Health Impact Assessment

HIA

Piloting the Process in Scotland

Scottish Needs Assessment Programme

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May 2000

PREFACE

The Scottish Executive has identified Health Impact Assessment (HIA) as an 'essential step' towards placing health at the centre of the decision making process at both national and local levels. It is further seen as having the potential to assist in reducing health inequalities, with the Acheson Report[1] recommending that 'as part of health impact assessment, all policies likely to have a direct or indirect effect on health should be formulated in such a way that by favouring the less well off they will, wherever possible, reduce such inequalities'.

The Scottish Needs Assessment Programme (SNAP), a Scotland-wide network with well developed links with both the service and academic side of medical and non-medical Public Health, was commissioned by the Scottish Executive to pilot the HIA process within Scottish settings.

The pilot process involved conducting two HIAs. This report discusses the two pilot assessments and the lessons that have been learned from conducting them, and reports on the substantial discussions that have taken place throughout this work. The two case studies "A Health Impact Assessment of the City of Edinburgh Council's Urban Transport Strategy, and "A Health Impact Assessment of the North Edinburgh Area Renewal (NEAR) Housing Strategy" are also available from SNAP.

This report is the outcome of an initiative undertaken on behalf of SNAP, led by Professor Phil Hanlon, and sponsored by the Scottish Executive. The report was written by the HIA Working Group (See below for membership), although the final editorial decisions rest with SNAP. Of necessity, the final report does not necessarily reflect the opinions of all those who contributed.

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EXECUTIVE SUMMARY

Health Impact Assessment (HIA) has been identified as an 'essential step' towards placing health at the centre of the decision making process at both national and local levels.

The Scottish Needs Assessment Programme worked together with partners on two pilot HIAs. These were case studies, intended to pilot methods and approaches that are appropriate for HIA in Scotland.

From our experiences with the case studies, we believe that HIA has great potential to improve health through policies in many different sectors. It can form the basis of further discussion between different interests, and provide a firmer basis on which to make choices. We also found that HIA has wider benefits and is a useful way to work in partnership with other sectors. HIA is one component in the development of health sensitive planning. We hope that it will become a part of decision making in many sectors at all levels in Scotland.

We make the following suggestions for a way forward for HIA in Scotland.

How should HIA be part of planning and policy-making?

General principles

- HIA should be seen as one element in the range of partnership work to promote health and consider health in planning. It should not be separate from other joint planning activities, but be part of a palette of methods and approaches that can be used by those involved in this work.

- A formal HIA should be considered when there is uncertainty or concern about possible health risks, or possible opportunities to increase health gain, from a proposal.

- HIA should be integral to the planning process and be carried out at a stage when it is possible to make changes to the proposal.

- HIA should be jointly owned by health and other relevant partner(s). They should jointly decide when a formal HIA is needed, and it should be jointly commissioned. The final decisions and responsibility for implementing recommendations rest with policy makers or planning authorities.

- Where Environmental Impact Assessment is carried out, it should be integrated with Health Impact Assessment. Health input should be sought from the beginning and throughout the assessment to ensure coverage of health impacts. This should not be the only model for HIA and should not prevent HIA of policies that do not require EIA.

- Health impact assessment may also be carried out independently of formal planning mechanisms, as a way to present evidence for health advocacy.

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National level

- The Scottish Executive should develop mechanisms to consider health in national policy making, and to support this at other levels.

- Scottish Executive departments responsible for health and local government should jointly promote health impact assessment as part of routine policy making in local authorities and other public bodies.

- As outlined in *Towards a Healthier Scotland,* the Public Health Strategy Group will play a pivotal role to 'ensure the integration of policies and initiatives with health implications…and encourage the use of Health Impact Assessment'. This should include ensuring that health is considered in all national policies, identifying policies that should be subjected to HIA, supporting the use of HIA and its integration into national decision making.

- The Chief Medical Officer also plays a key role as chief health adviser to all government departments. The CMO is therefore placed to ensure the integrity of HIA and support its use as part of decision making processes.

- Possible mechanisms to consider health in national and local policy making include:

  - The development of a simple checklist to identify health relevant policies for use by policymakers in all sectors. This should be used routinely as part of the policy development process in all sectors. It would help identify areas where some public health advice or input might enhance opportunities for health gain, or where more formal HIA might be indicated.

  - A 'case-finding' procedure, similar to that used in the Netherlands, could be developed to identify health relevant policies. This would include criteria to identify and prioritise policies which should be subjected to HIA. Responsibility for case finding would lie within the Scottish Executive Health Department.

  - Cross departmental audit could be carried out to study whether health is considered appropriately in policy making.

  - The CMO Annual Report could highlight health implications of national policies in different sectors, including the findings of more formal HIA as appropriate.

  - Monitoring requirements for initiatives like Social Inclusion Partnerships, New Community Schools, New Deals could include outlines of their health implications and mechanisms to do and act on HIA where appropriate.

  - External auditors could study whether health is considered in policy making in a range of national and local organisations. This could use a model and methods similar to the Accounts Commission.

- The proposed HIA Network should be closely associated with the Public Health Institute and be integrated with other inter-sectoral work to promote health at national level. Possible areas of work for the network include:

  - Work with health and other government departments in the development of the checklists and criteria to identify health relevant policies.

- Be available to advise health and other government departments if a formal HIA of a national policy is being considered.

- Do, lead, or commission and appraise HIA of national policies.

- Keep a database of completed and current HIAs and share information and experiences of policy areas subjected to HIA and the methods used.

- Provide advice on methods and approaches to those carrying out HIA at all levels.

- Provide training for health professionals, policy makers and others in HIA.

- Develop quality standards for HIA.

- Link with and share international experience of HIA.

- Raise awareness of HIA and encourage its use as part of partnership work at all levels.

