





CROSS-COUNTRY ANALYSIS OF THE INSTITUTIONALIZATION OF HEALTH IMPACT ASSESSMENT

Social Determinants of Health Discussion Paper 8

DEBATES, POLICY & PRACTICE, CASE STUDIES

CROSS-COUNTRY ANALYSIS OF THE INSTITUTIONALIZATION OF HEALTH IMPACT ASSESSMENT

Jennifer H. Lee, Nathalie Röbbel and Carlos Dora



The Series:

The Discussion Paper Series on Social Determinants of Health provides a forum for sharing knowledge on how to tackle the social determinants of health to improve health equity. Papers explore themes related to questions of strategy, governance, tools, and capacity building. They aim to review country experiences with an eye to understanding practice, innovations, and encouraging frank debate on the connections between health and the broader policy environment. Papers are all peer-reviewed.

Background:

The institutionalization of Health Impact Assessment is a clear indicator of a country's implementation of a Health in All Policies agenda. A number of countries have developed policy frameworks and governance mechanisms for including health into other sector policies, programmes and projects through the implementation of HIA. However, differences in the political, socioeconomic and institutional settings may lead to substantial variations in the use and institutionalization of HIA. A better understanding of the enabling factors and barriers across countries could contribute to the development of more effective strategies for wider institutionalization and implementation of HIA. Thus, a cross-country analysis was conducted to provide greater insight on HIA practice.

The views presented in this report are those of the authors and do not represent the decisions, policies or views of the World Health Organization.

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Contents

| ABBREVIATIONS | 2 |
|--|----------|
| EXECUTIVE SUMMARY | 3 |
| 1.INTRODUCTION | 5 |
| 2.METHODOLOGY | |
| 3.FINDINGS | |
| | |
| 3.1 Degree of and mechanisms for institutionalization | |
| 3.1.1 Degree of institutionalization | |
| 3.1.3 Factors that led to institutionalization | |
| 3.2 Political setting and context | |
| 3.2.1 Political support and commitment | |
| 3.2.2 Opposition | |
| 3.2.3 Triggers for HIA | |
| 3.2.4 Where in the policy cycle does HIA fit? | 15 |
| 3.3 Framing: forms and types of HIA used | |
| 3.3.1 Stand-alone Health Impact Assessment (HIA) | |
| 3.3.2 Environmental Impact Assessment (EIA) | |
| 3.3.3 Strategic Environmental Assessment (SEA) | |
| 3.3.4 Integrated Impact Assessment (IIA) | |
| 3.3.5 Health Lens Analysis (HLA) | |
| 3.3.7 What HIA covered | |
| 3.3.8 Comprehensiveness of HIA | |
| 3.4 Implementation, resource requirements and structures | |
| 3.4.1 Implementation | |
| 3.4.2 Actors and stakeholders | |
| 3.4.3 Capacity and pool of experts | 21 |
| 3.4.4 Funding | |
| 3.4.5 Data availability and monitoring | |
| 3.4.6 Knowledge transfer | |
| 3.4.7 Public participation | |
| 3.5 Outcomes and conclusions | |
| 3.5.1 Factors that led to institutionalization | |
| 3.5.3 Limiting factors | |
| č | |
| 4.RECOMMENDATIONS | 27 |
| 4.1 Embed HIA in national normative systems | 27 |
| 4.2 Clarify definition and operationalization of HIA and develop guidelines and methodological criteria. | |
| 4.3 Strengthen and build capacity for HIA practice | |
| 4.4 Improve cooperation between sectors | 29 |
| 5.NEXT STEPS | 31 |
| ANNEX A. ANALYTICAL FRAMEWORK: KEY DIMENSIONS AND QUESTIONS ADDRESSED | 32 |
| ANNEX B. SUMMARY OF COUNTRY FINDINGS BY DIMENSIONS OF | |
| THE ANALYTICAL FRAMEWORK | ၁၁ |
| REFERENCES | აა 12 |
| REFERENCES. | /1.7 |

Abbreviations

DG SANCO Directorate-General for Health and Consumers

EIA Environmental Impact Assessment

HIA Health Impact Assessment HLA Health Lens Analysis

IIA Integrated Impact AssessmentPHIA Public Health Impact AssessmentSEA Strategic Environmental Assessment

SIA Social Impact Assessment WHO World Health Organization

Executive summary

he World Health Organization (WHO) defines Health Impact Assessment (HIA) as a combination of procedures, methods and tools to systematically evaluate the potential effects of a policy, programme or project on the health of a population (positive or negative, direct or indirect) and the distribution of those effects within the population. There has been increasing international attention on the potential for using HIA as a way to mainstream health into sector policies, as evidenced during the World Conference on Social Determinants of Health (October 2011) and the United Nations Conference on Sustainable Development (June 2012). A number of countries have adopted legislative frameworks and governance mechanisms to consider the impact of policies, programmes or projects on health. However, differences in political, socioeconomic and administrative settings lead to substantial variations in the use and institutionalization of HIA. There is limited research on the systematic use of HIA and the institutional processes that support or impede its use. This report describes and compares the institutionalization of HIA in nine (mainly middle- and high-income) countries and the European Union to gain a better understanding of the enabling and limiting factors that could then contribute to the identification of strategies for wider and more effective implementation of HIA.

An analytical framework and sample research questions were developed based on existing HIA literature and case studies. The framework covers five areas: degree of and mechanisms for institutionalization; political setting and context; framing and type of HIA; implementation, resource requirements and structures; and outcomes and conclusions. In-depth interviews were conducted with policy-makers, experts, public health officials and other stakeholders from Australia (South Australia), Canada (Quebec), Finland, Lithuania, the Netherlands, Slovakia, Switzerland, Thailand, the United States of America and the European Commission.

The findings from the interviews showed that all countries have institutionalized HIA to a certain extent. The degree of institutionalization varied within and across countries; yet there were similarities in the mechanisms used to achieve it (for example through Public Health Acts or establishment of research centres). Drivers for the institutionalization of HIA included recognition of the importance of and need for intersectoral action; increasing international movement towards health promotion and use of HIA; support from the health sector; experiences with the institutionalization of Environmental Impact Assessment (EIA); and advancement of HIA at the local level. The key factors enabling institutionalization of HIA were legislation (for example inclusion of HIA within Public Health Acts); political willingness; involvement of research communities; awareness of the inadequacy of EIA or other assessments in considering health; capacity and resources; availability of international committal documents and tools; and public participation. Challenges to institutionalization and systematic implementation included lack of clarity around methodology and procedures; narrow definitions of health; lack of awareness of relevance to other sectors; and insufficient funding and tools. Based on their experiences, key informants from countries proposed these core recommendations: embed HIA in national normative systems; clarify definition and operationalization of HIA and develop guidelines and methodological criteria; strengthen and build capacity for HIA practice; and improve cooperation between sectors.

To support progress in the institutionalization and systematic implementation of HIA and to build on the work that is already being done, WHO could continue to advocate the systematic assessment of policies, programmes and projects in countries that have not institutionalized any form of HIA; work to improve the definition of health (determinants and impacts) and cooperate with other agencies, institutions, and organizations to develop methodology and guidelines to strengthen and systematize the coverage of health in other forms of assessments; extend work with more countries to develop governance mechanisms for healthy public policy using HIA in other sectors; and establish a global network of centres to support HIA practice.

1. Introduction

he Adelaide Statement on Health in All Policies emphasized that government objectives are best achieved when all sectors include health and well-being as a key component of policy development (1). Health Impact Assessment (HIA) is a useful tool to achieve this (2–6). The World Health Organization (WHO) defines HIA as a combination of procedures, methods and tools to systematically evaluate the potential effects of a policy, programme or project on the health of a population (positive or negative, direct or indirect) and the distribution of those effects within the population (7). HIA provides recommendations on how a proposed project, programme and policy can be modified or adapted to avoid health risks, to promote health gain and to reduce health inequalities.

HIA is a means for raising awareness of health considerations and wider determinants of health among non-health sectors, and can also be the result of increased awareness (8, 9). Ideally, the HIA process contributes to collaboration among different sectors (10). Throughout Europe, HIA is a key means for measuring policy impacts on health determinants and fulfilling European Union treaty obligations (11). There has been an increase in the calls for HIA use by groups such as WHO, the International Finance Corporation (12-14) and the United Kingdom National Health Service (15), and substantial growth in HIA activity has taken place over the past 20 years (9). Benefits of the HIA process include bringing together stakeholders, setting a framework for collaborative working, providing the opportunity to engage with communities and offering practical recommendations to improve health (16, 17). Nonetheless, HIA has not been widely implemented or uniformly applied for various reasons.

In 1999, the WHO Regional Office for Europe published the Gothenburg Consensus Paper, which established a framework for HIA based on a social model of health and the values of democracy, equity and sustainability (7). In some cases, an equity-focused HIA or Health Equity Impact Assessment is carried out, which emphasizes the importance of evaluating the distribution of the impact and whether these impacts are inequitable (18) within

a population in terms of characteristics such as gender, occupational status, ethnic background, wealth and other markers of socioeconomic status, as well as area of residence (7) or other factors affecting specific population groups. Public health authorities can use impact assessments that systematically consider equity issues as one key way to ensure that they meet the public sector duty in the development and delivery of equitable policies, practices and services (19). In 2008, the WHO Commission on Social Determinants of Health made the following recommendations regarding HIA (13):

- WHO, in collaboration with other relevant multilateral agencies, supporting Member States, institutionalize Health Equity Impact Assessment, globally and nationally, of major global, regional, and bilateral economic agreements (Rec. 12.1);
- Health Equity Impact Assessment of all government policies, including finance, is used (Rec. 10.3);
- Governments build capacity for Health Equity Impact Assessment among policy-makers and planners across government departments (Rec. 16.7).

Some practitioners have seen institutionalization of HIA within decision-making organizations as the most important factor if HIA is to be adopted by policy-makers (9, 20). Many nations have legislation that supports or requires the use of HIA and have invested in capacity building to ensure that there is the capacity to carry out HIAs (12). Legislation that has made HIA a formal requirement has played a key role in advancing HIA practice (21). Additionally, HIAs as a regulatory process may ensure legitimacy and build constituency (22). However, having a legal requirement has not necessarily been sufficient for institutionalization of HIA and sustainable practice (8). Based on country experiences, it is evident that there are a range of factors that promote an enabling environment for the institutionalization and implementation of HIA, whereas other factors impede its use.

To contribute to the research in this area, the Department of Ethics and Social Determinants, in cooperation with the Department of Public Health and Environment within WHO, is conducting a comparative analysis of the institutionalization of HIA in nine countries and the European Union. The purpose of this study is to identify relevant aspects to consider when analysing institutionalization of HIA; review the pros and cons of the institutionalization processes; identify elements of strategic approaches for countries to institutionalize HIA; and produce

recommendations based on country experiences. This report supplements earlier work in the area by Dora and colleagues (21), which looked at international experiences with HIA, specifically in Canada, Europe, Australia and Thailand.

The report is divided into the following chapters: a description of the methodology for analysis; findings from the literature and analysis of the interviews according to the components of the framework, along with outcomes and conclusions; recommendations; and next steps.

2. Methodology

he analysis was based on a review of legislation and guidelines concerning HIA and semistructured interviews with key informants, including experts, policy-makers, public health officials and other stakeholders. Based on existing literature and case studies and informed by the findings of Dora and colleagues' previous study (21), the authors developed an analytical framework to compare country experiences with the institutionalization of HIA. The framework presented in annex A covers five dimensions: (a) degree of and mechanisms for institutionalization; (b) political setting and context; (c) framing and type of HIA; (d) implementation, resource requirements and structures; and (e) outcomes and conclusions. Individuals were interviewed over the telephone using the framework and associated questions as a guide. Annex B presents a summary of findings for each country by the five dimensions covered in the analytical framework.

A total of 13 professionals involved in regional, national and international HIA processes were interviewed: Manager of Health in All Policies and Senior Policy Officer for the Department of Health

and Health in All Policies (South Australia); National Director of Public Health (Quebec); Counsellor for the Permanent Mission of Finland and Development Manager at the National Institute for Health and Welfare (Finland); Deputy Director of the Centre for Health Education and Disease Prevention (Lithuania); Head of Environment and Health Department, Public Health Authority of the Slovak Republic (Slovakia); Professor and Director of Groupe de Recherche en Environnement et Santé at University of Geneva (Switzerland); Senior Adviser on Disease Control for the Ministry of Public Health (Thailand); Adviser on Health in All Policies at the National Institute of Public Health and the Environment and Deputy Director of the Netherlands Commission for Environmental Assessment (the Netherlands): General Counsel to the Council on Environmental Quality (United States of America); and analyst at the Directorate-General for Health and Consumers (DG SANCO) (European Commission). These places were selected because of their experiences with HIA institutionalization or use, the availability of literature documenting the HIA experience and accessibility of key informants.

