still promoting the model of "speaking truth to power". They are portraying the relationship between science and decision-making as a technical issue, securing an essentially linear and rational relationship between the two *(36)*. However, decision-making concerning policies, programmes or projects involves a whole range of evidence, not only scientific evidence. This view is captured by the following citation by Klein *(37)*, who is commenting on evidence-based policy-making:

"Everyone can agree that policy should be informed by evidence and that every effort should be made to improve the quality of evidence. But that conclusion must be qualified in three respects. First, the research community must accept that it has no claim to specially privileged knowledge which trumps other types of evidence. Second, it must assert its claims to recognition and funding with due modesty: excessive claims about either EBM [evidence-based medicine] or EBP [evidence-based policy] are likely to lead to excessive disillusion. Third, it must achieve a more sophisticated understanding of policy processes based on recognition that politics rightly matter."

A study examining the use of evidence in local NHS policy-making highlights the importance of sustained dialogue between researchers and decision-makers in order to increase the use of scientific knowledge by decision-makers *(38)*.

These findings are supported by the model of policy learning, which points at two requirements that must be met in order to permit the utilization of technical information *(34)*.

1. As the ability of organizations to evaluate and utilize outside information is largely a function of the level of prior related knowledge, a critical level of expertise in the subject area must be present in the institution of the decision-maker in order for learning to take place.

2. A large number of boundary-spanning links must exist between the policy-making body and its environment.

Even in comparable political systems, considerable differences seem to exist concerning the conditions for the use of technical knowledge for policy-making. A study by Saint-Martin showed important differences between the British, French and Canadian governments concerning the openness of policy-making institutions to outside expert knowledge *(39)*.

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Developing and implementing HIA as a concept of transferring knowledge about potential health effects to decision-makers would benefit from models adapted from the social sciences, especially the policy sciences. Case studies and evaluation research accompanying HIA implementation should be used to validate these theoretical models.

The term "boundary-spanning links" used in the policy sciences refers to the links across the limits of the institution that owns the decision-making process. As the use of technical information or knowledge depends on the presence of prior expertise inside the institution, how can we hope to implement HIA in decision-making processes in non-health institutions without any prior health knowledge? The concept of capacity-building is of central importance as a process that should accompany efforts of knowledge transfer.

The production is knowledge is not to be seen as a simple technical exercise of producing the appropriate public health knowledge. A stakeholder process is often necessary in order to define the issues that should be assessed. Such a stakeholder process is also useful for gathering knowledge from the different groups concerned with the policy, programme or project *(40)*. Who should be involved in the dialogue on knowledge, on "making sense together"? A number of actors can be involved: public health institutions, the decision-making body, community groups, academic and other research organizations, "the public", and others. We must define the different groups and institutions that should be involved as stakeholders in the dialogue of producing, interpreting and using the knowledge on expected health impacts.

The notions of knowledge transfer, of boundary-spanning links and of capacity-building may appeal to public health professionals. Adopting a model of "making sense together" rather than "speaking truth to power" for HIA represents a formidable challenge for all stakeholders in the process, including public health institutions.

4. Case study: the rise and fall of HIA in British Columbia[4]

If we want to take full advantage of the current window of opportunity for HIA in Europe, it may be wise to take a step back and have a look at past experiences in other parts of the world. For the experience in British Columbia we are able to define a period in time where HIA has been an active issue. Using a non-European case study may create the necessary distance for reflective thinking. Many other examples should be available, and could be used for conducting other case studies.

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[4] I am grateful to Cameron Lewis, Mollie Butler, Trevor Hancock and Susan Stovel, who provided detailed information on the evolution of HIA in British Columbia. Efforts have been made to ensure the accuracy of this information. The responsibility for omissions or errors rests with the author of the present document.

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4.1 Description of events

In 1991, a Royal Commission in British Columbia recommended HIA for new government policies, programmes and legislation, and it was first used for decisions at cabinet level in 1993. In this section we shall examine why HIA is currently no longer an active issue in British Columbia.

In 1989, the Ministry of Health created an "Office of Health Promotion" and hosted the First National Conference on Health Promotion and Disease Prevention, focusing on healthy public policies. At this conference, Trevor Hancock *(41)* reviewed the results and recommendations of the Adelaide Conference on Healthy Policies *(15)* and drew the following conclusions:

"The challenge, I submit, is no longer to define and debate the merits of health policy; the challenge is to identify the health impacts of current and possible alternative policies and to develop, implement and evaluate healthy public policies at all levels of government."

Dedicated individuals in the Office of Health Promotion[5] soon started to promote the idea of an institutionalized HIA as a tool for healthy public policies. In its 1991 report *(42)* the British Columbia Royal Commission on Health Care and Costs recommended two "strategies for change" for achieving public policies for health.

1. "Evaluate the possible health effects of all proposed provincial programmes or legislation, or changes to existing programmes or legislation.

2. Include studies of potential health effects in all environmental impact assessments."

Subsequent to the Royal Commission, the Government undertook an extensive consultation process. The outcome was the release of *New directions for a healthy British Columbia (43)* in 1993, which set a reform course for the British Columbia health care system. One of its 38 specific initiatives was "a health impact assessment will be carried out for all new government policies and programs".

With the help of the Deputy Minister of Health and support from the Premier's Office contacts were made with the Cabinet Planning Secretariat, who agreed to integrate HIA into the formal process of policy analysis at cabinet level.

Workshops on HIA were held with policy analysts in different ministries, and HIA was formalized as part of the "Cabinet Document System" (Box 5).

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[5] Susan Stovel was one of those dedicated individuals, and she provided valuable information on the evolution of HIA in British Columbia.

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Box 3. HIA at cabinet level in British Columbia

A. In 1993, the *"Guidelines for preparing cabinet submissions & documentation" (44)* were revised by adding health concerns to the list of different implications that had to be considered.

"… the following implications must be considered … :
- *Sustainable Development Implications*
- *Social Implications*
- *Regional and Community Implications*
- *Gender Implications*
- *Implications for Other Equity Groups*
- *Health Implications*
- *Implications for Aboriginal, Local, Provincial, Federal and International Relations*
- *Implications for Other Government Agencies*
- *Political Implications"*

The following section was provided as guidance on how to analyse these health implications:

"***Health Implications***

The likely positive or negative impact of each option on the health of individuals, groups and communities, or on the health care system should be analyzed. This analysis should recognize the social, economic and physical factors affecting health, such as economic security, employment and working conditions, social support, safety, equity, education, and sense of control. The opportunity for the inclusion of individuals, communities, and other sectors in decision making on issues that affect their health should be considered. Attention should be paid to short term and long term effects. The consistency of each option with the government's objectives for improved hea1th for British Columbians should be evaluated.