- Audit the use of HIA as part of partnership work at all levels.

- Develop screening criteria to help decide when HIA is needed at local level.

- Develop frameworks for topic areas or sectors to prevent duplication of work. The frameworks could include:
  - Literature review of evidence on health impacts of that sector/topic
  - National policy context
  - Key questions to ask of local policies: eg what the health relevant issues are; what the key contextual factors are that influence the health impact; how to identify if further HIA is needed at local level
  - Relevant secondary data sources that can be used for HIA in that topic area
  - Suitable indicators for monitoring

These frameworks would also help inform proactive development of health sensitive policies in a range of sectors.

- The Scottish Executive and CoSLA should endorse and encourage HIA as part of Community Planning.

- CoSLA public health officers and Best Value officers should work together to encourage the inclusion of health impacts in Best Value reviews.

Health Board/Local Authority level

- Local Authorities, as well as Health Boards, should have a formal duty to promote health.

- At local level, the responsibility for commissioning, funding and doing HIA should rest jointly between health boards and partner organisations.

- The Local Authority led Community Plan should highlight the health implications of key areas of work. This would raise awareness of health and health inequalities, and identify where more formal HIA could add value to decision making. No matter what approach is taken in community plans, HIA should be incorporated into their evaluation.

- Partners in the Community Planning process should demonstrate decision making structures that:
  - facilitate identification of health impacts,
  - allow formal HIA if required, and
  - show how the findings of these are taken into account.

- Best Value reviews of services and programmes should include their health impacts.

- Public Bodies should report on the health implications of their policies in their annual reports.

- Health Improvement Programmes should demonstrate commitment and resources for partnership work, including HIA.

- Health Improvement Programmes should show commitment to assessment of the broad impacts of health sector activities.

- Revitalised annual reports of the Director of Public Health could be pivotal to the work of health boards as public health organisations. The DPH annual report should include a description of the overall health implications of strategies being developed by partner organisations. This will help identify areas where HIA would be appropriate. The report should also report on current HIAs in progress and the findings of completed HIA.

What criteria should inform the selection of topics for HIA?

- Not all proposals can be subjected to formal HIA, due to constraints of time and resources. Screening is therefore required to prioritise topics for HIA.

- The decision on whether to do HIA will depend on individual circumstances. There are no *absolute* criteria to select policies or projects that require HIA. Policies in many sectors influence health and the extent of those health impacts are determined by a range of factors. Selection of topic areas for HIA means *prioritising* those where the most health gain may be achieved by a formal assessment of impacts.

- Impacts on national and local priority topics or groups should be considered when prioritising topics for HIA.

Other factors to consider in prioritising topics for HIA are:

Policy/Project Factors

- Scale of proposal and resources to be employed
- Degree of conflict
- Awareness of likely health impacts
- Potential for change to proposal

Resource Factors

- Time available
- Funding available
- Knowledge of Area/Community
- Knowledge of Topic
- Information sources/data available

How should HIA be done?

- There is no single 'blueprint' for HIA that will be appropriate for all circumstances. Different approaches and methods will be required in different situations.

- A range of skills and disciplines is needed to undertake HIA. The expertise required will vary in each case, but is likely to include both a public health perspective and the relevant sector.

- From our work we have developed a set of principles to help those undertaking HIA. Not all of these will be appropriate in all cases, but they highlight the key issues to consider. The principles are presented overleaf.

Key principles for Health Impact Assessment

The Health Impact Assessment process should:

- **Screen: Not all policies can be subjected to HIA, a screening process should be applied to select and prioritise the topics with important health impacts.**
- **Negotiate: The scope of the HIA and implementation of recommendations should be agreed with decision-makers.**
- **Share ownership: The HIA should be jointly owned by the decision-makers, the investigators, the affected community and other stakeholders.**
- **Be timely: The initial HIA should be carried out when the policy is clearly defined but it is still possible to influence decision-making.**
- **Define and analyse the policy: It is important to understand the policy being assessed, including its rationale, its objectives and evidence of the results of similar policies elsewhere. This includes consideration of the policy context.**
- **Define and profile the population: The population whose health is being considered should be defined and its health status, health problems and capacity should be profiled. This should include separate identification and profiling of relevant subgroups.**
- **Use an explicit model of health: The scope of the health impacts to be identified, and the nature of causality assumed should be clear. This requires a framework to define health impacts, health determinants, and influences on health and health determinants.**
- **Be aware of underlying values: HIA is as much art as science. Judgements must be made in prioritising potential impacts, estimating risks and benefits and making recommendations. This is necessarily value laden. Investigators should be explicit about the values or political position from which HIA is undertaken.**
- **Be systematic: The HIA should be carried out in a systematic way, using a comprehensive framework to identify all relevant impacts and a transparent, credible approach.**
- **Think broadly: All relevant impacts should be identified and considered, including indirect and long-term impacts.**
- **Use appropriate evidence: Both quantitative and qualitative methods may be used in an HIA and the method mix will vary with circumstances. The evidence and methods gathered should be appropriate to the impacts identified and the importance and scope of the policy.**
- **Involve the community: They have unique insights into how the proposal might affect their lives, their community, and their health-related behaviour.**
- **Take into account local factors: HIA combines evidence from elsewhere with consideration of local differences that might influence how and by whom the impacts are borne locally.**
- **Recognise difference: Communities are not homogenous. Different impacts are borne by different sectors of the community and HIA should make these explicit.**
- **Monitor impacts prospectively: Having carried out an initial prospective HIA, there should be a procedure for continuous monitoring of resultant impacts, to identify any unexpected impacts and inform future prospective HIA of similar policies.**
- **Make practical recommendations: Recommendations should seek to mitigate adverse and enhance beneficial impacts, be practical to implement and should aid the most effective use of limited budgets.**

(Note: 'policies' is used here to mean policies, programmes or projects)

1. INTRODUCTION

The Scottish Executive has identified Health Impact Assessment (HIA) as an 'essential step' towards placing health at the centre of the decision making process at both national and local levels. It is further seen as having the potential to assist in reducing health inequalities, with the Acheson Report[1] recommending that 'as part of health impact assessment, all policies likely to have a direct or indirect effect on health should be formulated in such a way that by favouring the less well off they will, wherever possible, reduce such inequalities'.