3. Findings

his section describes the findings from existing HIA literature, legislation and guidelines and an analysis of the interviews organized by the components of the framework.¹

3.1 Degree of and mechanisms for institutionalization

Institutionalization of HIA is defined as the systematic integration of HIA into the decisionmaking process (23) and creation of a "permanent demand" for HIA use (8). There are different degrees to which HIA can become institutionalized (for example accepted as a social norm, formalized as part of the policy process, voluntary, mandated, undertaken as a social responsibility) and a number of mechanisms to achieve this (for example guidelines, legislation, regulation, policy, administrative frameworks). The interviews showed that all the countries that were included in the analysis have at least partially institutionalized HIA. The use and institutionalization of HIA does not only depend upon international public health processes but can also be influenced by national country characteristics. Each country has found its own approach to institutionalizing HIA according to its specific domestic contextual circumstances.

3.1.1 Degree of institutionalization

There is wide variation in the degree to which countries, regions, cities and local communities have institutionalized HIA. Some countries have made HIAs mandatory as part of a regulatory process, either through standard working procedures of a department or institution or a requirement through legislation. Mandated HIAs are implemented to fulfil a statutory or regulatory requirement and tend to place importance on following a tightly prescribed process, with emphasis on the scientific nature of methods used to identify potential health impacts

(12). In Thailand, the Constitution requires an Environmental and Health Impact Assessment of all programmes or activities that might impact the environment, natural resources and health of a community.

In other countries HIAs are voluntary, and whether or not they are carried out depends on the interests of policy-makers and those who seek to advise them (24). In Wales, the Health Promotion Division of the National Assembly made a public commitment to use HIA as a strategy to tackle determinants of health that cut across policy areas after the publication of a document on HIA in 1999 (25). Through the 1990 Milan Declaration on Healthy Cities, participating cities and towns pledged to "make health and environmental assessment part of all urban planning decisions, policies and programmes" (26). In another example, the 1997 Jakarta Declaration on Health Promotion "placed a high priority on promoting social responsibility for health and identified equity-focused health impact assessment as a high priority for action" at the local level (27). In Australia, a national framework for HIA within Environmental Impact Assessment (EIA) has existed for several years (28); however, implementation is not mandatory. While HIA implementation may not be mandatory at the national level, subnational or local laws can require HIA. Within Australia, the Victorian Public Health and Wellbeing Act and the Tasmanian Environmental Protection Act contain an explicit provision for HIAs.

The interviews showed that the degree to which HIA has been institutionalized ranged from HIA being a voluntary process (South Australia, the Netherlands, Switzerland) to mandatory implementation of HIA for projects or major public policies (Quebec, Thailand, Slovakia and Lithuania). With the exception of Switzerland, those that have institutionalized a stand-alone HIA (Quebec, Thailand, Slovakia and Lithuania) have a requirement for HIA implementation. There were substantial differences between and within countries with regards to HIA requirements, methodology and responsibilities.

¹ Findings from the literature are cited while findings from the interviews are attributed to the country but reflect the viewpoints of the key informants.

In Switzerland, HIA has not been mandatory there is no binding legal basis at the federal level for the use of HIA and its application depends on the cantons. In the Netherlands, HIA has been institutionalized through voluntary approaches or without formal procedures, such as through a health effect screening. In the United States, the analysis of health effects is required under the National Environmental Policy Act, but in some circumstances HIA is voluntary. There has been a trend towards implementing HIA outside the formal decision-making process by organizations such as non-profit community-based groups, universities or health departments that do not have decision-making authority over the proposals being addressed.

Thailand requires that all major public policies be subject to HIA and that compliance mechanisms be established. After the completion of a project or activity where health impacts have occurred, people can still request an HIA for such a project or activity under the National Health Act. In Quebec, Canada, the Public Health Act legitimizes consideration of health issues in other government sectors (29). The Ministry of Health and Social Services has an advisory role and should be consulted if policies and programmes are to have a significant health

effect on the population; however, there is no exact definition of when and how this is required. South Australia has a provision similar to Quebec in its Public Health Act. In Slovakia, national or regional public health institutions (for example the Public Health Authority of the Slovak Republic or regional public health authorities) are authorized directly by the Public Health Act to demand HIA if they suspect a negative impact on public health. The outcome of basic screening indicates when an HIA is required for development projects.

At the national level, Finland has had a longstanding interest in implementing Health in All Policies¹ and institutionalized HIA for projects in 2002–2006. There is a binding norm to conduct an Integrated Impact Assessment (IIA) but no legislation exists. At the municipal level, HIA and Social Impact Assessment (SIA) have been statutory since 1994 for certain kinds of projects, plans and programmes referred to in the Act on Environmental Impact Assessment Procedure, the Land Use and Building Act or the Act on the Assessment of the Impacts of the Authorities' Plans, Programmes and Policies on the Environment.

¹ Health in All Policies is an approach to systematically integrate health and well-being considerations into the policy-making process of government. It draws on the governance and decision-making structures of government to imbed Health in All Policies and ensure its sustainability. The approach includes tools and processes that enable evidence to be considered and assessed, which includes the use of HIA when relevant.

3.1.2 Mechanisms for institutionalization

The mechanisms by which HIA is institutionalized also differ within and across countries. A wellknown example of a policy that includes a commitment to HIA is Saving lives: our healthier nation, introduced in the United Kingdom in 1999 (30). The Department of Health in the United Kingdom has supported the development of HIA methodology and research on the application of HIA. An example of a regulation at the regional level is the Public Health Service Act of North Rhine Westphalia in Germany, which provides a legal basis for HIA by stating that public health services shall contribute to all planning processes (23). In British Columbia, Canada, the Office of Health Promotion published the HIA toolkit and guidelines to support institutionalization of HIA at the regional and community levels (31, 32).

Normative systems

The interviews showed that HIA has been formalized through various normative systems across the countries. HIA can be regulated through a single law, but also through several legal instruments operating simultaneously. In many countries or territories, HIA has been institutionalized within Public Health Acts (Quebec, the Netherlands, Slovakia, Thailand and South Australia), Health Promotion and Prevention Acts (Switzerland)1 or Public Health Care Acts (Lithuania). In some cases where HIA was institutionalized within Public Health Acts, HIA methodology and responsibilities were not defined (Quebec, South Australia and the Netherlands). In Lithuania, however, HIA methodology has been defined through bylaws. In Slovakia, binding regulation for HIA methodology and procedure is currently under preparation. These types of differences were also found to exist between the local and the national level. HIA can also be regulated by national fundamental principles. In Thailand, in addition to the Public Health Act, the Constitution states that programmes or activities that might impact the environment, natural resources and health of a community cannot be implemented without conducting an Environmental and Health Impact Assessment of the people and community. In 2007,

Other mechanisms to support implementation of HIA

In addition to legislation, countries have established other mechanisms to support the systematic implementation of HIA. To meet the HIA requirement, the Ministry of Health and Social Services in Quebec, Canada, developed a two-part implementation strategy: the establishment of an intragovernmental HIA mechanism and a knowledge development and transfer programme on public policies and health. The Ministry developed an HIA guide based on impact assessment models developed in Europe and adapted to an intragovernmental context (35). In Switzerland, the Swiss Platform for Health Impact Assessment has been developing the use of HIA in the country through the exchange of experiences and skills while utilizing existing tools for evaluating policies. An introductory guide to HIA in Switzerland has been developed to explain the process of HIA in the country, highlighting the experience of HIA in cantons, particularly Geneva, Jura and Tessin (pioneers in the area of HIA).2

In some countries, special HIA working groups or units in charge of HIA have been created. South Australia provides advice and risk analysis to major

Finland introduced norms and guidelines for implementing IIA (impact assessment guidelines), which has been required by law for many years and was led by the Ministry of Justice. The guidelines describe, sector by sector, what kinds of impact may be involved, how the impact may be assessed and what methods and information sources are available for this purpose. The guidelines are applicable to legislative drafting and in the drafting of subordinate regulation (such as decrees) and other norms. The guidelines are also to be applied in the National Impact Assessment relating to the preparation and adoption of European Union norms and to the implementation of international obligations (33). At the supranational level, the Amsterdam Treaty of the European Union (1997) requires that all European Community policies protect health. Article 168 of the Treaty on the functioning of the European Union states that "a high level of human health protection shall be ensured in the definition and implementation of all Community policies and activities" (34).

¹ The Federal Parliament rejected the Health Promotion and Prevention Act in 2012; however, it is still valid for Geneva through the Public Health Act.

² Guide d'introduction à l'Evaluation d'Impact sur la Santé en Suisse: http://www.impactsante.ch/pdf/Guide_eis_francais_2010.pdf.

infrastructure development projects through its Health Protection Branch. There is a high-level interagency committee, the Government Planning Coordination Committee, which provides advice on major planning and development projects. The Health Department is a member of this committee and raises health issues or concerns when appropriate. In Slovakia, a working group was created to discuss the inclusion of HIA in the Public Health Act, but with members only representing the health sector. In the Netherlands, there was a National Support Unit in charge of Health in All Policies under the National School of Public Health. This group worked on the health impacts of policies at the national level between 1997 and 2003 but was dismantled and transferred under the authority of the National Institute of Public Health and the Environment.

The health sector alone has been insufficient in driving HIA implementation in some of the countries and has needed the support of intersectoral working groups. In Quebec, Canada, intersectoral working groups discussed the inclusion of HIA in the Public Health Act. In Switzerland, interministerial platforms and working groups on HIA have been created at the national and cantonal level. In the European Union, intersectoral decision-making boards for IIA have been established and in Thailand, HIA networks have been organized.

3.1.3 Factors that led to institutionalization

The analysis of the interviews revealed many different processes and preconditions that drove the institutionalization of HIA in countries. These factors can act separately or in parallel. Factors that contributed to countries institutionalizing HIA or moving towards institutionalization included international movements and commitment towards the use of impact assessments for health; rising health care costs; increasing awareness of the importance of intersectoral action; experiences with EIA; and other country-specific drivers.

Finland, The Netherlands, Slovakia and Lithuania cited the importance of international processes and commitments (for example the Gothenburg Consensus Paper, European Union action plans, WHO environmental health committal documents) in driving action towards institutionalization of HIA. In Quebec, Canada, one of the factors that contributed to the

institutionalization of HIA was the international movement for the promotion of health under the Ottawa Charter (36). Increasing efforts to institutionalize HIA worldwide have also helped to strengthen the work in Quebec.

The commitment of a high-level official such as the Minister of Health (in Quebec) or the Premier (in South Australia) was stated to be crucially important for ensuring an initial mandate to commence this process. Rising health care costs were seen as another factor for the systematic use of HIA. Increasing costs have promoted a more preventive public health approach and the use of tools that strengthen the involvement of non-health sectors in prevention and promotion approaches.

Another factor leading to the institutionalization of HIA was the recognition of the impact of decisions made in other sectors on the health of the population and on the social inequalities of health (Quebec). The South Australian Health in All Policies Initiative aims to build healthy public policy through working in partnership during the policy development process with other government departments. In Finland, institutionalization arose out of an issue of coherence - various ministries all had their own guidelines, which made the policy-making process incoherent. A single set of guidelines to institutionalize IIA was developed to increase policy coherence across government, harmonize the process and ensure the decisions of one sector did not cause harm to others.

"The institutionalization of HIA was inspired by the institutionalization of EIA but this is also a logical conclusion of the use of such a tool." (Switzerland)

In other countries, the desire to have a separate HIA regulation has been driven by their experiences with the institutionalization of EIA (Slovakia, Thailand and Switzerland). Some countries developed their HIA approach on wellestablished national EIA approaches. In South Australia, for instance, the consideration of health, although not mandatory, has been an integral part of EIA. In some countries, institutionalization of HIA was motivated by perceived limitations of EIA. Slovakia and Thailand found that health was

not sufficiently covered by EIA and in Switzerland, the move towards HIA came out of the realization of the need to better differentiate the scope and methodology of EIA and HIA.

Country-specific contexts have also contributed to driving the institutionalization of HIA. For example, in the Netherlands, characterized by relatively heavy industry, much effort has been made to develop and collect numerous health indicators (including smell, noise, air quality). This long-standing tradition in health information systems has helped to institutionalize health assessments, as there is the need and the available information to assess health impacts. Moreover, the public health authorities pushed to have health screening linked into EIA there.

3.2 Political setting and context

This section summarizes findings regarding the political setting for the institutionalization of HIA and the context in which HIA has been implemented (for example triggers for HIA or why HIA was done, at what point in the decision-making process HIA took place and who the stakeholders were).