It is recommended that the originating Ministry contact the Ministry of Health (Office of Health Promotion), and in conjunction with this staff develop this analysis as required."

B. In 1993–1994 an interministry work group, led by the Ministry of Health, implemented training sessions for the policy analysts working in the different ministries of the British Columbia government and guided the development of a toolkit *(45)*. A revised version incorporating the feedback from these training sessions was published in the 1994 *(46)*. It proposed the following questions to be used for assessing the expected impacts of decisions:

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"*Will a given option have an impact on*:

♦ the ***creation of income and/or wealth***? *Will different income groups or communities be impacted positively or negatively?*

♦ the ***distribution of income and/or wealth***? *Will different income groups or communities be impacted positively or negatively?*

♦ ***employment opportunities*** *for individual or communities? What is the impact on the nature and distribution of jobs and/or on the working conditions?*

♦ ***learning opportunities*** *, particularly for young people and/ or the unemployed? Will the training/education support 'tomorrow's jobs'?*

♦ ***healthier beginnings for children***? *This includes meeting their basic physical needs, building self-esteem and developing a sense of 'connectedness' with others.*

♦ *the number and quality of* ***healthy personal connections***, *such as those with friends, families, colleagues and community groups (as distinct from professional support services)? Will it segregate or isolate individuals or groups?*

♦ ***physical safety and security*** *among individuals and communities?*

♦ *people's* ***sense of control*** *over their own lives in the decision-making affecting their income, working and living conditions, support systems, local governance, etc.?*

♦ ***physical and/or mental health***? *Which individuals or groups are most affected?*

♦ *the provision of* ***fair, equitable and respectful access*** *to government programs, services and/or resources?*

♦ *the* ***environment***. *Will these environmental changes affect human health?"*

C. This 1994 toolkit contains the following advice on how to integrate the assessment of health implications with the other assessments of implications as for example social and gender implications and sustainable development:

"Please note that, as we are talking about the ***economic, social and physical/environmental determinants of health***, *there will likely be some overlap in your assessment of health impacts and your assessment of impacts for other sections, including social, sustainable development, women and other equity seeking groups. Hopefully the tool will assist you in determining the most significant health impacts and subsequently you may decide to note them either within the health implications section of the cabinet submission or incorporate them in other implications sections."*

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While the toolkit was intended for policy analysts in the different ministries, it was felt necessary to develop another tool for use in lower-level planning, and this was published in 1994 as *Health impact assessment guidelines (47)*. These guidelines were distributed at the 1994 and 1995 conferences of the Canadian Public Health Association, the 1995 national Conference on Community Health Centres, the 1994 International Public Health Association conference, and through the British Columbia Healthy Communities initiative. In 1995, a series of 86 workshops and 26 presentations were held across the province to increase awareness of the determinants of health and to familiarize potential users of the HIA process with the guidelines document. These sessions involved approximately 2000 service providers, educators, managers and representatives from regional health boards and community health councils *(45)*.

In 1995, the momentum for HIA seemed irreversible. In 1999, HIA was no longer an active issue in British Columbia's health system. What happened in between?

In 1996, after the re-election of the NDP Government, health care reform as laid out in *New directions for a healthy British Columbia (43)* was quashed and replaced with different principles, called "Better Teamwork, Better Care" *(48)*. Davidson *(49)* provides the following description of these changes:

"During the critical three years between the 1993 birth of New Directions and its funeral rites in November 1996, the British Columbia government's position on elections, taxation, local autonomy and scope of action for health authorities changed. The direction of change in each instance was consistent with the progressive abandonment of the reform principles inherent in the original policy statement. Movement was away from a perspective centred on citizen empowerment toward a policy focussing on the accountability of boards and councils to the Ministry of Health. Bound up in that change was a retreat from political accountability to the community and an advance toward managerial accountability to the ministry. … Managerial accountability refers to spending money in accordance with accepted accounting practices, providing services as efficiently as possible, and obtaining the intended results. "

As a result of these political changes, the structure of the Ministry of Health underwent a major upheaval: the "Office of Health Promotion" (the HIA "think tank"), which had become the "Population Health Resource Branch" was disbanded, a number of initiatives were moved to the new Ministry for Children and Families, and other initiatives were transferred to the Preventive Health Branch in the Ministry of Health. The HIA initiative came to rest in the "Policy Development and Project Management Branch" in the Ministry of Health.

Before and after these political and administrative upheavals, most of the dedicated individuals who had promoted and implemented HIA at cabinet level and at the community level left the Ministry of Health. Without these

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resource persons, adequate follow-up on HIA implementation did not occur. For example, when two key people left the Ministry in 1994, the training of policy analysts was not followed up with actual HIA practice at cabinet level.[6] While the "Guidelines for preparing cabinet submissions & documentation" were basically left unchanged, the wording of the section on health implications was no longer interpreted as mandatory, but rather as optional.

Concerning the 1994 HIA tool for use in lower-level planning *(47)*, an evaluation of the workshops indicated that only a small percentage of the individuals exposed to this guidelines document subsequently conducted HIAs, but does not provide any information on why this was the case *(45)*. After this evaluation, neither the 1994 guidelines nor a 1997 draft revision were actively promoted by the Ministry of Health *(45)*. A complete review of the Health impact assessment guidelines was carried out in 1998, and the main recommendation stated that the guidelines should not be revised or promoted, as "there is no reliable evidence to date that the HIA processes in place in other jurisdictions are creating policy or program changes consistent with the determinants of health perspective". As a result of this 1998 report, HIA is no longer an active issue in British Columbia.

4.2 Discussion

This succinct view of the evolution of HIA in British Columbia provides several lessons concerning strategies for institutionalizing HIA.

- During a policy window, dedicated individuals working as policy entrepreneurs can succeed in putting HIA on the political agenda.
- The strategic use of this policy window may permit the institutionalization of HIA.
- A model of knowledge transfer and capacity-building permits a rapid institutionalization of HIA as part of an existing decision-making process.