Whilst the White Paper *Towards a Healthier Scotland* [2] recommended wide use of HIA, it was not specified how it should be done and incorporated into the planning process, or how the recommendations of any assessment could be implemented.

The Scottish Needs Assessment Programme (SNAP) is a Scotland-wide network with well developed links with both the service and academic side of medical and non-medical Public Health, and as such is ideally placed to examine the issues and deliver on the HIA agenda. SNAP has thus been commissioned by the Scottish Executive to pilot the HIA process within Scottish settings.

This paper accompanies the reports of the two Scottish Executive funded pilot HIAs that have been carried out in Scotland, and should be read together with them. It:

- outlines the background to Health Impact Assessment;
- describes the process of investigation undertaken by SNAP;
- compares two case studies conducted within Scotland;
- discusses the lessons learnt from the experience of implementing HIA;
- makes suggestions for the way forward for HIA in Scotland.

This report is not a blueprint for HIA. It is a discursive piece of work that discusses the pilot assessments and the lessons that have been learned from conducting them, and reports the substantial discussions that have taken place throughout this work. This report and the reports of the two case studies are intended for a wide audience. They will be of interest to the Scottish Executive, Local Government and Health Boards, as well as anyone who has an interest in assessing the health impacts of their policies and projects. It is intended that the various community groups, organisations and individuals who were involved in the case studies will also be able to use these reports in their local areas.

2. BACKGROUND TO HEALTH IMPACT ASSESSMENT

'Health Impact Assessment (HIA) is a method of evaluating the likely effects of policies, initiatives and activities on health at a population level and helping to develop recommendations to maximise health gain and minimise health risks. It offers a framework within which to consider, and influence, the broad determinants of health'.
The Scottish Executive, 1999[2]

'Health Impact Assessment is the estimation of the effects of a specified action on the health of a defined population.'
Alex Scott-Samuel, 1998[3]

Health Impact Assessment (HIA) is viewed in Scotland as a new and evolving concept. As indicated by the above definitions, it should be used to determine the extent of both beneficial and adverse effects of policies, initiatives and services, considering also the differential impact that may be felt by different groups of the population. It is a way to enable more effective decision-making for improving health in the general population and can potentially contribute to addressing inequalities in health. HIA can be used at local community, city-wide, regional, national and international levels.

Rationale for HIA

Improvements in the health of the population cannot be achieved by health services alone. Health is influenced by activities in many other sectors. Policies, programmes and projects* of almost all public and private sectors have an impact on health. This may be positive or negative, great or small. Often the impacts on health are caused through intermediate determinants of health. There is a long history of public health endeavours to study and influence the effects of the physical environment on health. We are now increasingly aware of the importance of the psycho-social environment, and of the wide range of health determinants. Health impact assessment is one way to influence the environment in order to improve health, by working in partnership with other sectors.

At the declaratory level, there is high level support for HIA. The Scottish Executive has recommended that HIA should be done. The 1999 white paper *'Towards a Healthier Scotland'* expressed a commitment towards health impact assessment in the statement 'Given the Government's determination to place health at the centre of planning and decision making at national and local level, HIA is seen as an essential step when formulating policy at both levels.[2]'

There is also international recognition of the need for HIA. At European Union level there is increasing recognition that activities and policies in many sectors influence health. A constitutional requirement to give due regard to health implications is stated in Article 152 of the Amsterdam Treaty:

'A high level of human health protection shall be ensured in the definition and implementation of all community policies and activities'.

European Union Treaty of Amsterdam, 1997[4]

* From now on, the word 'policy' is used to cover policies as well as projects and programmes

The WHO Regional Office for Europe, in its strategy Health 21, calls for all member states to implement HIA in its target 14.2:

> ***By 2020,***
> ***'Member States should have established mechanisms for health impact assessment and ensured that all sectors become accountable for the effects of their policies and actions on health'***
>
> ***WHO Regional Office for Europe 1998***

The Roots of HIA

There are a number of roots from which the concept of HIA has been derived. These include impact assessment, policy appraisal and healthy public policy.

Healthy Public Policy

In 1994 the World Health Organisation in its strategy Health For All, set a target that 'By the year 2000, all Member States should have developed, and be implementing, intersectoral policies for the promotion of healthy lifestyles, with systems ensuring public participation in policy-making and implementation.' This target had the heading Healthy Public Policy. It recognised that to improve health we must work with other sectors. The idea behind this term, according to Health Canada, is that 'all public policies, regardless of their intended audience, should be examined for their impact on health'. WHO Europe in its strategy Health 21 recognises the need to work in an integrated way with other sectors:

> ***'The policies that are the most successful in sustaining and improving the health of the population are those which deal with economic growth, human development and health in an integrated way'.***
>
> ***World Health Organisation Regional Office for Europe, 1999***

Healthy public policy is widely accepted as an ideal, but there have been relatively few practical methods to help implement it.

Policy analysis and evaluation

Policy analysis and evaluation is an integral part of the policymaking process. It includes weighing up the costs and benefits of policies, at the stage of policy formulation. It also includes monitoring whether or not policies are meeting their objectives. It encompasses evaluation of both process and outcome and a range of different methods and approaches. For example, economic tools can be used to define the costs and benefits so they can be directly compared. It focuses on the defined, *intended* objectives of a policy.