3.2.1 Political support and commitment

Davenport and colleagues (9) identified the following enabling factors for HIA having influence in the decision-making process: organizational commitment to HIA; the provision of an enabling structure for HIA (for example human resources, evidence base and intersectoral working); existing statutory frameworks supporting the use of HIA; alignment of recommendations from HIA with other political drivers; and development of recommendations that are realistic and can be incorporated into the existing planning process. The political commitment and support for HIA varies considerably across countries and can be highly dependent on the governing administration. Country experiences have shown political will (for example supporting legislation, promotion of consistent methods, monitoring and evaluation) to be an enabling factor for the institutionalization of HIA (8). In addition to political commitment, Wismar and colleagues emphasized that institutionalization requires strong stewardship, investment and resource generation (23).

As can be expected, some countries have a stronger public health culture and capacity in support of institutionalization than others (37). A political commitment to public health concerns opens a window of opportunity for implementing and institutionalizing HIA (8). A review of HIA implementation in Quebec, Canada, found that ministries and agencies with a social mission adhered more extensively to the HIA approach than those with an economic mission (38). In a transitional country such as Lithuania, politicians have prioritized economic benefits rather than health (39).

Key informants from Thailand, Quebec, South Australia, Slovakia and Lithuania expressed the view that strong political will and support was a factor for success in HIA or Health in All Policies. In South Australia, the Health in All Policies process was further buttressed by being seen to have utility by other sectors as it met their needs and policy objectives. In Thailand, the National Health System Reform was launched in 2000 and has advocated addressing health in the policies of non-health sectors and a greater role for the public in decision-making. HIA was identified as a mechanism for developing a healthier society by facilitating stakeholder involvement and by including sound information in public policymaking. In 2002, the Ministry of Public Health established a Division of Sanitation and HIA to define HIA systems and to support healthy public policy, especially among local governments. The main actors for the inclusion of HIA in the Constitution were a Constitutional Drafting Group driven by representatives of the health sector and supported by representatives of other sectors. Subsequently, a network for HIA was established. In Quebec, public health has always been well integrated in the other sectors, particularly at the local level. There is a steady working group of representatives from all ministries that reviews policies, plans, and other relevant matters. New laws and by-laws are discussed and undergo consultation every week at the Premier's Office. In South Australia, the Department of Health and the Department of the Premier and Cabinet collaborate to support the Executive Committee of the Cabinet in the application of the targets of the state's Strategic Plan through the Health Lens projects, providing advice and building capacity across the system. Additionally, political willingness led to legislative amendments that institutionalized HIA in both Slovakia and Lithuania.

The key informant from the Netherlands stated that in the past, the Netherlands was more supportive of assessing health impacts of policies at the national level. However, lacking a clear mandate of responsibility for HIA, the Ministry of Health stopped commissioning HIAs. In the United States, besides EIA laws, there is no specific health policy at the federal level that helps to further include or develop HIA in the country. At the state level, Washington and Massachusetts have passed legislation to support HIA, and several other states, including California, Maryland, Minnesota and West Virginia, have proposed legislation. Even without legislation, several states (for example Hawaii, Alaska, California, Wisconsin and Oregon) have been conducting and using HIA to evaluate proposed projects, programmes, plans and policies (17).

3.2.2 Opposition

"The experience shows that the collaboration between the health sector and other sectors can vary across the sectors; some sectors are easier to cooperate with, others show more resistance; education, employment, culture have shown to be sectors easier to access, while others like spatial planning and finance have been more difficult to reach." (the Netherlands)

The institutionalization of HIA has followed different acceptance processes across the countries. While the development of an HIA approach and its inclusion into national legal frameworks has been accepted with no opposition by other sectors in Thailand, other countries have experienced some stronger resistance. The experience of Quebec, Canada, shows that despite its current well-established position, other governmental departments initially perceived HIA sceptically. Although required by legislation, the health sector was not systematically consulted at the beginning of the policy development process. Some stronger opposition was encountered by other sectors in Lithuania and Switzerland. Decision-makers in other sectors were hesitant to integrate HIA in the decision-making processes since it was often

assumed to be "another assessment" (overlap between EIA and HIA) that is costly.

The key informant from Lithuania pointed out that the economic sector often plays a crucial role, fearing that HIA may delay decisions and projects and consequently entail financial losses. The economic benefits of a prevention-based public health approach through HIA and its impacts on a reduction of health care costs is a concept that is yet to be sufficiently accepted. Furthermore, the impact of non-health policies on health is still little understood in some countries.

3.2.3 Triggers for HIA

The trigger for implementing an HIA can vary from requests from policy-makers or the minister of health, demand from individuals or a group of individuals, fulfilment of a decision-making requirement or an open window of opportunity. In Quebec, for example, public health involvement in public hearings about pesticide applications led to a memorandum of understanding between the Ministry of Healtth and Social Services and the Ministry of Environment forming the basis for the systematic practice of HIA in EIA. A trigger can also be the set of circumstances obliging a prescribed body or a federal authority to ensure that an HIA is conducted under the regulations (for example, if the proposed policy or project will negatively impact a specific subpopulation).

Across the countries, the triggers for HIA implementation were not the same but commonalities were identified. HIA is generally implemented to fulfil a legislative requirement or at the request of the ministry of health or regional or local public health authorities. In Quebec, most requests for HIA come from the Cabinet. In several of the countries, the main promoter of HIA has been the health sector. The movement for HIA in Slovakia was activated by the Department of Environment and Health, which was a key player during the whole process of institutionalization of HIA in the country. In the United States, the decision to initiate an HIA is often made ad hoc when public health advocates recognize that the proposal may have important health implications that would not otherwise be recognized or addressed. In South Australia, policies are selected for Health Lens Analysis (HLA) under the Health in All Policies Initiative using a collaborative priority-setting process, which involves both central government and the Department of Health.

Once identified, engagement formally commences with the agreement between the lead agency and the Department of Health on the broad policy areas to be considered. This is followed up with the convening of a working group consisting of representatives from agencies who have influence on the policy area and who partner in the project (partner agencies). In the European Union, the Secretariat-General, the Impact Assessment Board and the Commission departments screen the initiatives and decide together whether an impact assessment is needed. In Thailand, the demand for an HIA can come from individuals or a group of individuals. In Switzerland, work at the cantonal level (Ticino, Jura and Geneva) was a trigger for HIA at the federal level.

3.2.4 Where in the policy cycle does HIA fit?

The timing of HIA and the importance of early involvement have been widely discussed in relation to projects; however, with regards to policy-making, which is incremental or cyclical, identification of when to begin an HIA or consider an assessment report is not obvious (7). Kemm points out that HIA should be integrated into the policy-making process (40). Those who carry out HIA need to understand that it is important for policy-makers to "conform to the policy-making timetable, furnish information in a form that is policy relevant and fit the administrative structures of the policy makers" (40).

In all countries where a key informant was interviewed, HIA typically takes place in the beginning of the policy, programme or project development processes. Key informants stressed the importance of undertaking the HIA at an early stage of the decision-making process. In South Australia, an HLA takes place at the policy problem identification stage in cooperation with the sector that initiates the policy or programme. In Lithuania, HIA typically takes place in the beginning of all project development processes; however, there was evidence that in the early planning stage of spatial planning projects there is insufficient information about the details of the project so in-depth assessment is not possible. HIA is also performed at different planning-level stages, depending on the type of project. In Slovakia and Lithuania, during the development of new policies, the draft policy goes through a consultation phase involving all governmental sectors.

3.3 Framing: forms and types of HIA used

The consideration of health in policy processes is typically framed and institutionalized as an independent HIA or coupled with other forms of impact assessments: mainly EIA, including through existing federal or provincial processes; Strategic Environmental Assessment (SEA); IIA; or other types of assessments (8, 41-43). There is much debate about which form of impact assessment should be implemented, the benefits of "piggybacking" or integrating within other assessments (8) and the utility of developing new frameworks (44). Each form of assessment can offer benefits depending on the context (41), but there have also been criticism or areas needing improvement with regard to the integration of health (41, 45, 46). Additionally, the decision to use or prioritize one form of assessment over another to evaluate a policy proposal is "likely to have a substantial bearing on subsequent policy choices" (47). The interviews showed that HIAs have been implemented as a stand-alone assessment or integrated with other forms of assessments (for example EIA, SEA, IIA).

3.3.1 Stand-alone Health Impact Assessment (HIA)

"The past experience of EIA has made a new approach necessary; health was not sufficiently covered by the assessments and there was not sufficient public participation in the process." (Thailand)

Quebec (Canada), Thailand, Slovakia, Lithuania, Switzerland and the Netherlands have institutionalized a stand-alone HIA to some extent. In South Australia, the HLA process has included aspects of a traditional HIA methodology, and a suite of additional methods (such as economic modelling). The United States has also been increasingly moving towards the use of standalone HIA. Most of these countries identified the need for a separate assessment due to inadequacies in the definition or coverage of health in other forms of assessments. The health sector has played

a key role in driving the institutionalization of a stand-alone HIA in Quebec. In Thailand, use of a stand-alone HIA was motivated by the perceived lack of public participation in the EIA process. Nevertheless, several of the countries have built on the institutionalization experience of EIA to move towards the institutionalization of HIA.

3.3.2 Environmental Impact Assessment (EIA)

Countries have institutionalized HIA by piggybacking onto other impact assessments, particularly EIA. EIA is often used to evaluate environmental justice and environmental equity (48, 49). Many countries around the world have a statutory requirement to undertake EIA (50). Many of the environmental disasters that led to regulatory EIA and environmental social movements came to public attention because of their impact on health (51). Consequently, health has always been a key consideration within EIA and is often part of the definition of environment in legal frameworks for EIA (8). Given its much longer history, examples of EIA institutionalization have informed and advanced HIA practice. Banken posited, "institutionalizing HIA by 'piggybacking' on an institutionalized EIA procedure may often be much easier than doing it as part of decisionmaking processes that are not regulated by a legal framework" (8). An integrated approach is said to "avoid unnecessary cost, inconvenience, delays, legislative complexities and uncertainties of responsibilities" (28). In the case of incorporating HIA as a part of EIA, the already established mechanisms of EIA offer an immediate "point of access to the decision-making process" (44). In 1992, the National Health and Medical Research Council of Australia advocated inclusion of HIA within EIA through the publication of the National Framework for Health and Environmental Impact Assessment, which outlined a model for the conduct of EIA and HIA (52).

The interviews showed that HIA has been institutionalized within EIA at some point in all of the countries, as most EIA regulations explicitly require the identification and analysis of health effects when EIA is conducted. Most of these countries have integrated health assessment in EIA regulations within Environmental Protection Acts (the Netherlands and the United States) or Acts on Environmental Impact Assessments (Finland, Slovakia and Thailand). Canada's environmental assessment legislation, along with other policy

instruments, require the assessment of some health impacts that result from environmental effects of proposed projects, plans, programmes or policies. In the United States, EIA has been institutionalized through the National Environmental Policy Act since 1970, creating a legal framework obliging the public administration to conduct environmental assessments. Under the National Environmental Policy Act, all actions (for example oil and gas leasing offshore or onshore, mining, forestry, military installations and actions in the United States, major water projects, land management, highways, airports) proposed by federal agencies (except the Environmental Protection Agency) need to undergo an EIA.

3.3.3 Strategic Environmental Assessment (SEA)

While EIA typically focuses at the level of individual projects, SEA takes a strategic overview of high-level decisions and is carried out in the early stages of the policy development process (41). It is sometimes referred to as Strategic Environmental Impact Assessment. In 2010, specific requirements for including health (not only those associated with environmental factors) and involving health authorities at all stages of the assessments were included in the Protocol on Strategic Environmental Assessment to the Convention on Environmental Impact Assessment in a Transboundary Context of the United Nations Economic Commission for Europe (53). The SEA Protocol ensures that health considerations are taken into account by requiring stakeholders to evaluate the environmental and health consequences of their policies. The Protocol represented a first step towards the institutionalization of HIA and has presented an opportunity to build technical and institutional capacity to carry out HIAs in decision-making processes.

In Canada, progress is being made by some federal government departments towards assessing health impacts as part of SEA as a result of changes in legislation and other policy tools. At present, SEAs are not primarily health driven, but there is potential for an expanded health focus, given that SEA is linked to sustainable development, which encompasses environmental, economic and social outcomes. The European Commission, international organizations and donors have integrated selected environmental and social aspects of health into the screening, scoping, risk

assessment, decision-making, implementation and monitoring of projects, programmes and policies, with HIA playing an important role (54–56). The European Commission has used this mandate to include health in their SEA procedure, which is applied to public plans and programmes (for example land use, transport, energy, waste, agriculture), but not policies. As per the European Union directive, Finland and the Netherlands have included health in SEA regulations.

3.3.4 Integrated Impact Assessment (IIA)

IIA brings together components of environmental, health, social and other forms of impact assessment in an effort to incorporate an exploration of all the different ways in which policies, programmes or projects may affect the physical, social and economic environment. Organizations are increasingly trying to combine assessments on cross-cutting themes into IIA.