The rise and fall of HIA in British Columbia seems to correspond to the opening and closing of a window of opportunity. In the Kingdon model of policy change *(50)*, the interaction of the three streams of problems, policies and politics are responsible for creating a window of policy change: "The separate streams of problems, policies, and politics come together at certain critical times. Solutions become joined to problems, and both of them are joined to favourable political forces". This policy window is to be seen as a window of opportunity for implementing change. Individuals acting as "policy entrepreneurs" play a central role in opening the window by connecting the different streams. In her study applying the Kingdon model to the institutionalization of the Healthy Cities concept, De Leeuw replaces the concept of policy entrepreneur with social entrepreneur *(51)*. This more general term seems to be appropriate for the institutionalization of HIA.

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[6] Susan Stovel, personal communication, November 2000.

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As we have seen, the idea of HIA has been present in public health since the mid-1980s, and it was proposed again in 1989 *(41)*. The 1993 change towards a health policy based on health determinants and political accountability to the community opened a window of opportunity: dedicated individuals in the Office of Health Promotion acted as social entrepreneurs and succeeded in joining HIA as a solution to the problem of how to implement the new orientations. The 1996 change in health policy abandoning the reform principles closed this window of opportunity. While Kingdon elaborated his model after studying policy agenda setting in the United States, applying his model to the smaller scale of introducing HIA does make sense in explaining the events in British Columbia.

Applying the concepts of policy windows and social entrepreneurs to health promotion and healthy public policies merits further theoretical development and empirical research. Walt *(52)* and de Leeuw *(51)* provide examples of using these concepts of the political sciences in order to increase our understanding of the development of health policies.

The development of HIA at cabinet level in British Columbia was guided by the explicit concern for institutionalizing HIA as part of the decision-making process. This explicit concern was not based on explicit models from the policy sciences, but rather on strategic concerns of integrating HIA into the existing decision-making process at cabinet level. The social entrepreneurs at the Office of Health Promotion succeeded in changing the written rules for this decision-making process and they implemented a learning process for the policy analysts in the different ministries.

If we define advocacy for health as "a combination of individuals and social actions designed to gain political commitment, policy support, social acceptance and systems support for a particular health goal" *(53)*, the policy entrepreneurs did not use a model of advocacy for health, but they acted as advocates for HIA as a decision-making tool. HIA was not linked to any specific health goal, but rather to the overall goal of healthy public policies. The training of policy analysts in the different ministries shows that capacity-building for HIA was one of the central objectives of the process. Public health had the role of elaborating the tools, implementing the learning process and acting as resource for the analysts as knowledge producers.

This strategy of institutionalizing HIA did not succeed in influencing the routine practice of decision-making at cabinet level. What can we learn from this failure of institutionalization? A lack of political commitment in a period of policy instability, and an insufficient involvement of different public health institutions in this process, may have contributed to this failure.

The support by the Premier's office served as an impetus for discussions with the Cabinet Planning Secretariat. While it is not be appropriate to make conjectures about the degree of political commitment from the Premier's office

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or the motivations, the absence of public announcements and the apparent absence of any follow up from this level after the initial contacts seem to indicate a low level of political commitment to implement HIA at cabinet level. Furthermore, the radical change in principles underlying health policy between 1993 and 1996 indicates a period of profound instability in health policy. The diminishing concern for a model of social determinants of health in health policy during this period was certainly responsible for diminishing the importance of HIA on the policy agenda.

At the Ministry of Health, HIA was developed by a few social entrepreneurs who were acting as resource persons for HIA at cabinet level. When these key persons left the Ministry, HIA at cabinet level withered away. This is a very clear indication that the concept of HIA was not institutionalized in the Ministry of Health itself. Furthermore, the other public health institutions in the province, such as the Public Health Association of British Columbia and the academic departments of public health, were not included as resources for this HIA process. The confidentiality of decision-making at the level of cabinet may block the involvement of public health actors who do not have direct access to government. The imperative of confidentiality may impose limits on the effectiveness of HIA for influencing public policy. This is certainly one of many subjects that would benefit from theoretical and empirical studies.

The HIA tool for use in lower-level planning was largely distributed without any strategy for its uptake by potential users. The small percentage of individuals exposed to the tool who subsequently used it is a good indication of failure in implementation and institutionalization. The basic lesson from this particular experience concerns the importance of a learning process when implementing HIA tools.

What are the lessons to be learned from the rise and fall of HIA? The most important lesson is probably the awareness of policy windows for implementing HIA. Such a window may open and lead to the mobilization of important resources for developing tools and methods, but it should not be taken for granted. It should be used to institutionalize HIA as quickly and solidly as possible.

5. Lessons from environmental impact assessments

In British Columbia, the policy window for implementing HIA in decision-making for non-health sectors at the cabinet level opened and closed before HIA had been institutionalized. The environmental impact assessment process is one often-cited example of a successful institutionalization of impact assessment as a policy tool.

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5.1 Description

The environmental impact assessment (EIA) process was born in 1970 when the National Environmental Policy Act (NEPA) *(21)* came into effect in the United States. Rising environmental awareness during the 1960s, an oil spill in California, and the intention of the Federal Government to take political advantage by acting on the environment gave rise to a policy window that was used by Lynton Caldwell, a political scientist from Indiana University, who acted as the "academic godfather" for NEPA *(54)*.

The basic precept of the EIA process as instituted by NEPA is based on the idea that the traditional incremental mode of decision-making in public administrations could not integrate a horizontal issue such as the environment. The EIA process was conceived as an action-forcing device: by requiring a written statement of the expected consequences of a project on the environment (environmental impact statement) the decision-makers were forced to take these concerns into account when planning projects *(19)*.

Procedures for conducting the EIA were refined in 1978 after reviewing the experience with the initial process. NEPA turned out to be an action-forcing device, not only for decision-makers but also for scientists and consultants: the methodologies for conducting EIA did not exist when NEPA became law and the specific knowledge base had to be developed for this purpose.

By being based on a framework of policy sciences, EIA as instituted through NEPA not only contributed to short-term decision-making but also led to a long-term learning process in the policy system.