Impact assessment

Impact assessment explores the *unintended* consequences of a policy, programme or project. There are many forms of impact assessment. Perhaps the most relevant are Environmental Impact Assessment (EIA) which is an assessment of the potential for impacts on the physical environment, and Social Impact Assessment (SIA) which is an assessment of the potential for social impacts.

EIA is the most established form of impact assessment. It aims primarily to reduce the negative environmental impacts of specific developments and has been required by law in the UK since 1988

following the implementation of an EU Council Directive. EIAs are viewed as exercises undertaken by technical experts largely drawing on quantitative data.

The process of developing a HIA can be similar to that of an EIA (see Appendix I) but there are some important differences between the two. Firstly, HIA is concerned with the impact of the environment on people whereas EIA is concerned with the impact of people on the environment. There are some health elements within EIA, but these tend to focus on health hazards such as pollution and communicable diseases, which does not allow for the assessment of health in its broadest sense.

Secondly, EIA predominantly seeks to reduce negative environmental impacts of specific developments or projects. HIA seeks to identify and maximise health gain as well as assess the negative health consequences, and includes broader policies and plans. Recently, EIA of broader policies is being attempted, and is called Strategic Environmental Assessments (SEA) but this still tends to focus on mitigation of negative impacts.

Thirdly, EIA is mandatory and there is specific guidance on how and when it should be done. There is no statutory requirement to undertake HIA. It is now being recommended but it is not yet clear where the responsibility for identifying policies or project that require HIA and carrying them out should lie. Nor is it clear to what extent the findings and recommendations can or will be acted upon.

Lastly, and perhaps more significantly is the emerging ethos of HIA and the nature of the evidence that is likely to be brought to bear. EIA assesses biophysical impacts that are more amenable to 'expert' identification and quantification. With HIA, on the other hand, it is the affected communities who can be deemed to be 'expert' as they have the unique insight into how a proposed change is likely to affect their lives, behaviour and social environment.

What model of health should HIA use?

Before assessing impacts on health, we must clearly define what we mean by health. The model of health used has implications for the type of information to be collected and for the indicators that will ultimately be employed. If health is defined merely as the absence of disease, this could result in an assessment which is very tight methodologically and based on 'hard' biomedical evidence. This approach could, however, prove to be rather limiting. If the overarching aim of public policy is to improve the health and wellbeing of the population, then an appropriate model of health, which reflects this aim, should be used when the health impacts of policies are being assessed. We would argue that when conducting a health impact assessment it is therefore necessary define health in its broadest sense, and to consider the impact of policies on the broader determinants of health.

The Socio-ecological Model of Health

'Health is a state of complete physical, mental and social well-being and not merely the absence of absence of disease or infirmity.'

World Health Organisation, 1948[5]

'Health is a resource for everyday life, not the object of living. It is a positive concept emphasising social and personal resources as well as physical capabilities.'

World Health Organisation, 1986[6]

The World Health Organisation's Global Strategy *Health For All in the 21st Century* (1998) identifies the improvement of the health and well-being of people as the ultimate aim of social and economic development. The socio-ecological model of health is inclusive and participatory. It recognises that health and well-being are determined by a whole system of complex interactions. These include genetic inheritance, the physical circumstances in which people grow up and then live (housing, air quality, working environment, etc), the social environment (education, levels of friendship support and trust, etc), personal behaviour (smoking, drinking, diet, exercise) and, crucially, access to, or lack of, money and other resources that give us control over our lives. It is now well understood that these determinants of health operate over the whole life span.

> ***'The prerequisites for health are peace, shelter, education, social security, social relations, food, income, the empowerment of women, a stable eco-system, sustainable resource use, social justice, respect for human rights, and equity. Above all, poverty is the greatest threat to health.'***
>
> ***World Health Organisation, 1997[7]***

The complex and interactive nature of the determinants of health points to a need for an equally diverse range of agencies and organisations to consider health when making policy decisions. As HIA is concerned with assessing the health impact of policies and projects which go beyond the health sector, and addressing the issue of health inequalities, the socio-ecological model of health provides a very appropriate foundation for this work. *Towards a Healthier Scotland*[2], with its emphasis on life circumstances and lifestyles, demonstrates that this model of health is in line with current government thinking.

International experience of HIA

Methods and procedures for HIA have been developed in several other countries. In Canada, there are attempts to integrate HIA into EIA. A task force was set up in 1992 to provide guidance on including health as part of EIA, but Provinces vary in how this is practised. Quebec has been relatively successful with EIA being under the responsibility of the Ministry of the Environment. This Ministry instructs the project proponent to produce an environmental impact statement (EIS). The relevant regional public health department contributes public health sections to the instructions for this EIS and appraises the health aspects of the statement.

Other countries that have linked HIA to EIA include Australia and Germany. This may give a clear mandate for assessment, but there are dangers in this approach. It may: limit HIA to projects with implications for the physical environment; limit impacts identified to those that are bio-physical determinants; and focus on mitigating adverse impacts, not enhancing positive impacts.

The Netherlands has made progress both in developing methods and in integrating HIA into government policy making. The Ministry of Health finances a department of the Netherlands School of Public Health to help identify policies that should have HIA and to carry out or commission the work. They screen all documents produced by the Dutch House of Parliament, the annual national budget proposals and reports of advisory committees to identify those that are health relevant. If needed, they commission further HIA from a research institute and to date 15 HIAs have been commissioned, examples of which are listed below. Findings are submitted to the Ministry of Health, who is responsible for negotiating and implementing the recommendations.