Integrating HIA within IIA attempts to reduce the likelihood of "impact assessment fatigue" faced by administrators, policy-makers, developers and others when they are required to undertake many different impact assessments (57). IIA can simplify the assessment process, enabling and encouraging sectors to work together to ensure "their" issue is adequately considered and reducing duplication of assessments (57).

The European Commission has developed an IIA Framework and carries out IIA on all major initiatives to improve the quality and coherence of the policy development process (42). Within the IIA there are three main assessments: Economic, Environmental and Social Impact Assessment (with health being a part of the Social Impact Assessment). Despite having an apparently rigorous system for IIA and being formally committed to its application, public health implications in European Commission practice are largely overlooked. HIA is voluntary within the European Union and not incorporated into its mandatory IIA tool. In Finland, IIA includes the impact on businesses, households, public finances, the economy, the authorities, the state and future of the environment, fundamental rights, democratic participation, health, equality, regional development, crime prevention and the information society. The method used for IIA is based on the types of assessments that are being integrated and decisions made about the approach at the scoping stage (58). At the local level in Finland, HIA is conducted as part of a Human Impact Assessment.

3.3.5 Health Lens Analysis (HLA)

In South Australia, the Health in All Policies Initiative operates within the government policy-making environment. Through crosssectoral collaboration it seeks to influence public policy, which closely aligns with the key social determinants of health, to achieve better policy outcomes and simultaneously improve population health and well-being. Established in 2007, the successful implementation of Health in All Policies in South Australia has been influenced by a highlevel mandate from central government, an overarching policy framework that is supportive of a diverse programme of work, a commitment to work collaboratively and in partnership with agencies outside health, and a strong evaluation process. HLA is used to identify key interactions and synergies between the selected public policy and health and well-being. Elements of HIA have been incorporated into the HLA process, but not always. A legislative mandate to systematically apply HLA under the Health in All Policies Initiative is now contained in the South Australian Public Health Act (2011) (2).

3.3.6 Scope of the health impacts assessed

Wright and colleagues (41) highlight the fact that there is resistance to incorporating HIA into other forms of assessment for fear of losing its focus on health issues. Some have criticized the integration of HIA into EIA (45), arguing that health has typically been considered only in the early stages of the Environmental Assessment process and health considerations have been limited to physical health effects triggered directly by project-related environmental change, and health and social determinants have not been considered (59, 60). Similarly, Wright and colleagues point out that "EIA and SEA are triggered by biophysical rather than 'social' concerns and thus have traditionally focused on a 'narrow' model of health" (41). In the use of EIA in the United Kingdom, health has usually been either neglected or interpreted very narrowly (impacts through air quality and noise). In a review of SEAs conducted in several European Union countries, Fischer and colleagues (46) found that while SEAs covered important

physical and natural aspects that are related to health, social and behavioural aspects were considered to a much smaller extent. Moreover, the health sector often fails to engage with SEAs, and when it does, it has an inadequate view of the scope of "health", such that engagement is directed at improving health infrastructure rather than helping to design sustainable developments or communities (61). Experiences with IIA showed it to be "overly complex and likely to generate excessive administrative and transaction costs" (62). As the quality of IIA is dependent on the individuals who contribute to it, the need to involve people representing all areas that are covered could create additional work and be treated as a tick-box procedure (57). Furthermore, acquiring enough resources and time to evaluate all determinants for each proposal may be challenging (63).

"Although health impacts are an integral part of EIAs, the reality has shown that health impacts were not sufficiently covered; there was the need to strengthen health considerations." (Slovakia)

On paper, consideration of health is a part of EIA (as part of the definition of possible effects); however, in practice, health assessments are not always done. There is no standardized checklist for an HIA that is integrated within an EIA or for a stand-alone HIA. The health determinants and impacts that are included, the data sources and methods that are used and the recommendations that are made are therefore often determined by HIA practitioners rather than according to a legal or regulatory standard. The attention or coverage given to health largely varies from assessment to assessment and across the countries. Differences were found in the screening requirement for health impacts within EIA and SEA.

The interviews showed that HIA through EIA is obligatory only in some countries. In the United States, analysis of health effects is required for proposed actions (including projects, regulations, policies and programmes) falling under the National Environmental Policy Act but not for other actions. In the Netherlands and South Australia, the provision for screening for health impacts is not mandatory. Similarly, assessment of

health in SEA has not been systematically included within SEA regulations. In contrast, Slovakia and Thailand mandate the screening for health impacts; however, it has not been thoroughly carried out or the reference to health has been minimal, as in the case of Slovakia. HIA integrated within EIA has been undertaken haphazardly, dependent on individual authorities' willingness to consider health and the availability of HIA experts able to implement assessments. The findings were similar for IIA within the European Union – some ministries made little mention of health and others have done proper analyses of health.

Moreover, EIA has traditionally included at most only a cursory analysis of health effects. In some countries, HIA has focused on environmentally mediated health impacts (such as noise and pollution) while others have focused on a broad view of health. In Lithuania, during the screening phase of EIA, the question of whether there will be a significant impact on health or not is negotiated with the regional public health centres; often, health is not sufficiently taken into consideration at this stage. In the United States, the health risks considered in an EIA depend on the issue raised.

3.3.7 What HIA covered

While HIA is applicable to projects, programmes and policies (Switzerland), it has mostly been applied to one of the options in the countries, depending on national capacities and priorities.

The HIAs or HLAs that were conducted focused on planned activities and projects (Lithuania and Slovakia); policies and projects (Thailand and South Australia); law proposals (Finland); and legislative proposals, non-legislative initiatives and implementing measures likely to have significant effects (European Union through IIA). At the national level in Finland, law proposals are covered but not policies. Municipalities use HIA for policies, strategies, budgets, committee proposals and various other issues (64).

Although not widely or commonly practiced, HIA has been used in all levels of government and across the country to evaluate health impacts of proposed projects, policies, plans and programmes in the United States. Much of the work in the United States has centred on major energy projects (for example North Slope offshore oil and gas leasing) and local communities, focusing on policies and programmes associated with land use,

housing and transportation planning. A number of policies and programmes, as a matter of law, fall outside the purview of the National Environmental Policy Act. They range from policies on school nutrition to congressional legislation. Thus, relying on existing EIA laws applicable at the state and municipal levels is inadequate to ensure analysis of all important health impacts across other policy sectors. In Lithuania and Slovakia, HIA has been limited to projects and is not used for policies and programmes. In Thailand, HIA covers public policies and projects that could harm the health of the population as per the Constitution. In South Australia, HLA is applied to government policies (for example on migration, water, density, active transport, mining). It has also been applied to a local urban planning issue. HLA starts at the beginning of the policy cycle with problem identification, and examines the policy problem from the perspective of other sectors rather than a health perspective.

3.3.8 Comprehensiveness of HIA

In addition to the framing of an HIA, types of HIA also vary in terms of length to complete and methodology used (6). Mini or desktop HIA, which usually takes a few days to complete, is "a brief investigation of the health impacts of a proposal", typically using existing knowledge and expertise and research from previous HIAs. A standard or intermediate HIA, which can take weeks, is "a more detailed investigation of health impacts" and typically involves reviewing available evidence and sometimes gathering new information. The third type is a maxi or comprehensive HIA, which is "an intensive investigation of health impacts undertaken over an extended period" and can take many months to complete. Blau and colleagues found that at the national level, the most commonly used type of HIA was the standard or intermediate; at the regional level, the mini or desktop HIA was used most frequently; and a comprehensive HIA was less likely to be used (6).

> "It is often the time and resources that are available that decide whether a rapid, intermediate or comprehensive assessment is done." (Switzerland)

The country experiences revealed that HIA has been carried out in many different ways and the timeframe in which HIA is implemented is not standardized within or across the countries. Experience in Switzerland, for example, showed that the choice of the methodology to follow has often been driven by the time available, making the choice determined by the available resources rather than by the methodological needs. Time constraints for the inclusion of health have also been observed within intersectoral policy consultation processes. In Slovakia, for instance, all governmental regulations go through an intersectoral consultation process (involving all ministries) before being sent for approval to the government. Ministries have only 30 days for commenting on the proposals, making an HIA screening process very difficult. In South Australia, the health assessment conducted under HLA is part of the government's policy-making process and as policy-making can take time, so can HLA. The HLA process needs to be flexible, adaptable and responsive to changing administrative and political contexts.

3.4 Implementation, resource requirements and structures

This section looks at factors involved in the implementation process of HIA: methodology and tools, actors and stakeholders, capacity to carry out HIA, funding, data availability and monitoring, accessibility of information and public participation.

3.4.1 Implementation

Practitioners, policy-makers and researchers have argued that legal frameworks are one of the strongest means for changing rules of HIA practice and a necessary tool to institutionalize HIA (8, 65). Nevertheless, legal frameworks may not be sufficient to foster institutionalization of HIA and sustainable practice (21). Wismar and colleagues (23) identified the following enabling elements for institutionalization of HIA: strong governance support, the establishment of dedicated support units or explicitly integrating responsibilities for HIA in existing institutions, developing the health intelligence for HIA, and regular funding for HIA activities. Moreover, according to Banken (8), translating a legal framework into practice is dependent on the existence of administrative frameworks such as

those that bind different institutions and levels of institutions. Administrative frameworks outline (for example) the procedures for how HIA should be implemented, the approach that should be used and level of formality. In Australia, administrative procedures were built in to facilitate HIA within existing EIA legislation and processes rather than developing new frameworks (66). In British Columbia, Canada, public health entrepreneurs established an administrative framework by adding health concerns into guidelines for preparing cabinet submissions and documentation (8). Examples of elements identified for a best practice HIA framework in Australia included clear guidelines for implementation and procedures (for example referral mechanisms and working relationships between agencies); early health agency involvement in HIA processes, to ensure health impacts are identified early; clear, mandatory and legally enforceable assessment requirements; and consistent application of HIA requirements to all development decision-making that involves significant health impacts (66).

In addition to administrative frameworks and guidelines, sustained and systematic use of HIA is dependent on the existence of tools, methods and procedures for implementing HIA. In Quebec, Canada, lack of knowledge with respect to the impact assessment process and determinants of health and well-being were found to be the main obstacles to implementation (65). The efforts of the Ministry of Health and Social Services to increase awareness and support for government ministries and agencies through intragovernmental tools and procedures have facilitated the implementation of the impact assessment process (65). A network of ministerial representatives was created to promote awareness of the existing tools in their respective ministries and support the use of these tools. Key aspects of capacity building for HIA implementation are the production and training of HIA practitioners and the establishment of support units (23).

The analysis of the interviews showed that the implementation process appears to be more systematic in some countries than in others. The countries included in this report have been using multiple variations of tools and methodologies for performing assessments. Some countries have established clear rules and procedures for conducting HIA (Thailand, Lithuania and Finland). Moreover, in Thailand, a guidance document clarifies rights and obligations of citizens, government and industry and provides a detailed

account of HIA regulations. In Lithuania, although there is no defined quality assurance procedure for carrying out HIA, quality is supposed to be assured by the fact that Public Health Impact Assessment (PHIA) is a licensed activity; regional public health centres review PHIA reports and approve them if acceptable, and there is a public information procedure.

Other countries did not have defined methodologies of responsibilities for the implementation of HIA. The United States does not have a standardized checklist for health assessment (either for standalone HIA or HIA integrated within EIA). The methods and responsibilities by the public health authorities in conducting HIA are also not defined in the Netherlands; however, health effect screening is an established practice that is performed by the Ministry of Health and local authorities. Similar to Quebec, health checklists are to be used for HIA (mainly during the screening and scoping phase). The first step of an HIA is performed by the public health authorities through an existing checklist (fast tool) with which a decision is made whether an HIA is required or not – this checklist contains predefined questions and issues but is adapted to the project. Although there is no uniform methodology for HIA in Slovakia, experts carrying out HIAs are accredited by the Public Health Authority. Twenty-one licensed experts perform the assessments.

3.4.2 Actors and stakeholders

Wismar and colleagues (23) found that most countries have established "lead agencies" (for example governments and public sector administration, research centres or institutes, public health associations, universities) to act as "focal points exerting technical leadership and providing support regarding conducting, organizing, managing, commissioning and supervising the HIA". Other stakeholders involved in HIA have included public health institutions, decision-making bodies, community groups, academic and other research organizations, and the public.

HIA credibility has been found to depend on who conducts the assessments – expert assessors are thought to bring greater credibility to the results and thus enable HIA to have influence in the decision-making process (9). Assessors vary depending on the type and topic of HIA and include administrators, state institutes,

universities, private research companies and freelance scientists (23). In South Australia's HLA, the working group acts as the assessors with the Health in All Policies team providing technical support but more importantly facilitating the collaborative process. In high-income countries, HIA is carried out largely under the auspices of statutory agencies at national, regional and local levels. In some middle-income countries such as Brazil, academics and national ministries may lead HIA and in low-income countries WHO, the World Bank, bilateral agencies or international nongovernmental organizations that invest in programmes of their choice often take the lead. Frequently, HIA is conducted by a combination of assessors or supported by other organizations, groups and individuals (23).