- It increased the effectiveness of decision-making by increasing the uptake and use of technical information by decision-makers *(55)*.
- It served as a coordinating device by improving consultative behaviour, information sharing and negotiation between the different sectors of the public administration *(55)*. The coordination function is very important, considering that in the United States "a federal-aid highway project can easily involve 30 to 40 statutory, regulatory, and executive order requirements" and that "environmental and permit reviews for such projects require coordination with as many as 30 federal, state, and local highway, environmental, and planning agencies, as well as the public" *(56)*.
- It reshaped the dynamics of the policy process by creating "new political processes through which citizens, politicians, and other expert bureaucrats might reasonably be expected to press their legitimate demands for more environmental sensitivity in national policy-making" *(55)*. Different evaluations of the effectiveness of EIA arrive at the conclusion that it is a success in terms of influencing decision-making *(57)*. In the Netherlands, a 1996 survey indicated that in a representative

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selection of 100 EIA procedures, the knowledge produced by the EIA process was relevant and produced a change in view in 79% of the cases *(57)*.

5.2 Discussion

EIA is the best known example whereby the introduction of an impact assessment was successful in changing the rules for decision-making. Could we use the same strategy for institutionalizing HIA? Bartlett *(55)* states:

"It makes a difference how impact assessment is institutionalized in the policy system; its policy impact is neither simple nor assured. Impact assessment does not influence policy through some magic inherent in its techniques or procedures. More than methodology or substantive focus, what determines the success of impact assessment is the appropriateness and effectiveness in particular circumstances of its implicit policy strategy."

In 1970, EIA as established through NEPA seems to have been an appropriate and effective strategy for changing the rules of decision-making processes influencing the environment. Three decades later, the social and political context has changed considerably. Our contemporary world tends to rely more on networks than on strong institutions. Describing the developments of international health policies, Kickbusch advances that we have entered a new area of public policy being "defined by increasing overlaps between domestic and foreign policy and national and international interests as well as by a widening range of new actors at the local, national, regional and international level" *(58)*. This post-modern world is characterized by "a dense network of trans-national and international social relations in terms of 'agency' and 'accountability'" *(58)*. While in the past public policy was defined by strong central institutions with clearly defined borders, today's institutionalized networks are characterized by "multiple centers and porous borders" *(59)*. Zijederveld proposes a model of thin institutions and thick networks as a model to understand the institutionalization of our contemporary world *(59)*.

EIA is already institutionalized in many countries and international organizations. Institutionalizing HIA by "piggybacking" on an institutionalized EIA procedure may often be much easier than doing it as part of decision-making processes that are not regulated by a legal framework.

Nevertheless, even if the legal frameworks for EIA in most countries include health impacts as a compulsory element of the impacts to be studied, the actual HIA practice is often rather poor. In Quebec, HIA as part of EIA has reached a high degree of institutionalization. After an initial use of HIA as a form of environmental health advocacy at the beginning of the 1980s, a memorandum of understanding was signed between the Ministry of Health and the Ministry of the Environment. This administrative framework has been

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the key element in the subsequent development of a very systematic and active HIA/EIA practice in Quebec. Mutual understanding and trust have been achieved through regular contacts between the professionals in the public health network and those in the Ministry of the Environment.[7] This experience underlines the importance of the policy science concept of boundary-spanning links mentioned earlier.

6. The concept of institutionalization

In the different sections we have used the terms "institution" and "institutionalization" without any formal definition. In common language, the term institution is often used as a synonym for organization: For example, the European Commission and the European Parliament are officially called institutions of the European Union.[8] In sociology, institution has been defined as "a set of roles graded in authority that have been embodied in consistent patterns of actions that have been legitimated and sanctioned by society or segments of that society; whose purpose is to carry out certain activities or prescribed needs of that society or segments of society" *(61)*. According to this sociological definition, religion, family, state and market are all examples of social institutions. In organizational theory, one definition states, "institutions consist of cognitive, normative, and regulative structures and activities that provide stability and meaning to social behavior" *(62)*. In political science, the sociological meaning of institutions is restricted to the formal structures and processes relating to the state *(63,64)*. Bogdanor provides the following guidance on how to understand the concept of "institution": "Central to the social science use of the term is the sense of the Latin verb *instituere* (to set up or establish) from which it is derived. This is in line with the notion of an 'institution' as an established form of activity which long antedates the development of modern political science and sociology" *(65)*.

The central characteristic of an institution concerns the fact that it surpasses the level of the individual and refers to the level of social interactions and society. Institutions are ensuring the continuity of society while constraining at the same time individual liberties *(59)*. On the political level, "institutions shape outcomes in the political process by setting the limits within which power is exercised and by affecting the volume and direction of political communication" *(64)*.

Institutions constrain individual actions through a complex arrangement of different rules *(66)*:

"By 'rules' we mean the routines, procedures, conventions, roles, strategies, organizational forms, and technologies around which political activity is constructed. We also mean the beliefs, paradigms, codes cultures, and knowledge that surround, support, elaborate, and contradict those roles and routines. It is a commonplace observation in empirical social science that behavior is constrained or dictated by such cultural dicta and social norms. Action is often based more on identifying the

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[7] For a more complete description of the system of HIA as part of EIA in Quebec, see Banken *(60)*.
[8] See http://europa.eu.int/inst-en.htm, consulted 19 January 2001.

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normatively appropriate behavior than on calculating the return expected from alternative choices. Routines are independent of the individual actors who execute them and are capable of surviving considerable turnover in individuals. "

In common language, the terms institution and organization refer to a real-life object that is the result of institutionalization. Zijderveld proposes the term institute to designate this real-life object *(59)*. The use of the terms organization and institution in the social sciences refers to the analytical dimensions for this real-life object; the term organization refers to the structure, the term institution to the existence of a common set of rules: "Selznick's classic study (1949) of the Tennessee Valley Authority pointed to the process through which an organization based largely on a technical process is transformed into an institution, and begins to embody values as well as merely a structural form." *(67)*.

This passage from an organization to an institution is very arbitrary. Depending on the kind and strength of rules, organizations and institutions can be more or less institutionalized *(67)*:

"Polsby argued that the House of Representatives had changed over time in the direction of becoming more 'institutionalized', meaning that it had well-established boundaries for roles, internal complexity, and universalistic criteria. … In short, legislatures can be conceptualized as institutions that vary in their degree of institutionalization. That is they differ in the extent to which they are successful in imposing a set of common values on their members."