Examples of government policies submitted to HIA in the Netherlands

Energy Tax Regulation (Ecotax)
High Speed Railway
Tobacco Policy
Alcohol & Catering Act
Reduction of the Dental Care Package
National Budget
Election Programmes Political Parties
Housing Forecast 2030
Interdepartmental Commission for Economic Structural Reinforcement
Identification of policy areas influencing determinants of five major health problems

In Sweden an assessment of some impacts of the EU Common Agricultural Policy was undertaken in 1996. This was commissioned by the Ministry of Health and carried out by the Swedish National Institute of Public Health. A contrasting approach has been the development of a tool to help Swedish county councillors to make an assessment of their own policies and identify when to seek expert advice.

The WHO European Centre for Health Policy is working to bring together these experiences and try to reach a degree of consensus on how HIA can best be used to improve health policy development. It has already published a consensus paper that presents a common understanding of HIA[8].

Experience of HIA in the UK

An early HIA was done in Manchester, when the Manchester and Stockport Health Commissions submitted a report of a HIA to the public inquiry into the proposed second runway at Manchester Airport. This report proved to have a substantial part to play in planning stage, and the recommendations were largely accepted by the airport planners[9; 10].

There has been a considerable amount of work done on HIA in Liverpool, by the Liverpool Public Health Observatory. They have performed a number of HIAs[11-14], and have produced the influential Merseyside Guidelines for Health Impact Assessment[15]. They have also held conferences and training courses on HIA.

Pilot HIAs in Mersey

Community Safety Projects[12]
Drug Prevention Initiative[11]
International Astronomy and Space Exploration Centre[13]
Integrated Transport Strategy[14]

The English Department of Health has a HIA interest group and in 1998 held a seminar on methods for HIA. The Welsh National Assembly has published a document on developing HIA[16] and some pilot HIAs are being done in Wales.

In Scotland, use of HIA was proposed in the 1998 green paper 'Working Together for a Healthier Scotland'[17] as a means to facilitate the consideration of health in 'policy formulation across the spectrum of Scottish Office responsibilities'. The 1999 white paper 'Towards a Healthier Scotland'[2]

expressed a commitment towards health impact assessment: 'Given the Government's determination to place health at the centre of planning and decision making at national and local level, HIA is seen as an essential step when formulating policy at both levels.'

Scottish Executive thinking on HIA is further developed in the Review of the Public Health Function, which proposes a national HIA Network. This is likely to be linked to the new Scottish Public Health Institute.

The Medical Research Council's Social and Public Health Sciences Unit at Glasgow University is currently undertaking a systematic literature review to identify existing health impact assessments as well as papers concerning methodology issues surrounding HIA.

All this activity reflects a great deal of interest in HIA, but there is still uncertainty about the appropriate methods and approach to use in Scotland. There is also debate about its role in the planning process. The SNAP pilots were an attempt to explore some of these issues by carrying out HIA in practice.

3. THE PROCESS

This section describes the process undertaken by SNAP to undertake a practical application of HIA and to consider the lessons of this application for the future development of HIA.

In October 1998, SNAP hosted a seminar to discuss HIA and bring together people with an interest in the subject. Discussions at the seminar led to the establishment of two groups to consider the development of HIA for two key policy areas with major implications for health – urban regeneration and transport. A research assistant was appointed by SNAP to support the work of these two groups.

The two groups worked in different ways. The Transport Group carried out a HIA, whereas the Urban Regeneration Group acted as a forum to discuss and learn from HIAs carried out by individual members of the group.

The Transport Group

The transport group was a mixture of health professionals and individuals with a knowledge of and interest in transport issues. The group performed a health impact assessment of the City of Edinburgh Council's urban transport policy. A subgroup performed the day to day work of the assessment, with the main group meeting twice to discuss the issues and prioritise the health impacts.

The rationale behind the work of the Transport Group was to link with the development the Local Transport Strategy of the City of Edinburgh Council. It was regarded mainly as a scoping exercise to test the approach and methods while generating practical recommendations to use in the development of the strategy. The HIA is reported in full in an accompanying report.

The Urban Regeneration Partnerships Group

The urban regeneration group initially attracted a range of people from national and local statutory and voluntary organisations including: health boards; health partnerships; local authorities; local regeneration partnerships; Scottish Executive and national policy analysis organisations.

Policies and projects within urban regeneration implicitly have the potential to promote health, but this is not always recognised. There is often an assumption that health gain is an automatic by-product of making changes to health determinants (e.g. housing) and that no further thought is required as to whether different types of intervention will have a different health impact, or impact differentially on different population subgroups. Even where there is recognition of the potential to promote health, many of the 'non health policies' within urban regeneration are economically driven and fail to achieve an integrated health perspective or assessment of impact within their development. This was confirmed by an analysis of the minutes of one urban regeneration partnership over one year. The minutes showed that the role of health was largely confined to health service issues or a narrow perspective of healthy lifestyles. There is often an assumption that health gain is an automatic by-product of making changes to health determinants (e.g. housing) and that no further thought is required as to whether different types of intervention will have a different health impact.

3. THE PROCESS

This section describes the process undertaken by SNAP to undertake a practical application of HIA and to consider the lessons of this application for the future development of HIA.

In October 1998, SNAP hosted a seminar to discuss HIA and bring together people with an interest in the subject. Discussions at the seminar led to the establishment of two groups to consider the development of HIA for two key policy areas with major implications for health – urban regeneration and transport. A research assistant was appointed by SNAP to support the work of these two groups.

The two groups worked in different ways. The Transport Group carried out a HIA, whereas the Urban Regeneration Group acted as a forum to discuss and learn from HIAs carried out by individual members of the group.

The Transport Group

The transport group was a mixture of health professionals and individuals with a knowledge of and interest in transport issues. The group performed a health impact assessment of the City of Edinburgh Council's urban transport policy. A subgroup performed the day to day work of the assessment, with the main group meeting twice to discuss the issues and prioritise the health impacts.