As mentioned before, the health sector has played a key role in driving the institutionalization and implementation of HIA in many countries. Public health services review, screen and approve the assessment (Slovakia and Lithuania) and in the Netherlands, health experts in expert groups review, screen and approve all cases where health is a significant issue for decision-making within EIA. For European Commission initiatives, the European Commission services such as the Directorate-General for Health and Consumers (DG SANCO) carry out impact analyses and the Impact Assessment Board controls its quality and issues opinions. In Slovakia, it is the public health authorities who indicate when HIA is required for investment projects. In South Australia, the Health Protection Branch provides advice and risk analysis to major infrastructure development projects when asked. Health in All Policies HLA will sometimes commission researchers to conduct the qualitative research on the policy issue. However, sometimes public health authorities are not consulted or minimally consulted. In Quebec, Canada, most HIA requests were from the Cabinet, but there had been prior involvement by the Ministry of Health and Social Services in many of them, through agreements and interministerial committees.

There are other actors that are or can be involved in the HIA process, including universities, expert groups, private companies, developers and the public. For example, in Switzerland, governmental departments, universities, expert groups such as Equiterre (Swiss nongovernmental organization for sustainable development) and private companies carry out HIA. Additionally, developers of economic activities (for example, anyone initiating the development of a construction plan) carry

out HIA in many countries. In the United States, HIAs are sometimes conducted by a decision-making agency, such as a metropolitan planning organization or a federal agency complying with the National Environmental Policy Act. Furthermore, the use of HIA in the United States is starting to be developed through the National Academy Panel and other academic institutions.

3.4.3 Capacity and pool of experts

Availability of resources (human or financial) to carry out or commission an HIA and training are important factors for continuous and routine implementation of HIA (67). Financing is a key issue and limiting factor to the implementation of HIA. The costs of HIA can be very high and it is often unclear who will bear the burden or provide the necessary staff to implement the HIA (68). Krieger and colleagues (68) point out that if the state is obligated, HIA could further constrain resources from addressing health issues. Few countries have invested in HIA in terms of securing and providing dedicated budgets for generating resources and conducting HIA (23). As identified by Harris-Roxas and Harris (12), HIA takes on different forms related to the type of proposals HIAs are undertaken on (for example, projects versus policies), the drivers for HIA (legislated versus voluntary) and the methods used to identify and assess potential health impacts (rapid versus comprehensive, narrow versus broad definitions of health). Based on these factors, the costs for HIA can vary considerably. Research grants from the European Union play an important role in enabling research and in developing techniques and capacity for HIA (21). Yet, Wismar and colleagues (23) found that HIA budgets for sustained funding of support units, centres, institutes and other facilities are scarce. Even if there is strong political commitment, lack of support in budget, time and training can be a barrier to implementation (23, 67, 69).

Knowledge and capacities for carrying out HIA are unequally available throughout the countries analysed. Some administrations, such as the province of Quebec in Canada, have well-established research programmes on HIA and training on health determinants available to other sectors. In South Australia, the health sector gives training on health determinants to representatives of key sectors (such as transport and urban planning). Few countries have academic institutions offering formal education in HIA and, consequently, there

are a limited number of professionally trained HIA practitioners and there is little agreement among them as to what constitutes good practice. This lack of knowledge is even more visible at the local and municipal levels and within other governmental sectors. Countries identified a lack of capacities within the health sector and the other sectors to conduct HIA (Slovakia, Lithuania and Finland).

In the United States, efforts to educate those who could benefit from the wider use of HIA have been led by health officials at the local. state, tribal and federal levels, as well as in the non-profit sector. The Robert Wood Johnson Foundation, The California Endowment, and a number of other prominent non-profit public health-focused foundations have been funding HIAs and HIA-related dissemination efforts since 1999. The Healthy Community Design Initiative of the United States Centers for Disease Control and Prevention has funded HIAs and HIA education and capacity building in state and local health departments. The Association of State and Territorial Health Officials, the National Association of City and County Health Officials, and the National Network of Public Health Institutes each sponsor learning communities to support the use of HIA. More recently, HIA has featured in prominent national health initiatives, and the National Prevention Council (a 17-department federal initiative charged with coordinating federal investments in all sectors to improve the health of Americans) and Healthy People 2020 (the United States Government's national health improvement programme) have featured workshops and webinars on HIA. In addition, a number of federal departments are piloting the use of HIA.

Actors in non-health sectors, such as land use planners, have increasingly adopted HIA as common practice, and the American Planning Association and National Network of City and County Health Officials jointly sponsor an online training curriculum in HIA. In 2012, the Health Impact Project (a collaboration of the Robert Wood Johnson Foundation and Pew Charitable Trusts), with the Centers for Disease Control and Prevention, the National Network of Public Health Institutes and others, held the inaugural national HIA meeting, which was attended by 450 people, including federal, state and local officials in transportation, housing, urban design, environmental regulation, energy and other sectors.

Accreditation requirements for experts carrying out HIA also varied between countries. The Public Health Authority of the Slovak Republic designates accreditation of experts in Slovakia, while it is not required in the Netherlands and Thailand. In Lithuania, the State Health Care Accreditation Service under the Ministry of Health issues licences to practitioners to conduct HIA.

"There is the need for more training on HIA at national level: capacity building should be improved for those experts performing HIA as well as for staff at the governmental level, working at the public health authorities." (Slovakia)

The lack of available human resources for HIA proves an additional difficulty. The examples of Slovakia and Lithuania show that the health services (Public Health Authority, State Public Health Service) in charge of reviewing the screening and scoping documents of an HIA and providing approvals for development projects do not have enough staff in charge of HIA.

For European Commission impact assessments, health aspects are systematically considered; however, this does not always result in a comprehensive HIA analysis. This may be due to a lack of specialized expertise, such as insufficient availability of HIA experts, health economists, HIA practitioners and other specialists.

3.4.4 Funding

Financing remains a key but also limiting factor to the implementation of HIA. In most of the countries reviewed it is the governmental department developing the policy or programme, the municipality at local level or the developer who pays for the HIA. In some countries it is the health sector promoting the development of an HIA approach to support the financial implementation of the assessment. In Thailand, for instance, the National Health Commission tries to mobilize funds. Similarly, in Switzerland, the Health Promotion Switzerland Foundation and the health departments of the cantons

cover the costs of the assessment. In the United States, foundations sometimes pay for HIA. At government level for EIA, the agency initiating the project is responsible for paying and if funding is limited, the health assessment is often cut off. At the urban or local level, HIA is done as part of the EIA and developers fund the assessment. Very few countries have made considerable provisions for financing HIAs and even if HIA is institutionalized effectively on one level, financing is missing on the others. In Finland, for example, the responsibility for HIA is passed to communities without the necessary clarity about how to fund it. In Slovakia, HIA costs for investment projects are the responsibility of the project submitter. Sustainable and adequate financing was also identified as a particularly difficult issue at the local level.

3.4.5 Data availability and monitoring

Data availability is a challenge at the national level but more data often exist at this level than at the local level. Across the countries analysed, baseline surveys are very rare. In some cases (for example Lithuania), questionnaires are implemented in order to better understand a baseline situation. In other countries, setting a baseline relies on existing data. In South Australia, data collection is an important part of the HLA process, where possible baseline data are drawn from existing sources to provide a picture of the current state. In some instances when data are not available, new data are collected.

Monitoring and evaluation of HIA (including the process, impact on policies, programmes and projects, and implementation of recommendations) is severely limited across the countries. Monitoring of the recommendations expressed within an HIA is not performed systematically in all countries reviewed. In some countries, such as Lithuania and Slovakia, there is no monitoring of the recommendations; however, health recommendations are monitored at the supranational level within the European Union integrated assessment at a later stage. HLAs in South Australia undergo an evaluation, which is commissioned by South Australian Health and conducted by researchers from the South Australian Community Health Research Unit at Flinders University.

3.4.6 Knowledge transfer

Knowledge development and transfer have also supported the implementation of HIA. For example, reporting the results of HIA is crucial to its successful implementation. It is essential that the findings of the assessment reach policy-makers so that they can be considered and influence the decision-making process (23). The patterns and means of reporting findings can range from reports or individual briefings to workshops or a combination of means (23). Davenport and colleagues (9) found that the tailored presentation of findings and recommendations to reflect the concerns of the organization supported the influence of HIA in the policy-making process, while the use of jargon was a barrier.

Similarly, although the reporting of the results of HIA is important to its successful implementation, little information was available about the exchange of knowledge beyond results being made available to the public in most of the countries. For example, in the European Union, all impact assessments and opinions of the Impact Assessment Board on their quality are published online once the Commission has adopted the relevant proposal. All HIA reports in Switzerland are available on the website of the Swiss Platform for Health Impact Assessment. In South Australia, findings, reports and evaluations of HLA are made available on the Department's website. Further, the HLA evidencegathering phase includes literature reviews, data analysis and qualitative research, and these reports are listed on the website.1 The evaluation uses qualitative methods to collect feedback from HLA participants, including senior-level policymakers who receive the HLA final reports and recommendations. In Lithuania, an announcement on HIA has to be published in a local newspaper and information on time and place for accessibility of the HIA report to the public has to be included in the announcement.

3.4.7 Public participation

The participation of the public in HIA can be critical for the quality and effectiveness of the HIA, as particularly evidenced in Thailand. The public can help to "identify important issues; focus the scope; highlight local conditions, health issues and potential effects that may not be obvious to practitioners from outside the community; and

 $^{1\} http://www.sahealth.sa.gov.au/healthinall policies.$

ensure that recommendations are realistic and practical" (17). In Thailand, individuals or groups of individuals have the right to request an HIA and to participate in the assessment of health impacts resulting from a public policy.

3.5 Outcomes and conclusions

This section summarizes the key drivers and limiting factors for the institutionalization and implementation of HIA that were identified across the countries.

3.5.1 Factors that led to institutionalization

Across the countries, key informants identified the following elements to be important factors leading to HIA institutionalization:

- strong political will and support;
- · legislative mandate;
- international commitment to Health in All Policies and health promotion;
- awareness of the importance of intersectoral cooperation;
- using the experience of other countries for example, experience of Quebec (Canada) as a positive example for South Australia, United States and Switzerland;
- involvement of research communities (Australia).

Normative embedment (for example legislation that has made HIA a formal requirement) has played a key role in advancing HIA practitce and making it part of the approval mechanism in many countries. The inclusion of HIA within Public Health Acts in Quebec, Slovakia, Lithuania and Thailand has helped to institutionalize the HIA process. In contrast, a lack of such requirements can lead to uneven application of HIA.

European Union action plans and WHO committal documents were important documents and tools for supporting the institutionalization of HIA. These documents have been essential for putting the promotion of Health in All Policies and other related approaches and tools for achieving this on the political agenda (the Netherlands, Lithuania and Slovakia). Respondents from many countries stated that effective use of the Health in All Policies approach relies strongly on HIAs. In South Australia, partnership and collaborative policy-making was considered a critical factor for institutionalizing HLA within a Health in All Policies approach.

"There was a lot of discussion on how to improve public health in the province of Quebec; when you work in prevention, then there is the need to work with other sectors; health promotion in general needs to address other sectors." (Quebec, Canada)

Health promotion and prevention processes enabling people to increase control over and improve their health were often mentioned as an important precondition for the institutionalization of HIA. International movements and international agreements, such as the Ottawa Charter for Health Promotion, the Gothenburg Consensus Paper, European Union action plans and WHO committal documents on environment and health (for example for the Ministerial Conferences on Environment and Health), are considered to be essential driving factors.

The recognition that health is largely impacted by decisions taken by other sectors can lead to the development, adoption and institutionalization of tools supporting a coherent approach to health prevention and promotion. For example, the South Australian Health in All Policies Initiative aims to build healthy public policy through working in partnership with other government departments during the policy development process. This partnership and analysis process - called Health Lens Analysis (HLA) - is considered an emerging methodology to translate the Health in All Policies concept into action. Nevertheless, the political engagement for intersectoral collaboration, resource sharing and vision is still not sufficiently developed in many countries. Countries stressed the need to have coherent methodologies and approaches among different sectors and to align their policies and supporting tools.