The analytical dimensions of the process of institutionalization refer to the area of sociology, political science and organizational theory. Public health does not seem to have explored the theoretical dimensions of institutionalization. The only specific reference we have found comes from the area of health promotion research, where the term "institutionalization" is used to designate the implementation of research findings in health promotion practice *(68)*.

HIA should be a tool to contribute to informed decision-making. Decision-making takes place in organizations and networks of organizations that can be more or less institutionalized. The different permanent rules that are the result of institutionalization condition the decision-making process and the decision-makers: "Institutions shape actors' behaviour by conditioning the latters' perception of their interests and affecting the probability of realizing them by constraining some choices and facilitating others" *(69)*.

Concerning HIA, the theoretical dimensions of the process of institutionalization are of strategic importance. If we are able to understand this process, we may be able to elaborate strategies for achieving a high level of institutionalization of HIA. If we ever manage to attain this level, concerns about health will become a permanent element of decision-making, the basic

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rules for decision-making will be changed, and this change will outlast short-term political changes. In this perspective, institutionalization becomes an objective not only for HIA but for all intersectoral actions for health.

HIA, as a combination of procedures, methods and tools to inform decision-making about potential impacts on health, is adding awareness and concern for health to the decision-making process. When defining strategies for institutionalizing HIA we must specify the means we want to use to make awareness of health a permanent value in decision-making institutions. These means can comprise different mechanisms:

- proposing HIA as a useful, easy and powerful tool to decision-makers;
- implementing administrative frameworks that bind different institutions and levels of institution; and
- legal frameworks as permanent rules.

While the first mechanism relates to the offer of HIA as a tool, the other two are related to mechanisms for institutionalizing a permanent demand for conducting HIA. Legal frameworks are the more durable mechanism but, while they are very powerful, they may be insufficient to foster institutionalization of HIA and sustainable practice. As we have discussed in section 5 on EIA, health concerns are part of the definition of environment in many legal frameworks for EIA. Translating the legal framework into practice seems to depend on the existence of administrative frameworks. The practice itself is impossible without the existence of the tools, methods and procedures of HIA.

In the United States, EIA was institutionalized through the National Environmental Policy Act (NEPA), creating a legal framework obliging the public administration to conduct environmental assessments. Specific organizations and institutions were created through this Act. The process, the tool and the methods did not exist when the law was enacted. This is an example of a rapid and permanent institutionalization through legal mechanisms.

In British Columbia, public health entrepreneurs used a strategy of an administrative framework to implement HIA during a window of political opportunity. They managed to establish an administrative framework by adding health concerns into the "Guidelines for preparing cabinet submissions & documentation". After having developed the necessary tools, the lack of political commitment during a period of policy instability brought the process of capacity-building to an end before the actual practice started.

Bartlett *(55)* explores patterns of institutionalization of different types of impact assessment. Describing the lessons from mandatory cost–benefit analysis as the earliest form of impact assessment, he states that it "made important contributions to the practice of government, but less by way of installing comprehensive economic rationality than through redefining political

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rationality". Accordingly, the institutionalization of HIA should be based on political rather than technical rationality, referring to available scientific knowledge.

7. HIA as a challenge for public health

In section 6 we saw that the process of institutionalization is all about establishing permanent rules that direct the different decision-making processes. Public health is itself a form of institution, with its own set of routines, procedures, conventions, technologies, beliefs and values. In this section we will discuss two aspects of public health where its own institutional rules may present an obstacle to the effective institutionalization of HIA in non-health sectors. The first concerns the belief in advocacy for health, the second the professional boundaries, the territoriality of public health.

7.1 The changing role of advocacy

In health promotion, advocacy for health is one of the three major strategies and has been defined as "a combination of individuals and social actions designed to gain political commitment, policy support, social acceptance and systems support for a particular health goal" *(53)*. Public health advocacy is not a form of advocacy with a defined constituency and accountability towards this constituency. It is rather a form of professional advocacy based on the value of health and the value of public service *(70)*.

Box 4. HIA as advocacy: an example from New Zealand

At the Workshop on Health Impact Assessment organized by the National Health Committee at the Conference of the Public Health Association of New Zealand (25 July 2000), Stephen Palmer, Medical Officer of Health at the Wellington Regional Public Health Unit, presented an HIA that was conducted in order to oppose an application by two supermarkets to the Liquor Licensing Trust to sell alcohol for 22 and 24 hours per day, respectively. The following is taken from the workshop summary (71)*.*

"In order to develop new information that would be relevant to the Trust, the Unit conducted a risk-based HIA. They used a number of data sources, including information routinely collected by police since 1996 in the region on where offenders had been drinking immediately prior to arrest for public disorder type offences. This allowed them to analyse the relationship between off-license sources of alcohol and increased propensity for young people, especially males, to be involved in public order offences. The implications for Maori offending rates were also highlighted. The predictions were put to the Trust hearings and resulted in the applications being turned down. The matter has now gone to appeal. The case study demonstrated the potential role for risk-based HIA studies, but also showed the shortcomings of the current legislation which places the onus of assessing health effects on the submitters, not the applicants!"

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The example from New Zealand (Box 4) describes a typical use of HIA as part of a strategy of advocacy. The public health authorities received the information that a change in the regulation of alcohol was requested, they judged that the requested changes would probably be detrimental to the health of the population, they gathered evidence to support this judgement, and they used this evidence in trying to influence the decision-making process. Using HIA as part of an advocacy approach involves several disadvantages.

- Public health is one of many interest groups trying to influence the decision-making process. Health is not an intrinsic value of the decision-making process, but rather a value that is advocated from outside the institutions owning the decision-making process (see Fig. 1).
- HIA is used as an ad hoc activity, draining regular resources no longer available for the other public health functions.

HIA is a useful tool for public health advocacy, but this type of use will be insufficient to systematically add health awareness to policy-making and will not lead to concern for the improvement of public health becoming the norm and a routine part of decision-making.