The rationale behind the work of the Transport Group was to link with the development the Local Transport Strategy of the City of Edinburgh Council. It was regarded mainly as a scoping exercise to test the approach and methods while generating practical recommendations to use in the development of the strategy. The HIA is reported in full in an accompanying report.

The Urban Regeneration Partnerships Group

The urban regeneration group initially attracted a range of people from national and local statutory and voluntary organisations including: health boards; health partnerships; local authorities; local regeneration partnerships; Scottish Executive and national policy analysis organisations.

Policies and projects within urban regeneration implicitly have the potential to promote health, but this is not always recognised. There is often an assumption that health gain is an automatic by-product of making changes to health determinants (e.g. housing) and that no further thought is required as to whether different types of intervention will have a different health impact, or impact differentially on different population subgroups. Even where there is recognition of the potential to promote health, many of the 'non health policies' within urban regeneration are economically driven and fail to achieve an integrated health perspective or assessment of impact within their development. This was confirmed by an analysis of the minutes of one urban regeneration partnership over one year. The minutes showed that the role of health was largely confined to health service issues or a narrow perspective of healthy lifestyles. There is often an assumption that health gain is an automatic by-product of making changes to health determinants (e.g. housing) and that no further thought is required as to whether different types of intervention will have a different health impact.

The group considered that HIA was an opportunity to raise the health promoting potential of these broad regeneration policies and also to integrate a consideration of social regeneration into this type of policy making. This perspective is in line with work undertaken elsewhere in the UK[9; 11; 12; 14].

The group agreed a case study methodology to demonstrate the practical application of HIA on these policies. The urban regeneration group was unable to conduct its own HIA because of the diverse nature of its membership. Individual members within the group agreed to carry out HIAs, together with the relevant regeneration partnership boards, in two localities. The research assistant supported the case studies. The case study groups reported back to the Urban Regeneration Partnerships group, which critically appraised methodology and outcomes, and acted as a sounding board for ideas. In addition the group devised a 'table top' exercise to test the potential for an expert led technical approach for this type of policy. This inter-linked process provided a mechanism for the discussions by the Group to continually reflect upon the principles and philosophy underlying both general health sensitive policy making and urban regeneration policy and their integration into HIA methodology, particularly the notions of partnership and community participation.

The 'tabletop' exercise

The Urban Regeneration Group itself also attempted a 'non-consultative' assessment in the form of a table-top exercise looking at the health impact of the shopping centre in Castlemilk. The group used a matrix of health determinants and agreed population groups to brainstorm possible impacts. Several impacts were identified and the exercise raised a number of methodological issues. The group concluded that tabletop exercises can identify some of the issues to be addressed in a HIA, but can not take the place of the whole assessment

The case studies

The two case studies were a HIA of the North Edinburgh Area Renewal (NEAR) Housing Strategy, and a HIA of Castlemilk Partnership. The NEAR HIA is reported in full in an accompanying report. Unfortunately, the Castlemilk HIA was postponed and has not been completed, but progress is reported below.

HIA of the Castlemilk Partnership

The initial proposal to carry out a HIA in Castlemilk was not agreed by the stakeholders because HIA was a new concept, there was confusion over the role of SNAP and the Partnership was undergoing transition. A seminar has been held that agreed the priority elements of the partnership and population groups to be studied in the HIA. A steering group has been set up to oversee the HIA, which has now begun and will be progressed through the following approach:

- Analysis of health, social, economic and environment data
- Analysis of key documents from CP and other key agencies
- Focus groups with local stakeholders (residents and workers)

The HIA report will include an assessment of key health impacts for the period 1988-98, but will also look at proposals for improving the health impact of the newly established Castlemilk Partnership over the next phase of its development.

The following lessons have already been learnt from this experience:

Timing: The timing of an HIA is critical. The proposal to undertake the HIA occurred at a time of staff turnover and uncertainty about future commitments and structures, which meant it was not agreed.

Approval, Commitment And Participation: The manner in which both formal approval of a proposal to do HIA and the commitment and participation of key stakeholders will be most effectively secured needs careful consideration. Some key interest groups did not participate in the seminar, notably those with an economic development, employment and training remit. They have had little involvement in health matters and may not readily see the relevance of HIA to their area or the contribution they may be able to make. Extra effort may be required to encourage key stakeholders in this sector to participate in HIA.

Data And Qualitative Information: The way in which information is collected, analysed and presented and valued is important to local confidence and the success of the HIA. It is already clear that local residents are doubtful about the accuracy of some official data and evaluation reports, and are concerned that their views had not been sought or were not represented. Every effort should be made to reassure community interests that their views would be taken into account.

Full details of the two completed HIAs, of the NEAR housing policy and the City of Edinburgh Council Transport Strategy, are given in the accompanying reports. These include the methods, findings, conclusions and lessons learnt for each HIA.

4. DISCUSSION OF CASE STUDIES AND LESSONS LEARNT

This section compares the completed case studies and draws general lessons to help those commissioning or doing HIA in future. It draws on the discussions held by the Urban Regeneration Group as well as the experiences of the health impact assessment pilots. Table One summarises the key features of the two completed health impact assessments.