3.5.2 Integration of HIA through other assessments

HIA can be formalized through other national mechanisms. South Australia does not systematically use HIA but, in addition to the Health in All Policies HLA process, the state provides advice and risk analysis to major infrastructure development projects through its Health Protection Branch. However, with the advent of the new South Australian Public Health Act, there is an opportunity to develop more systematic approaches to the delivery of health advice to other sectors of government. The health sector in Quebec, Canada, provides training on health determinants to representatives of key sectors (for example transport, urban planning). A tool for quickly scanning for Health in All Policies was developed to check if a specific policy topic would benefit from an intersectoral work approach. The key informant from Canada expressed the view that although the tool is not used any more it could provide a good opportunity for the promotion of intersectoral work, given greater accessibility among all sectors. Additionally, there is a steady working group of representatives from all ministries to review policies, plans and other relevant matters.

In the Netherlands, health effect screening is an established practice, performed by the Ministry of Health and by local authorities. A guide for healthy neighbourhoods in the Netherlands is an online tool containing health promotion interventions and concrete recommendations on how to shape healthy neighbourhoods. This tool can be easily used for HIA yet it is not sufficiently known. Additionally, a healthy mobility toolkit was developed in the framework of the Transport, Health and Environment Pan-European Programme. 2

Some argue that health analysis should be integrated into EIA because the relevant regulations provide a mechanism for achieving the same substantive goals as HIA (the Netherlands). Others contend that EIA has become too rigid to accommodate a comprehensive health analysis and that attention should be focused on the independent practice of HIA (Switzerland, Lithuania). A third option would be to include HIA into a broader tool, such as a General Impact Assessment; but this depends on the local conditions. The key informant from

Switzerland emphasized the importance of having a list of determinants of health to implement HIA within a General Impact Assessment. Despite the existing normative frameworks regulating HIA as a stand-alone praxis or as part of EIA, SEA, IIA or other impact assessment approaches, the country experiences showed that institutionalization of HIA depends mostly on political willingness.

HIA practice in all surveyed countries is not restricted by a narrow definition of health. While EIA regulation can use a restricted definition of health focusing on environmental determinants (as in Slovakia), public health legislation commonly adopts a broader definition of health. In addition to environmental determinants, other components of the health definition used include social determinants and well-being (Lithuania, Thailand, European Union).

3.5.3 Limiting factors

The country experiences showed that a legal requirement is not necessarily sufficient for successful implementation of HIA. Some examples indicated that the inclusion of HIA within the Public Health Act has not helped to institutionalize the HIA process; this was mainly due to the fact that the definition of HIA in these documents was vague and therefore did not change or increase an already existing praxis of performing health assessments (the Netherlands).

The country experiences demonstrated that the lack of communication between departments that have health expertise and departments that are actively engaged in promulgating policies, programmes and projects that potentially impact health is a serious impediment to effective implementation of HIA. Although the cooperation between different sectors (for example environment and health) is established through various mechanisms, such as intersectoral working groups, in practice many countries are still facing serious difficulties in fostering cross-sectoral cooperation. Examples from Thailand, Quebec (Canada) and others pointed to the importance of establishing mechanisms for generating knowledge about the health implications of sector policies and for transferring that knowledge to the sectors. Learning about health, its determinants and policies that can protect health is central to the acceptance and effective use of HIA. The health sector also needs to learn about the priorities and imperatives of other parts of government and find

 $^{1\} http://www.loketgezondleven.nl/settings/gezonde-wijk/$

² http://www.healthytransport.com/

ways of working collectively to deliver improved public policy and improved health without the assumption that the health agenda is the most important agenda for governments.

Lack of understanding on how health should be defined, how the impact assessment should be done, and other matters leads to limited or inadequate health analyses, especially when HIA is incorporated into EIA, SEA or other integrated assessment frameworks (for example Lithuania). The key informant from the United States stated that the historical failure to include health analysis uniformly as part of a mandated EIA might obscure the value of HIA. The country experiences highlighted the vital role of capacity building in the educational system. Centres of excellence and trusted institutions in various countries have played an important role in capacity building by developing evidence, tools and guidance that take into account the business practices of specific sectors. Although there is an increasing amount of scientific information about health impacts, the modelling of these accumulated impacts is still complex and costly, making the implementation of HIA an often-difficult task.

4. Recommendations

he key informants proposed recommendations on the main factors that could help strengthen the use and the institutionalization of HIA in their own countries, but also internationally. Four key recommendations were identified from the interviews: (a) embed HIA in national normative systems; (b) clarify definition and operationalization of HIA and develop guidelines and methodological criteria; (c) strengthen and build capacity for HIA practice; and (d) improve cooperation between sectors.

4.1 Embed HIA in national normative systems

Embedment of HIA in national normative systems (including legislation, Public Health Acts) has advanced HIA practice in Quebec, the Netherlands, Slovakia, Lithuania, Thailand and South Australia. Lithuania, for instance, has a draft national health programme, Health 2020. The need for HIA for policy decision processes is included in the current draft, and Lithuania has stated that Health in All Policies will be its health priority during the presidency in the European Union in the second half of 2013. Health for all is one of the horizontal priorities of the National Progress Programme (2014-2020). The Public Health Act of South Australia also has the potential to provide a framework for the institutionalization of the Health in All Policies HLA in South Australia and to introduce a systematic approach to HIA. The key principles are formality (a mandate contained within legislation); adaptability (to be able to adapt to different public health issues and priorities); utility (not prescriptive and applicable only where needed in order to make the process not too heavy); and subsidiarity (to have it performed at different levels, by different players (local councils), thus ensuring that it will be resistant to political changes).

4.2 Clarify definition and operationalization of HIA and develop guidelines and methodological criteria

HIA should be defined and operationalized more clearly within existing tools (for example Public Health Acts, EIA legislation). The key informant from the Netherlands expressed the view that the inclusion of HIA within the Public Health Act did not help to institutionalize the HIA process because the definition of HIA was vague and did not change existing practice of health assessments. Lithuania identified the need to have a broader definition of where HIA should be applied. The key informant from Switzerland highlighted the importance of having a tool that identifies a list of major determinants of health to implement HIA as the reality shows that it is difficult to make a comprehensive list of social determinants influencing health.

Countries recommended clarifying expectations and responsibilities for HIA, for example by defining who should be in charge of HIA, who should perform the HIA, when and in which cases to implement HIA, and how health should be defined. An example of current work in progress is in Slovakia, where the HIA working group is currently preparing regulations to be connected to the Public Health Act and also working on changes to the Act in reference to HIA. The suggestion will be made to specify the existence of by-laws and regulation directing the implementation of HIA and decisions will be taken by mid-2013. The interviewee from the United States recommended that any future policies, standards or regulations for HIA should include explicit criteria for identifying and screening candidate decisions and rules for providing oversight for the HIA process. Moreover, health experts should work with governmental institutions and the public in order to define the possible health impacts to consider. The key informant from the European Commission recommended better use of health indicators and the economic evaluation of health effects for the consideration of health to be more predominant in policy-making.

Key informants suggested having a more systematic approach to conducting HIA. As the interviewee from the United States pointed out, an ad hoc approach to HIA implementation may result in less useful applications. The interviewee from Lithuania identified that there is an insufficient methodological basis for the assessment of public health risk factors (for example air, noise, smell) and limited guidance on psycho-emotional, lifestyle, social factors and accessibility of health care assessment. For countries that integrate HIA in other impact assessments, such as SEA (the Netherlands), it was recommended to systematize the screening for health impacts. Some countries argued that it is better to have a separate HIA than having HIA integrated within other impact assessments.

Available tools and methodology for HIA at national and international levels need to be linked to each other and made more accessible and understandable to health and non-health professionals. There is a need to have better health indicators and to show the economic impacts of health effects in order for the health sector to play a more predominant role in policy evaluation processes.

4.3 Strengthen and build capacity for HIA practice

HIA can be more systematically implemented with greater resources, especially within public health institutions at national and local level. Increased human resources are required within countries (Lithuania), international organizations and institutions (for example the European Union). Key informants recommended increasing the number of certified experts or companies to perform HIA and creating a structure within governmental services to implement HIA. Additionally, a registry that could provide valuable information on groups that have HIA experience or that can provide advice on the costs, timeframes and sources of specialized expertise could be beneficial.

Having HIA capacity at the academic or community levels ensures that when governmental priorities change, the academic institutions are in a position to continue some or all aspects of HIA research and implementation. Thus, countries recommended that academic research institutions and knowledge research centres be further strengthened and provided with additional training on HIA implementation. Training of HIA

to other sectors and to health sector representatives is of crucial importance. Key informants suggested that training activities and education should be carried out across health, environment and other sectors to increase the HIA knowledge base. More capacity building is needed to ensure that professionals, researchers, experts, public health authorities and staff at the governmental level understand how HIA works and to support their work. Another recommendation was to have a structure within the governmental services to work on HIA, which would increase the interest of academics to get involved.

Based on its experiences and success, Thailand recommended building the capacity of communities and the public to get involved in and move forward the HIA mechanism and process, as communities are the ones who are affected and must have the capacity to initiate HIA and get involved actively. Without this capacity and involvement from the community, HIA will remain mainly academic and will not result in good and healthy public policy. Specific recommendations included increasing public participation and defining specific mechanisms for public participation and for the inclusion of results of the assessment into policies. Moreover, it was suggested that the involvement of nongovernmental sectors, stakeholders and players should be strengthened within the HIA process.

Additionally, key informants from the United States, South Australia, Slovakia and Thailand expressed the need for further research and scholarship on HIA and HLA, particularly relevant to policy. This would contribute towards expanding the knowledge base on the health burden of policies. The review showed that in some countries, the experiences with institutionalization of HIA at the local level have provided useful input to the national HIA development process. In other cases national approaches have been translated into local regulations and practice. In both cases it was evident that there is an opportunity to further strengthen the dialogue and the support between national and local actors and resource centres. Another recommendation was made to develop effective means of knowledge transfer, especially to the decision-makers and professionals concerned.

4.4 Improve cooperation between sectors

"It is important to be respectful and view the policy-making process as a collaborative partnership where health is not necessarily the expert or leader. This allows for the investigative process, the Health Lens Analysis, to draw out the evidence in a way where expertise is shared by all." (South Australia)

The key informant from the Netherlands stated that although the cooperation between different sectors is established through various mechanisms, such as intersectoral working groups, in practice, it does not always work as required.

The key informant from Slovakia stated that there is little understanding from other sectors about the potential health impacts of policies and communication between sectors remains difficult. Similarly, in Lithuania, there is a lack of intersectoral cooperation due to differing interests. The interviewee from Thailand expressed the view that rules, regulations and guidelines for HIA in specific sectors, such as agriculture and food production, should take into account sector issues and business-managed practices. One of the recommendations was to formulate a national approach (within the health sector and central government) to multisectoral action on social determinants of health. Another suggestion included expanding countries' cooperation and participation in international programmes, projects and training. The key informants from South Australia emphasized the importance of developing collaborative patrtnerships with a focus on the needs and goals of the other agencies.

5. Next steps

his report primarily describes and analyses the experience of middle- and high-income countries. Research on the implementation and institutionalization process of HIA in low- and middle-income countries would also be beneficial. Dissemination of the report findings to relevant audiences, mainly policy-makers and public health practitioners, is essential for them to benefit from the implementation and institutionalization experiences of other countries.

WHO has played an active role in advancing the field of HIA practice, as summarized by Dora and colleagues (21). The WHO experience with EIA and HIA for healthy public policy informed and influenced the negotiations of the SEA Protocol to the United Nations Economic Commission for Europe Convention on EIAs (70). WHO recently developed tools for HIA oversight to be used by multilateral development banks and aid recipient countries. The tools support the inclusion of health goals in development lending for all sectors of the economy and a decision by the International Finance Corporation to adopt safeguards for community health and safety. WHO is working with a few pilot countries on the development of governance mechanisms in the extractive industry for healthy public policy by including HIA.

Additionally, three possible areas of action for WHO were identified in a previous paper (71) to support equity in HIA:

 to enhance the equity focus of HIA and other related assessment processes, including the provision or endorsement of guidelines and recommendations;

- to build the capacity of health and other sectors to assess health equity impacts of policies, programmes and projects, including the wider use of HIA;
- to extend Member States' capacity to integrate findings from impact assessments and related processes into programme design and policymaking activities, to improve health equity within their population.

In congruence with the work that is already being done, WHO could further advocate and support the assessment of health in policies, programmes and projects in countries that have not institutionalized any form of HIA; improve the definition of health (determinants and impacts) and cooperate with other agencies, corporations, institutions and others to develop methodology and guidelines to strengthen and systematize the coverage of health in other forms of assessments; extend work with more countries to develop governance mechanisms for healthy public policy using HIA in other sectors; and establish a global network of centres to support HIA practice. Using the findings, it would be useful to hold a consultation with representatives of ministries, administrators, policy-makers and other actors in the near future to identify mechanisms for supporting and improving the use of HIA and other assessments.