Fig. 1. Advocacy in policy-making
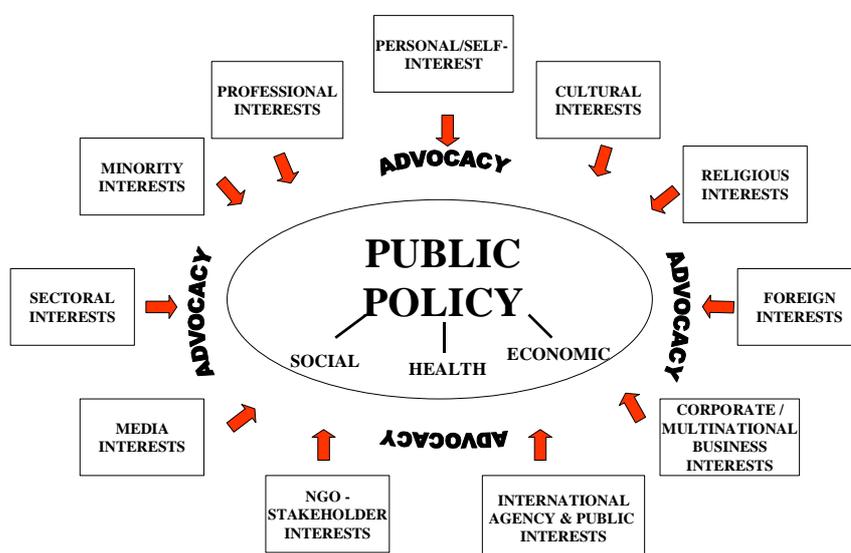
Source: Soskolne *(97).*

While a process of advocacy tries to influence decision-makers, knowledge transfer is aimed at informing decision-makers. In the area of public health, the concept of knowledge transfer has been developed for the transfer from

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researchers to public health practitioners and from public health practitioners to the public *(73–75)*. We have been unable to find any specific publications concerning the transfer of public health knowledge to decision-makers in public administrations.

Kemm *(76)* provides a good description of the tensions between the use of HIA as a means of advocacy and its use for informing decision-making:

"Health advocacy needs to be informed by Health Impact Assessment, which supplies the evidence that advocates can use to argue that the measures they favour will produce beneficial consequences. The practice of Health Impact Assessment creates a favourable climate for health advocacy by putting health high on the agenda and encouraging an open and participative process. However there is a tension between Health Impact Assessment, which seeks to make an impartial assessment of the health consequences of different policy options, and health advocacy, which is usually committed to one option."

The role of HIA for health advocacy depends on the degree to which it is institutionalized in the decision-making bodies in the non-health sector. Is HIA a tool used by the non-health sector, with due support and quality control by the health sector, or is it a tool used by public health to influence the decision-making process?

The first situation corresponds to an institutionalization of HIA in existing decision-making processes, the second to the present model of health advocacy. Institutionalizing HIA in existing decision-making processes will change the nature of health advocacy towards a control mechanism for the use of HIA by others. If we ever succeed in making health concerns the norm and a routine part of all public policy development, the possibility of independent HIA by the public health sector will be an important control mechanism to ensure the adequacy of routine HIA by the decision-making body.

7.2 Health impact assessment or human impact assessment

HIA is about "putting the pieces together" *(77)*, making explicit statements about concepts, processes and products of public health. For example, when examining the possible and probable effects of a project, programme or policy on the future health status of population groups, it is usually necessary to resort to a model of health determinants, defined as "personal, social, economic and environmental factors which determine the health status of individuals or populations" *(53)*. To provide a coherent picture of the expected results of a project, programme or policy on health, it is necessary to provide knowledge of effects on a range of health determinants (income, gender equality, equity, employment, noise, pollution, global warming, etc.). After assessing the expected effects on a range of health determinants we must

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provide a comprehensive judgement on the overall impact on health, taking into account any possible measures for mitigating the negative impacts *(78)*:

"HIA is based on a socio-economic model of health, which covers biological, psychological, economic, sociological and environmental determinants. It recognizes that many non-health policies, programmes and projects can have an influence on a population's health, therefore they should be assessed for their health impact at their planning stage. Recommendations can then be made to maximize health gains and minimize health hazards."

A number of the impact assessments on health determinants may be made by experts outside public health organizations, sometimes in assessments that are not part of HIA. In the Amsterdam Declaration, for example, a group of European social scientists urges the European Union "to make all major European policies subject to a social cohesion impact study" *(79)*. Social cohesion as part of social capital is known to play an important role as a health determinant.

What should be the relation between different types of social impact assessment (SIA) and HIA? The *Canadian handbook on health impact assessment* proposes that health professionals "translate health determinant concerns into research questions for the SIA evaluator" and that health professionals use SIAs "to translate back the social science output into useful predictions on health issues" *(80)*.

This form of collaboration corresponds to the term "feeder disciplines", which has been used by Bunton & Macdonald to describe the relation between public health and the different disciplines that contribute to the knowledge base for public health actions *(81)*. Rosenfield distinguishes three levels of research linkage between the health and the social sciences: multidisciplinary, interdisciplinary and transdisciplinary *(82)*.

We must decide which of the following views we should adopt to produce knowledge in an in-depth HIA:

- HIA as a multidisciplinary effort of different public health feeder disciplines (sociology, toxicology, microbiology, economy, etc.) working in parallel on a common problem from separate disciplinary paradigms;
- HIA as an interdisciplinary effort of different public health feeder disciplines working jointly on a common problem from separate disciplinary paradigms; or
- HIA as a transdisciplinary effort elaborating common conceptual frameworks based on theories, concepts and methods from the different disciplines.

We may tend to prefer interdisciplinary and transdisciplinary approaches, but it should be remembered that investment in time and resources will be too great for such approaches to be developed for a specific HIA.

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One of the challenges of HIA for public health concerns the development of a coherent approach to interactions between the feeder disciplines and the public health knowledge base. By providing a policy or a project to be evaluated as a common object of interest, HIA provides a unique opportunity and challenge by bringing together the concepts, methods and knowledge bases of classical health protection and health promotion and their respective feeder disciplines.

It is certainly possible to conduct HIAs without considering these challenges to the coherence of public health knowledge and actions. For example, HIA can be limited to the biophysical determinants of health, as in many HIAs that are part of an EIA process. It can also be limited to the effects of a project on social determinants of health. However, the perspectives of both examples do not represent a coherent public health perspective on the expected consequences of a project or policy on the health status of populations.