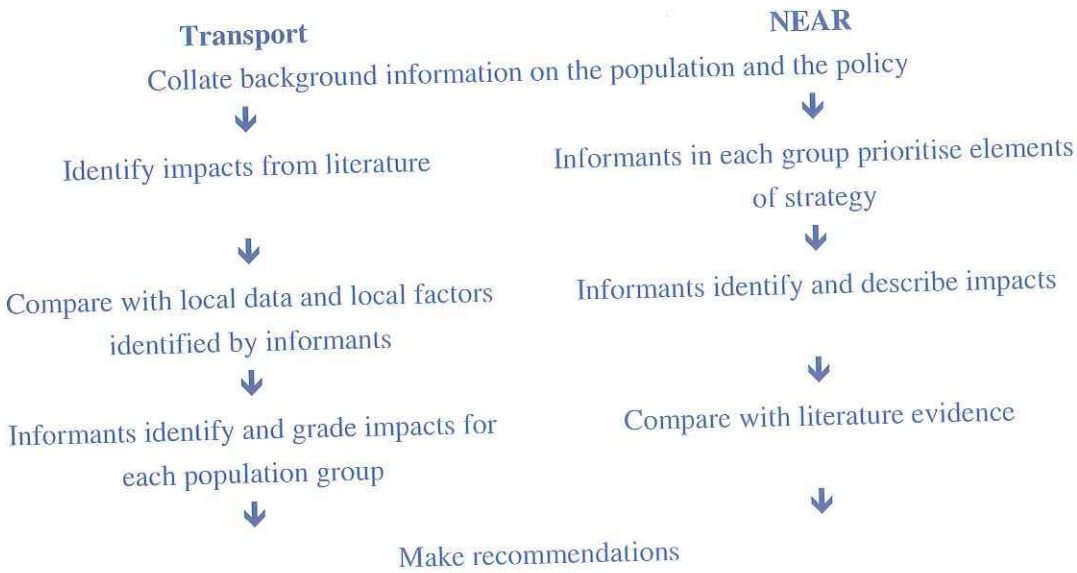
Table One: Comparisons of completed case studies

	Transport	*NEAR*
Topic	City transport policy	Local housing strategy
Time perspective	Prospective	Retrospective
Scope of policy	City wide	More circumscribed community
Overlaps	Clear overlaps with other policies	Overlaps not discussed but part of broader urban regeneration project
Procedure used to identify and describe impacts	Identified key impacts from literature Used local data to explore their local relevance Used informants to consider differences in impacts by population groups	Identified priority strategy elements and health impacts from informants Supported these findings with literature evidence
Methods	Literature, local data, 'expert' informants	Focus group discussion, interviews and literature
Kind of evidence	Mainly qualitative data used, some quantitative data available	Mostly qualitative data used
Participation	Less community participation, used key informants with expert knowledge	Involved existing community groups and stakeholders
Differences between groups identified	Identified differences in impacts borne by population groups	Identified differences in elements prioritised by population groups
Group membership	CEC transport; Napier University transport; Lothian Health public health; HEBS; LHC; SNAP	CEC housing and corporate services; Lothian Health public health and health promotion; Scottish Homes; Pilton Partnership; NEAR; SNAP
Implementation of recommendations	Used in policy development process	Used to plan future changes to strategy
Reported to	Council planners	Steering group
Resources used	Time of group members	Time of group members and cost of focus group discussion (FGD) facilitator

Approach

HIA should be carried out in a transparent manner that is credible to all stakeholders, with a clear, systematic approach being used. The methods employed by the groups are discussed below, but the overall processes also differed. The two approaches are summarised in Figure One overleaf.

Figure One: Approaches to HIA used



These approaches have different limitations. Firstly, the groups differed in the stage at which they defined the health impacts. As discussed below, the transport HIA may have missed some impacts because they were defined at the outset from the literature alone. Secondly, they differ in they way they make comparisons between groups. The transport group explicitly graded each impact for each population group. The NEAR group more directly sought the views of different community groups. The groups prioritised the *housing elements* of the strategy before they identified the health impacts and a comparison of the priority elements identified by each group is given. This represents each group's housing preferences, but the priority they place on the actual health impacts can only be surmised from these and from the qualitative descriptions.

Both groups found that it was difficult to separate the different stages of the work. An understanding of the population is needed to analyse the policy, but an understanding of the policy is needed to study relevant features of the population. It is particularly difficult to separate the identification of health impact from further analysis of these impacts. In the NEAR study, the FGDs were used for both: to identify and gain a qualitative understanding of the impacts. In the transport study, impacts emerged as the work progressed and needed to be added to the matrix. In other words, ***health impact assessment is an iterative process***. It is possible to describe the stages of HIA but after each stage of the work it may be necessary to re-visit earlier stages.

Defining the policy and local context

It is self-evident that a good understanding of the policy or project is needed to assess its likely health impact, but the information needed is more than a simple description of the proposals. It is important to understand the rationale for the proposal, relevant trends and projected trends, and the results of similar policies or projects elsewhere. This means that knowledge and expertise from outside the health sector is essential.

We also found that the local context can alter the health impacts. For example, the existence of disadvantaged estates on the outskirts of Edinburgh and local tourism industry have important implications for impacts of the CEC transport strategy.

The case studies encountered issues beyond the scope of the original policy to be assessed. For example, the transport group found it difficult to look at transport in isolation, without considering land use and economic policies. The NEAR group assessed only the housing element of the urban regeneration strategy, but clearly other elements of the strategy both impact on and are impacted by the housing elements, causing wider health impacts. It is obviously necessary to define as tightly as possible the subject of the HIA, but other wider policies need to be understood as context. The recommendations may also be directed at wider policies and other sectors.

The scope of health impacts

We adopted a broad model of health when identifying health impacts. We included impacts on well-being and on health determinants, as well as impacts on mortality and morbidity. This demands an understanding beyond the disease focus of traditional epidemiology.

We discussed how far to cast the net in trying to identify health impacts. Some of the impacts were not immediately obvious. We had to think broadly to identify the relevant issues. The timescale over which to predict impacts in prospective HIA also has to be decided. Some important impacts only arise in the long term, but it is possible to predict impacts with greater certainty over a shorter timescale. There is a similar debate over how direct an association between the policy and the impacts should be recognised.

It is important to have flexibility to study impacts that emerge as the work progresses. In the transport HIA, the main health impacts were identified at the outset from the literature. This made it more difficult to consider fully other impacts that were identified by informants later on. For example mental health impacts were included under the heading 'community networks' but arguably would have been explored in more depth as a separate heading. The NEAR HIA used informants to identify the impacts and then compared this with the literature, so it is less likely that important local impacts were missed.