Annex A. Analytical framework: key dimensions and questions addressed

| Key dimensions | Sample questions |
|---|---|
| A. Degree of and mechanisms for institutionalization | Has HIA been formalized, been made part of a well-established system or become part of the norm (informal)? What were the mechanisms for achieving this? What were the factors that led to institutionalization? How was HIA institutionalized (existence of resource centres, law/legislation, requirement for funding of project, public pressure/expectation)? Who was involved in the institutionalization of HIA? |
| B. Political setting and context | At what point in the decision-making process did an HIA take place? What kind of political support was available? Where in the policy cycle did HIA fit? Why was HIA done? What were the triggers? Who were the stakeholders that were involved? |
| C. Framing and type of HIA used | What model of HIA was used and what were the limitations (HIA, EIA, SEA, SIA, IIA)? At what level (policy, plan, project) was HIA done? What types of policies were covered? What types of HIAs were done (rapid, intermediate, comprehensive)? |
| If HIA in EIA, IIA, SEA | Continue to implementation and monitoring What aspects of health were considered (broad vs. narrow)? |
| | What kinds of health risks were included? Who conducted the HIA (a health expert, an HIA expert, a consultant)? Was it related to the public health priorities of the country or region? |
| D. Implementation, resource requirements and structures | How was HIA institutionalized? Who was involved? Who commissioned the HIA? How was the evidence leading up to the HIA brought together or integrated? Who provided inputs? Who implemented the HIA and what was the implementation process? What was the capacity to carry out HIA? Was there a pool of experts to conduct the HIA? Who funded the HIA? How was public participation and stakeholder involvement included? What were the accountability mechanisms that were in place (information published on a website, private, open to scrutiny, accessibility of results by stakeholders or the community)? |
| E. Outcomes and conclusions | What were the factors that led to institutionalization? What was the success of HIA? What were the results of the HIA (was there a change in the policy or programme)? How far have HIAs gone? Why have they stopped? What were the main enabling factors? What were the main limiting factors? |

Annex B. Summary of country findings by dimensions of the analytical framework

| Country / administrative unit | A. Degree of and mechanisms for institutionalization | B. Political setting and context | C. Framing and type of HIA used | D. Implementation and resource requirements | E. Outcomes and conclusions |
|-------------------------------------|---|--|--|---|--|
| 1. Quebec, Canada | Mandatory under the Public Health Act (2001) Requires Minister of Health to be consulted on all policies that could have an important health effect (Section 54) Provision of screening for health impacts mandatory Changes made to Public Health Act to include a complete list of determinants and the need to cover all sectors that could have an impact on health Drivers include: Recognition of the impact of decisions in other sectors on the health of the population International movement towards the promotion of health and institutionalization of HIA Support from the health sector; increasing costs of the health systems | Health is under the responsibility of each province Opposition towards HIA process in the beginning Main promoter of HIA has been the health sector; the environment sector has been an ally based on the experience of EIA HIA should take place at the beginning of all policy, programme and project development processes. After adoption and implementation of Public Health Act, health sector was not systematically consulted; informed about a new law, policy or plan at the end of the process. Today the health sector is consulted at the beginning; economic sector is still reluctant to involve health sector when developing new policies. Most requests for HIA from the Calinar | Stand-alone HIA Stand-alone HIA Rapid appraisal tools Screening tool with health criteria to be checked during HIA | There is a grid of all health criteria that should be included in screening Ministry of Health involved in many HlAs through agreements and interministerial committees Interestoral approach of the Public Health Act was ensured by two intersectoral working groups of representatives of all ministries review policies, plans, etc. Much work done around the table with other sectors Health sector gives training on health other sectors (e.g. transport, urban planning) Research programmes at university where researchers are asked to produce advice (before a law is developed) about the health impact of a specific measure or in a specific domain Ministries responsible for funding law proposals | Methods and responsibilities undefined by Public Health Act Inclusion of HIA within Public Health Act helped to institutionalize HIA process Institutionalization can only be advieved through political will Desire for better governance is crucial Training representatives of other sectors about health risks is a key approach to institutionalization |

| Country / administrative unit | A. Degree of and mechanisms B. Political setting and for institutionalization context | | C. Framing and type of HIA used | D. Implementation and resource requirements | E. Outcomes and conclusions |
|-------------------------------------|--|--|--|--|--|
| 2. United States of America | Integrated within EIA, formalized under National Environmental Policy Act since 1970 All actions proposed by federal agencies have to undergo an EIA under National Environmental Policy Act Washington and Massachusetts have passed legislation to support HIA; other states (California, Maryland, Minnesota and West Wirginia) have proposed legislation; other states have been using HIA without legislation (Hawaii, Alaska, Witsconsin and Oregon) | Until 2005, public health departments were not involved in the EIA process Decision to initiate HIA is often ad hoc by public health advocates | Ad hoc stand-alone HIA EIA on all actions proposed by federal agencies Health is a part of the definition of possible effects in EIA but HIA is not always done In housing developments and planning, health effects have been considered very limitedly Health is often seen as the consequence of personal choice Health risks considered depend on the issue raised At urban or local level HIA is done as part of EIA Much HIA activity has been centred on major energy projects and local communities (e.g. land use, housing and transportation | No standardized checklist for HIA integrated within EIA or for a standalone HIA Health experts need to work with governmental institutions and public to define the possible health impacts HIAs undertaken outside formal decision-making process by universities, community-based organizations or health departments with no authority over proposals HIA sometimes conducted by a decision-making agency (metropolitan planning organization or a federal agency) Funded by foundations; agency initiating a project; developers at the local level At government level for EIA, the initiating agency pays; if funding is limited, then HIA is often cut off Besuits are made nu blichy available | Relying on National Environmental Policy Act and EIA laws is inadequate to ensure HIA Current ad hoc approach may result in less useful applications More evaluation of HIA practice needed Future policies, standards or regulations for HIA should include explicit criteria for identifying and screening candidate decisions and rules for providing oversight for the HIA process to promote utility, validity and sustainability |

| Country / administrative unit | A. Degree of and mechanisms B. Political setting and for institutionalization context | B. Political setting and context | C. Framing and type of HIA used | D. Implementation and resource requirements | E. Outcomes and conclusions |
|-------------------------------------|--|--|---|--|--|
| 3. South Australia | Voluntary – no formal national approach to HIA Formal approach at regional level Provision of screening for health impacts not mandatory The new South Australia Public Health Act provides a legislative mandate similar to Quebec A South Australia public health state plan is being developed, which aims to provide the framework for actions across governmental agencies and local councils | Takes place early in the policy cycle, at the policy problem identification HLA based on a strong collaborative partnership with other sectors Strong support at political level Department of the Premier and Cabinet collaborate to support the Executive Committee of the Cabinet in the application of the targets of South Australia's Strategic Plan through the HLA | HIA not systematically used HLA of policies and local urban planning programmes Policies covered are across the board (migration, water, density, active transport, mining, etc.) HLA is flexible and adaptable and can include aspects of a traditional HIA but often draws on a range of methodologies Broad definition of health—includes both a health promotion and protection approach and a focus on equity issues At the urban or local level, HIA is done as part of the EIA | HLA is a flexible and responsive process tied to established policy-making processes of government and therefore can take time similar to comprehensive HIA or can be completed rapidly Health Protection Branch provides advice and risk analysis to major infrastructure development projects Researchers are involved. The health system finances 50% of the HIA process, the other department finances the remaining 50% External experts are commissioned to do the evaluation. The results are published on the Department's website (www.sahealth. sa.gov.au/healthinallpolicies). Limited public consultation (e.g. through qualitative evidence gathering such as focus groups for individual Health Lens projects) | HLA approach is an emerging methodology to translate Health in All Policies into action Driving force: use of HLA process to build healthy public policy in partnership with other government departments Broad recognition about health and well-being across other departments at state government level Departments who have participated in HLA have a better understanding of health and well-being and how the social determinants of health link to their area of policy responsibility Greater understanding and stronger partnerships between health and partner agencies |

| Country / administrative unit | A. Degree of and mechanisms B. Political setting and for institutionalization context | B. Political setting and context | C. Framing and type of HIA used | D. Implementation and resource requirements | E. Outcomes and conclusions |
|-------------------------------------|---|---|---|---|--|
| 4. Thailand | Mandatory – formal approach at national level Erwironmental and Health Impact Assessment of the people and the community written into the Constitution HA in Public Health Acts Health included in Acts on EIA In 2002, the Ministry of Public Health established a Division of Sanitation and HIA to define HIA systems and to support healthy public policy, especially among local governments Post experience of EIA made a new approach necessary, health was not sufficiently covered by the assessments and there was insufficient public participation in the process | The National Health System Reform was launched in 2000 and has advocated addressing health in policies in non-health sectors and a greater role for the public in decision-making HIA was identified as a mechanism for developing a healthier society by facilitating stakeholder involvament and by including sound information in public policy-making | Environmental and Health Impact Assessment HIA covers public policies and projects that could harm the health of the population as per the Constitution Definition of health is broad and holistic, focusing on well-being and including a variety of factors (physical, mental, social) | Thailand's National Health Commission Office has issued revised rules and procedures for use of HIA Document clarifies the rights and obligations of citizens, government and industry in relation to HIA Provides a detailed account of HIA regulations When HIA is requested by the public, assessment is supported by the National Health Commission, which tries to mobilize funds for implementing the HIA if public agencies request HIA, then experts are contracted No accreditation for experts performing HIA | Inclusion of HIA within Public Health Act helped to institutionalize HIA process New regulation has increased the number of HIAs done Preconditions for effective institutionalization: Development of guidelines and methodological criteria to be adopted right from the beginning of the screening and scoping phase Importance of capacity building of researchers, institutes, individuals Bottom-up approach rather than top-down Challenges: To define specific mechanisms for public participation and for incorporating results of the assessment into policies To develop rules, regulations and guidelines for HIA in specific sectors To expand the knowledge base so that health burden of policies and |

| Country / administrative unit | A. Degree of and mechanisms B. Political setting and for institutionalization context | B. Political setting and context | C. Framing and type of HIA used | C. Framing and type of HIA D. Implementation and resource used | E. Outcomes and conclusions |
|-------------------------------------|---|---|---|--|--|
| 5. Finland | Health assessment incorporated within IIA No legislation for IIA but binding norm Guidance for how to do IIA for all sectors (social, employment, puivate, public, environment, education, health) developed by the Ministry of Justice (2009) Guidelines were developed to clarify and facilitate the IIA process, increase policy coherence across government and organize experts Ministry of Health was consulted; Ministry of Justice developed guidelines to facilitate the process and organize experts | IlA occurs in the preparation phase before the proposal is ready and when it is sent out for comments to interested groups and other ministries. Felt political pressure to compete with the governance programme of the European Union Attempt to find out what hidden political interests are to prevent the decisions made in one sector from harming other sectors All ministries involved | HIA included in Human Impact Assessment at local level Health integrated in IIA HIA of law proposals not policies Types of IIA vary considerably some ministries make little mention of health; some conduct proper analyses of health HIA integrated within EIA (as mandatory requirement of European Union regulations) conducted on programmes and projects at the local level – health is narrowly defined Definition of health from public health and determinants point of view – some are included in social impacts | Ministries responsible for implementing the law conduct IIA and provide funding (applies to other sectors) Lack of personnel or time in Ministry of Health Lack of capacity to carry out HIA (Institute of Health and Welfare) Should consult with Ministry of Health but may not necessarily be the case Ministry of Environment may use private sector, consultant, specialized institutes Ministry of Health usually does IIA itself Guidebook does not specify sources of information but guidance on where to gather data Baseline survey not conducted Public not often included Ministries have commenting rounds with communities, labour unions, institutions | Desire for better governance is of political importance IIA gives health sector access to other legislation-making and the mechanism to challenge other sectors to consider health and to challenge other sectors to consider health as it is often done simultaneously. There has been some development but not as much as expected. Changes are made during early phases. Assessment should be done before proposal |

| Country / administrative unit | A. Degree of and mechanisms B. Political setting and for institutionalization context | B. Political setting and context | C. Framing and type of HIA used | C. Framing and type of HIA D. Implementation and resource used | E. Outcomes and conclusions |
|-------------------------------------|---|---|---------------------------------|---|--|
| 6. The Netherlands | Voluntary – no formal procedures Health effect screening Health included in EIA regulations within Environmental Protection Acts Health included in SEA regulations HIA in Public Health Acts Provision of screening for health impacts not mandatory | HIA takes place in the beginning of all policy, programme or project development processes. Public health authorities are main drivers to have health screening linked to ElA Minister of Health can advise or stop policy or project development that might have a negative impact on health (although seldom done) Netherlands Commission for Environmental Assessment (expertise in EIA and inclusion of health in EIA) | Integrated within EIA or SEA | Methods and responsibilities undefined by Public Health Act Health effect screening is an established practice performed by Ministry of Health and local authorities Health mobility toolkit developed Guide for healthy neighbourhood developed Netherlands Commission for Environmental Assessment checks the assessment if needed Scoping done by the competent issuing authority or developer Municipalities responsible for funding at local level Developers responsible for funding out HIAs Local governments need more financial and human resources for carrying out HIAs | Inclusion of HIA within Public Health Act did not help to institutionalize HIA process because definition of HIA was vague and did not change existing practice of health assessments European Union action plans and WHO committal documents and tools for promoting Health in All Policies on the political agenda Cooperation between sectors (e.g. environment and health) is established through various mechanisms (e.g. intersectoral working groups), but they do not always work as required inclusion of health within EIA was result of public participation Scientific information about health impacts exist but modelling of accumulated impacts is complex and costly |