By addressing the challenge of coherence in HIA, public health as a whole will become more effective in assuring the conditions in which people can be healthy. Meeting the challenge of coherence represents an ideal that must be strived for rather than an operational necessity. The integration of both social and biophysical determinants of health into HIA could be tried by using the concept of sustainable development, a framework that has the advantage of being already used by other sectors *(83)*:

"Despite efforts towards intersectoral action for health, public health or population health concepts are and will be owned by the health sector, exposing the traditional call for intersectoral actions to the judgement of 'health imperialism'. The explicit integration of population health into the sustainable development framework will permit an exchange of values, beliefs and experiences of actors in the health sector with a variety of actors in civil society and government. Through such a dialogue we may be able to establish a coherent and efficient process of assessing prospectively the consequences of today's actions and thus shaping desirable futures."

By enlarging the conceptual focus of HIA towards sustainable development, however, we will not resolve the basic problem of an ever-increasing number of different kinds of impact assessment generating resistance from administrators and politicians *(84)*:

"However, one of the major risks with HIA is that people will throw up their hands and say 'Oh no, not another impact assessment!' We already have to perform impact assessments for the environment, equality between men and women and large and small companies, and here you are with another one. This means that we must find one instrument for all of these areas, otherwise there is a risk that those who have to perform impact assessments will begin to claim as a matter of routine that the impact of all decisions is positive."

In the case study from British Columbia, we cited the statement from the 1994 toolkit concerning the integration of health implications with the other assessments of implications such as social and gender implications and sustainable development *(46)*:

"Please note that, as we are talking about the economic, social and physical/environmental determinants of health, there will likely be some overlap in your assessment of health impacts and your assessment of impacts for other sections, including social, sustainable development, women and other equity seeking groups. Hopefully the tool will assist you in determining the most significant health impacts and subsequently you may decide to note them either within the health implications section of the cabinet Submission or incorporate them in other implications sections."

This citation shows a certain ambiguity about HIA. The message seems to be that the assessment of expected impacts on health and health determinants should not necessarily be part of HIA. Indeed, the group that developed HIA in British Columbia favoured the term human impact assessment, but the term health impact assessment had been firmly established in the Ministry of Health by that time.[9] Milner *(85)* has expressed similar thoughts:

"We might see the term health impact assessment disappear. For some people, in some circumstances, that is not the most appropriate term. In fact I have had some quite hostile responses to the term health impact assessment. They do not like the term health in health impact assessment but they think it should be called something else. It is better described as something else. There is always this problem with professional boundaries, territoriality."

One of the challenges of HIA for public health concerns the professional boundaries, the territoriality, of public health. There may be considerable political advantages in abandoning the name health impact assessment, as argued by Kemm *(76)*:

"Policy-makers have to satisfy many policy goals including political, economic and social aims. Government is increasingly concerned that its different policy initiatives should be integrated. There may be calls to analyse policies for their impact on many other issues that cut across the interests of several ministries such as the economy, law and order, children, drugs and so on. While reframing economic and social goals as determinants of health may not alter the policy task, it can disturb the balance of influence between the branches of the policy-making organization. It is possible that health promoters could advance their cause more easily if Health Impact Assessment were given a name such as overall policy appraisal, which would not be seen to imply territorial claims."

While we agree with the above argument, we feel that a term such as "human impact assessment" may be more appropriate than the term overall policy

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[9] Stovel, S., personal communication, January 2001.

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appraisal, the latter being rather abstract and not including any reference to the basic focus of human wellbeing.

8. Some strategies for institutionalizing HIA

At the 1996 conference "Healthy Public Policy Development – Science, Art, or Chance" in Saskatchewan, Canada, Rasmussen concludes his analysis on the pessimistic note that "healthy public policy will emerge as it always has, through the incremental adjustments of existing policies based on the perceived needs and desires of the diverse members of the various policy subsystems that exist in each and every policy domain. Healthy public policy will continue to pop up as much by chance as by art or science" *(86)*. He arrives at this conclusion by arguing that a true horizontal healthy public policy process can only happen as a result of a major paradigm shift. According to the model of policy paradigm change by Howlett & Ramesh *(69)*, institutionalization is the last stage of such a process. While the conditions for such a change do not currently seem to exist in most Canadian governments, the situation seems to be different in other parts of the world, especially in Europe and New Zealand.

HIA as a tool for decision-making is a both a means for and a result of awareness of health considerations in the non-health sector. Using HIA as the basis for public health advocacy, health awareness will be introduced in the decision-making body, albeit very often only to a very limited degree and for a limited period of time. A political commitment to public health concerns opens a window of opportunity for implementing and institutionalizing HIA.

In some cases, the use of HIA for public health advocacy can lead to a high degree of institutionalization. For example, this was the case for HIA as part of the EIA process in Quebec, where a strong public health involvement in public hearings about pesticide applications against a spruce budworm infestation at the beginning of the 1980's *(87)* led to a memorandum of understanding between the Ministry of Health and the Ministry of the Environment that formed the basis for the systematic HIA practice in EIA. The reason for establishing the memorandum, however, may not have been an increased awareness of health considerations but rather the political will to channel a disruptive process of independent public health advocacy. Increasing health awareness through public health advocacy can be viewed as a bottom-up strategy for institutionalizing HIA.

The current implementation of HIA in the United Kingdom seems to have its origin in a top-down dynamic, whereby the Government proposed in 1998 that "major new government policies should be assessed for their impact on health" *(88)*. This commitment has opened a window of opportunity, which has

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been used by public health agencies and other institutions. The concept of social entrepreneurs using a window of opportunity, as experienced in British Columbia, may apply to the British situation. Different case studies at the different political levels where HIA has emerged would provide very valuable knowledge on the forces that led to the current situation in the United Kingdom.

Wales provides a very interesting example of institutionalizing HIA at the legislative level.[10] The National Assembly for Wales was established in July 1999, with responsibilities covering virtually all government policy areas. From its very start, Health Promotion Wales became part of the National Assembly.[11] In November 1999, a document on HIA was published by the Health Promotion Division of the National Assembly *(89)* and became the basis for a public commitment to use health impact assessment for its decisions. A major step forward has been the publication of the preliminary HIA of the Objective 1 programme, part of the European Community's Structural Funds Programme *(90)*. This document has led to an increased awareness of the social determinants of health across policy areas nationally and locally. As a result, one of the Objective 1 Partnership Boards, which consider proposals for funding, is asking all proposers to take health into account as part of their project development process.

We are advancing the following interpretation of the process of institutionalization of HIA in Wales, partly based on exchanges with Ceri Breeze and John Kemm.