| Country / administrative unit | A. Degree of and mechanisms for institutionalization | B. Political setting and context | C. Framing and type of HIA used | D. Implementation and resource requirements | E. Outcomes and conclusions |
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| 7. Switzerland | Voluntary, not mandatory Formal approach at national and cantonal level A proposal Health Promotion and Prevention Act was to be adopted at the federal level, which refers to HIA on projects and programmes; however, it is yet to be adopted At cantonal level, half is regulated through the Cantonal Health Act (Geneva, Fribourg) A ministerial platform on HIA was created operating countrywide on multidimensional health A research group on environment and health of the University of Geneva provides scientific advice for HIAs – seconded by Ministry of Health Swiss guide to HIA was prepared Drivers: There was a need to better underline the difference between EIA and HIA Institutionalization of HIA was inspired by the institutionalization of EIA Experiences of HIA at the cantonal level are driving forces for institutionalization at the federal level evel institutionalization at the federal level institutionalization of HIA in health acts is stongly inspired by the example | Differences between the federal and cantonal levels with health mainly under the responsibility of the cantons Main opposition to HA into the regulation came from the regulation came from the economic sector, which feared that EIA and HIA would cause a break in the project development activity and would cause economic loss. Discussion about the development of HIA at the federal level was supported by the Health Promotion Switzerland Foundation Work at the cantonal level (Ticino, Jura and Geneva) were triggers for HIA at the federal level were triggers for HIA at the federal l | In ElA, SEA and SIA, health is not necessarily and seldom included All kinds of policies are subject to HIA The ideal way would be to have a list of determinants to implement HIA Reality shows that it is difficult to make a comprehensive list of social determinants influencing health; a lot of promotion has been done to use a health inequality approach and to use inequality determinants Availability of time dictates type of HIA used (rapid, intermediate or comprehensive) | Main funding agency for HIA is the Health Promotion Switzerland Foundation and the health departments of the cantons Time is very important and a necessary condition 90% of the HIA are commissioned by governmental institutions with the agreement and support of other departments In Ticino, an interdisciplinary group puts forward requests to implement HIA Main funding agencies or institutions for the work on HIA are the Health Promotion Switzerland Foundation and the health departments of the cantons Department initiating the project also pays for the HIA. HIA implemented by governmental departments themselves, university, other expert groups such as Equiterre (nongovernmental organization for sustainable development) and private companies Public concerned in part of steering groups. | Institutionalization can only be achieved through political will Utility of HIA not sufficiently understood by the economic sector HIA implementation at the federal level faced internal opposition because of a perceived concurence with other assessment tools (e.g. sustainability) One of the problems was the wording ("étude" in French is not well accepted as assessment or evaluation) There is a big need for advocacy of HIA Not enough public participating in health promotion, only through associations Monitoring needs to be better developed Better to have a separate HIA than integrate HIA into other assessments HIA could be integrated into a broader tool, such as General Impact Assessment, but dependent on local conditions Important to have a tool that accounts for major determinants of health HIA at the cantonal level is gaining legitimacy but implementation suffers from budget reductions Having a legal basis is good but not survival |

| Country / administrative unit | A. Degree of and mechanisms for institutionalization | B. Political setting and context | C. Framing and type of HIA used | D. Implementation and resource requirements | E. Outcomes and conclusions |
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| 8. Slovakia | Mandatory – formal approach at national level and regional level but only regarding investment projects HIA in Public Health Acts Regulated through Public Health Act No. 355 (2007), amended in 2010 to include HIA According to the EIA Act, EIAs should also include HIA (i.e. each territorial planning document has to include both an EIA and HIA) Driving force for including HIA in the latest version of the Public Health Act is the experience with EIA and its legislation – although health impacts are an integral part of EIAs, the reality showed that health impacts were not sufficiently covered; there was a need to strengthen health considerations International strategic documents and commitments (European Union and WHO) were driving forces HIA institutionalization mainly driven by the health sector | In development of new policies, the draft policy goes through a consultation phase involving all governmental sectors; each sector only has 30 days to comment on the policies, which is not enough time for enabling an HIA is performed by public health authorities through an existing checklist (fast tool) used to decide whether an HIA is required or not | HIA can be done as part of ElAs or independently HIA can be done in cases where no ElA is necessary It is up to the national or regional public health authorities to decide when to perform HIA when to perform HIA the Public Health Act adopts a broader definition Reference to health in EIA is often very small and insufficient HIA is only applicable for projects and not policies and strategic documents The HIA process for development projects is long, allowing a comprehensive health assessment | Public Health Authority of the Slovak Republic or regional public health authorities indicate when HIA is required for development projects. Health authority checks the HIA Where an HIA within EIA is performed, it is done by private companies and not the health sector. No uniform methodologies are used All development projects need to be accepted by the national or regional public health authorities. Responsibility for the HIA and its funding is with the developer of the project and HIA is needed, the developer needs to commission an external expert for carrying out HIAs are accredited by the Public Health Authority of the Slovak Republic. Experts carrying out HIAs are accredited by the Public Health Authority of the Slovak Republic website. A registry of certified experts in the country. A registry of certified experts is on the Public Health Authority of the Slovak Republic website. HIA expert establishes an expert group to perform the assessment. Assessments are dhecked by the health authorities, which then give the authorization for carrying out the development project. | Inclusion of HIA within Public Health Act helped to institutionalize HIA process Improvements have been reached through committal documents based on agreements and processes (European Union, WHO) The inclusion of HIA in Public Health Act has been implemented and many developers have appreciated HIAs Political will for intersectoral approach is not yet sufficiently developed There is little understanding from other sectors about the potential health impacts of policies Communication between sectors is still difficult There is need for more training on HIA at national level; working with the public health building should be improved for those experts performing HIA as well as for staff at the governmental level, working with the public health authorities There is a need for more certified experts and companies performing HIA. There is a need for more certified experts and companies performing HIA. There is a need to better define the provision for HIA in the Public Health Act – better regulation of who is performing HIA, in which cases, etc. The HIA working group is currently preparing regulations to be connected to the Public Health Act and also working on changes related to HIA (to specify existence of by-laws and regulations on the implementation of HIA) |

| Country / administrative unit | A. Degree of and mechanisms for institutionalization | B. Political setting and context | C. Framing and type of HIA used | D. Implementation and resource requirements | E. Outcomes and conclusions |
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| 9. Lithuania | HIA in Public Health Care Act (the Law on Public Health Care) National guidelines for carrying out HA but not regional or local Public Health Care Law was amended in 2007 to reflect a new definition of PHIA: process of identification, description and assessment of impact on public health of factors related to planned economic activity and influencing public health Article 38 requires that municipality institutions was added: PHIA be adopted by the Minister of Health Article 38 requires that municipality institutions was added: PHIA be adopted by the Minister of municipality institutions was added: peath and adopted by the Minister of mostly based on the work and the experiences hared by WHO and cooperation with other countries funded through European Union funded through European Union | PHIA can be performed as a separate procedure or as part of EIA HIA is performed at different planning stages depending on the type of the project planning of all project development processes At the early planning stage of spatial planning projects, there is not enough information about the details of the project so in-depth assessment is not possible projects, there is not enough information about the details of the project so in-depth assessment is not possible stages of the project and regional public health centres (Innti July 2012 they are subordinated to the Ministry of Health) review screening and scoping documents (EIA, SEA) and reports (EIA, SEA) and reports and issue decisions and provide approval (PHIA reports) Developers of economic activities Institutions performing PHIA (private, consultancy companies and public (local communities, active citizens, nongovernmental organizations) | HIA focused on planned activities (projects) but not policies or strategic plans HIA of proposed economic activities are carried out within the procedures specified in the Law on EIA During screening phase of EIA, the question of whether health should be included or not is negotiated with the regional public health centres Often, health is not sufficiently taken into consideration at this stage At present, there is no scoping and screening in PHIA if performed as a separate procedure (it is set that PHIA should be undertaken if defining of the sanitary protection zones of the planned economic activity is necessary) PHIAs are usually done within 3 to 5 months | Methods defined through by-laws that regulate the implementation of PHIA No quality assurance system for carrying out PHIA Quality is supposed to be assured by the fact that PHIA is a licensed activity, regional public health centres review PHIA reports and approve them if acceptable; public information procedure There has been a focus on capacity building and awareness raising since 2000 Lack of data at the local level HIA can be performed only by licensed subjects; the regional public health centres ensure the licensed activities are in compliance with requirements defined by the Ministry of Health Licences are issued by the State Health Care Accreditation service under the Ministry of Health 15 private companies, 1 university, 2 public health institutions, over 70 public health specialists (only a few practising) The initiator or developer of the project pays for the assessment Announcement of HIA assessment has to be published in a local newspaper with indication of time and place where public Baseline surveys are very rare—sometimes questionnaires are implemented in order to understand a baseline situation | Well-developed legal process for HIA Legal requirement for HIA puts health at the top of the agenda when new economic activities are planned Public health culture is in its infancy; all levels including the public have to recognize their role in health improvement Need for broader definition on where HIA should be applied There is a need to monitor the recommendations of HIAs and to inform about follow-up actions; this would help to make it better understood by other sectors and better institutionalized There is no permanent infrastructure to monitor and coordinate HIA European Union action plans and WHO committal documents and WHO committal documents and tools for promoting Health in All Policies on the political agenda More public participation is required Lack of intersectoral cooperation; different interests European Union Social Fund co-funded national project on development of PHIA in Lithuania (2010–2013) Scientific information about health impacts exist but modelling of accumulated impacts is complex and costly Information system to support PHIA is not sufficiently developed—lack of information non health status of communities, background environmental pollution and relations between risk factors and health insufficient methodological basis for assessment of risk factors and health care assessment from EIA process (air, noise, smell, non-ionizing radiation) but nearly no guidance on psycho-emotional, lifestyle, social actors, accessibility of health care assessment from EIA process Necessity for further international cooperation and participation in international programmes, projects and trainings |

| Country / administrative unit | A. Degree of and mechanisms B. Political setting and for institutionalization context | B. Political setting and context | C. Framing and type of HIA used | D. Implementation and resource requirements | E. Outcomes and conclusions |
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| 10. European Commission | Mandatory as part of Commission's impact assessment system Commission impact assessment guidelines (2005 and 2009) Updated guidelines (2009) give wider recognition to health and public health – access to the health system and to public health and safety; social determinants and poverty are essential factors of the guidelines Illas are necessary for the most important Commission initiatives and those having the most farreaching impacts Guidelines were developed by representatives of all Commission services, including DG SANCO | The Secretariat-General / Impact Assessment Board and the Commission departments screen the initiatives and decide together whether an impact assessment is needed Leading authority for the guidelines development was the Secretariat-General of the European Commission DG SANCO is part of all Commission IlAs that relate to health and consumers through active involvement in the impact assessment steering groups | HIA integrated within IIA HIA of legislative proposals that have significant economic, social and environmental impacts; non-legislative initiatives (white papers, action plans, expenditure programmes, negotiating guidelines for international agreements) that define future policies; and certain implementing measures that are likely to have significant impacts Definition of health is broad No concrete specific health aspects are considered; depends on individual cases and problems that are trying to be solved or | quality control and support group working under the authority of the Commission President The Board examines and issues opinions on all the Commission's impact assessments Unit responsible for producing the policy is responsible for the IIA, they set up an interservice steering group IIAs and all opinions of the Assessment Board on their quality are published online once the Commission has adopted the relevant proposal If health is part of the assessment, the impact assessment is not monitored; rather, what is monitored and evaluated is wheather the options chosen within the juitiative advisor the policitives | The development of the guidelines had an impact as before there was no formal impact analysis The inclusion of health within the social pillar of IIAs was the decision of the Commission Health is thought to be sufficiently covered; however, sometimes there is discussion on whether the health aspects should be better represented in the analysis DG SANCO encourages the other Commission services to analyse health impacts within their initiatives on an ongoing basis. To have health more predominantly featured, there is a need to promote procurain of health effects. |

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SOCIAL DETERMINANTS OF HEALTH

ACCESS TO POWER, MONEY AND RESOURCES AND THE CONDITIONS OF DAILY LIFE — THE CIRCUMSTANCES IN WHICH PEOPLE ARE BORN, GROW, LIVE, WORK, AND AGE





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