The National Assembly for Wales has been established as a new organization, including an existing health promotion organization as one of its components. As a result, a critical level of expertise in public health and a high number of boundary-spanning links were present from its very beginning. The capacity for using the knowledge produced by HIA and even the capacity for owning the HIA process were therefore present. By asking all proposers to take health into account, a Partnership Board is creating a demand for HIA for development proposals. This can be considered as a top-down implementation of HIA. HIA is not implemented as health advocacy, but rather as a process informing decision-making.

The experience with implementing HIA at the policy level in New Zealand supports our view on the importance of a policy science approach for institutionalizing HIA. Signal & Durham *(91)* argue that the normal means of incorporating information on health impacts at government decision-making level are insufficient. These means, which they call generic mechanisms,

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[10] The information on the situation in Wales was mostly provided by Ceri Breeze, Head of Policy and Strategy Branch, Health Promotion Division, The National Assembly for Wales, personal communications, March 2001. For further information please contact Ceri Breeze at ceri.breeze@wales.gsi.gov.uk.

[11] For details on the history of Health Promotion Wales, see http://www.hpw.wales.gov.uk/abouthpd/goodbye%5Fhpw.htm (accessed 8 February 2001).

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include the participation of the minister of health at cabinet meetings and ministerial committees. They identify different obstacles to explain why "several bodies have recommended the HIA approach in the last five years, and yet formal HIA tools are still not in use, despite apparent support within the public health sector for the concept. It is possible that this long gestation period is associated with various factors, including political will and concerns about resources and effectiveness."

Legal frameworks constitute the most effective means of institutionalizing HIA. Uncertainties about the types of project, programme or policy that should be subjected to an HIA need not constitute an obstacle for a legal framework. For example, in Quebec the process of elaborating a new public health law, including health promotion, has been an occasion to include HIA in a legal framework. The attempts to include a formal HIA process for policies and programmes did not seem to be politically feasible. The current proposition of the new public health law, to be debated in the autumn of 2001, includes a disposition to the effect that the minister of health has the mandate to inform the other ministries as to the effect their legislation may have on health.[12] While this type of legal disposition may seem rather weak, it may have profound long-term effects on the decision-making processes at cabinet level.

HIA can be used at many different levels of decision-making and in many different kinds of context. While it is impossible to propose any recipe for institutionalization, operational examples from EIA may be very useful for HIA. For example, the Dutch experience with a Joint Support Centre for Proposed Legislation, established to support the different ministries in assessing the environmental consequences of proposed legislation, is an example of an institutional innovation that may be applicable to HIA *(92)*.

The supranational level, such as the World Trade Organization, represents a particular problem for implementing and institutionalizing an effective HIA procedure. The negative effects of the international trade agreements on health can be very important *(93)*. Which organization is going to carry out HIAs for international agreements? Which control mechanisms can be put into place to ensure the quality and credibility of such assessments? The current debate on the effect of globalization on human wellbeing may constitute a window of opportunity for institutionalizing HIA at the global level.

9. Conclusion

In the present document we have argued that the availability of technical information on expected health impacts will be insufficient to influence decision-making to a significant degree. We argue that it is necessary to

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[12] For the exact wording in French see http://www.assnat.qc.ca/fra/publications/projets-loi/publics/01-f036.htm, paragraph 51.

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change the rules governing the existing processes and systems of decision-making; in other words, we have to institutionalize HIA.

Legal frameworks constitute one of the strongest means for changing these rules. During the opening of a policy window, public health professionals should act as social entrepreneurs and strive for strong formal frameworks for HIA. At the national level, legal frameworks are probably a necessary tool. At the local level, where communication paths are much shorter, an efficient and sustainable HIA practice may emerge without such strong formal frameworks. Institutionalizing HIA through legal and administrative frameworks does not mean implementing complicated and time- and resource-consuming procedures. Initial legal frameworks should provide the overall obligation for carrying out HIAs without fixing the exact procedures. They should contain the principles and values, and define accountability and control mechanisms. These are some of the requirements for instituting a social learning process that will ultimately lead to a high-level institutionalization of HIA.

Some of the challenges of institutionalization are related to our knowledge on how public health institutions function in different countries and settings. Public health is oriented towards action; reflection on its own inner workings does not seem to receive any significant attention, judged by the absence of literature in this area. The international Delphi study on essential public health functions reveals an astonishing consensus among public health experts all over the world on what constitutes public health practice *(94)*. This consensus may indicate similarities in thinking and practice independent from political contexts. Research on the worldviews of public health practitioners would facilitate the organization of an intersectoral dialogue that is quintessential in HIA. The perception of political power by public health professionals would be one aspect worth studying.

For many actors in the area of public health, health concerns are not receiving the attention they deserve in public policies. Lack of power has been identified as one of the obstacles for intersectoral health policy: "Most countries encounter difficulties in strengthening their intersectoral policy for health because of the relatively weak political position of the health sector compared with, for example, government finance" *(95)*. Will HIA increase the power of public health actors in intersectoral decision-making processes?

Increasing the power of public health actors will easily be perceived by the other policy actors as some form of "health imperialism" and create resistance to a successful integration of HIA into the existing decision-making processes. The aim is not to increase the relative power of public health actors but to add health awareness to policy-making and to inform decision-making. The model of enabling actors in non-health areas to produce public health knowledge for use by decision-makers, as used in British Columbia, seems to be an appropriate strategy for successful implementation of HIA. While this strategy may diminish resistance by non-health actors, it may create resistance by

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public health actors. Public health professionals are used to gathering information, interpreting its significance in terms of public health, and deciding on actions. A model of HIA based on knowledge transfer, enabling non-health actors to produce public health knowledge, demands a departure from this tradition.

Enabling or empowering non-health actors to produce public health knowledge must be part of a learning process and be followed with continuing quality control by public health. Without control as to its scientific validity HIA, like all impact assessment, risks becoming a symbolic function without real world effectiveness: "At the same time, the politics of bureaucracy provides an environment in which the effectiveness of impact assessment can be tempered, subverted, and broken in the absence of adequate provisions for external accountability" *(55)*.

The biggest challenge may concern the values of HIA: democracy, equity, sustainable development and ethical use of evidence *(32)*. They must be integrated into a coherent HIA process and institutionalized as part of existing decision-making processes. This challenge has to be met if we want the dream of effective healthy public policies to come true.

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