We identified more positive impacts than negative impacts. We discussed whether it would be more effective to concentrate on policies that might be health damaging, where HIA might help prevent the damage. But, equally, HIA is a way to find opportunities to maximise health gain. In fact we recognised that a 'zero' impact could still represent a missed opportunity for health gain. We hope that HIA will develop as a positive way to work with other sectors to define and promote healthy public policy, not just as reactive assessment of policies that are already defined.

Methods and evidence

In our case studies, we collated evidence from a range of sources to identify and describe health impacts. These included published literature, routinely available data, interviews with key informants, focus group discussions with community members, and group meetings. We found that a mix of methods gave a picture of the health impacts and produced different kinds of evidence. The methods used will depend on the scope of the policy and what information is available. They should be as robust as possible while being practical and giving timely conclusions.

Neither group used a checklist or tool to identify the impacts, although the NEAR group used the Liverpool framework in the pilot stage and when planning the focus groups. A comprehensive checklist of the determinants of health would be perhaps either rather general or quite long. But it would make the scope of the health impacts considered more explicit. Both groups used matrices to

present the impacts identified. Matrices can also be used as a tool to make explicit the scope of health impacts considered and as a framework for policy analysis.

It is most important to collect the kind of information that is needed to inform policy development. HIA is primarily a practical way to use existing knowledge, rather than a way to generate new knowledge. Sometimes it will be appropriate to do further research, for example to quantify impacts, but it is important that impacts are not given undue priority because they are amenable to quantification.

We found that qualitative and quantitative data are complementary, giving different perspectives on the same overall picture. Many impacts are best explored using qualitative methods. In the NEAR HIA the qualitative data gathered in the FGDs gave insights into the strength of feeling people had for each insight, and the priority placed on them. For example, it was more important for people to feel safe inside their homes than in the street. They also demonstrated that some impacts were dependent on other factors. For example, money saved from cost-efficient heating could only be spent on 'healthy' foods if there were also better shopping facilities. Both qualitative and quantitative methods are valid ways to describe the impacts.

Involving a range of stakeholders in HIA allows assessment of impacts from a number of perspectives. We discussed how to weight different perspectives and different kinds of evidence, in particular the weight that should be given to community perceptions against 'hard' quantitative data. It is important that the availability of 'hard' evidence does not become the main influence on prioritisation. Lack of evidence is not the same as evidence for no health impact. Some areas of impact that are well recognised by communities but are less well researched. This is why affected communities should be involved in identifying and prioritising impacts.

We discussed how much of the HIA could be done solely from a literature review, then applied to several similar policies or projects in different places. We found that in practice we needed to understand the local circumstances and the specific local policy to assess the impacts. The literature review may identify some key issues to include in a HIA of a policy area. These key issues could be used as a starting point for HIA of similar policies or projects in several localities. But this would not preclude the need to consider the local context and the views of local people in each assessment. Perhaps a parallel can be drawn with Evidence Based Medicine, which is defined as 'the conscientious, explicit, and judicious use of current best evidence in making decisions about the care of individual patients'. HIA is the use of the best available evidence to assess the likely effect of a specific policy in a specific situation. In both cases, the evidence must be weighed for its local relevance as well as its robustness.

Participation

The groups recognised the need for participation of stakeholders, especially affected communities, in doing the HIA. Participation of affected people is needed because of their unique insight into how the proposal might affect their community, their well-being and their health-related behaviour. It is also important to study the value that affected people place on different health impacts. Participation of affected people might be one way to ensure that priorities are not unduly skewed by the availability of 'hard' quantitative evidence. Affected communities may also be able to suggest changes that will maximise the health benefit. This suggests that participation might be needed at different stages of the HIA, to identify and describe impacts and to make recommendations.

It is difficult to engage meaningfully with affected communities. The transport HIA did not gain participation other than input from selected key informants, whose perspective was undoubtedly

different from that of the public. The CEC is now engaged in a wide consultation exercise, inviting contributions from any interested Edinburgh residents. Some responses may reflect health concerns but we are more likely to gain insight into specific health concerns if we ask for them directly. The NEAR HIA involved people who were members of existing groups, using focus group discussions. The existing infrastructure in the NEAR project made this possible. But there was no community input into the recommendations made and the groups may not have been representative of the whole community.

These problems with participation are not restricted to health impact assessment, and the mechanisms used will not be unique to HIA. Often a range of different methods might be used to gather community views. Mechanisms could include FGDs, citizens panels, opinion polls, inviting views from NGOs and existing groups in the community.

Inequalities

We believe that HIA has a role in reducing health inequalities. In our case studies, we identified different health impacts affecting different population groups. For example, in the transport case study, deprived populations were most disadvantaged by policies favouring car use. In the housing study, different groups prioritised different elements of the strategy. It is important that these differences are recognised as they have implications for the recommendations of the HIA.

We discussed how to weight the priorities of different groups. In the NEAR HIA, the priorities of each group were simply combined but we also thought it important to present the priorities of each group. Applying a 'bottom line' value to the combined health impacts borne by all groups would hide the differences between them. We would advocate against this. For HIA to help tackle inequalities, it is essential that the different impacts borne by different groups are made explicit. Then the recommendations can seek to reduce any health inequalities that might result as a result of the proposed policy or project.

Making recommendations

The main aim of HIA is to make the health impacts explicit. If this is to lead to change to improve health, it is obviously crucial to make recommendations to prevent any adverse impacts and enhance positive health impacts. It is most important for the recommendations to be closely connected to the health impacts identified. An understanding of what is possible is needed as well as an understanding of the health impacts. This means that input from the relevant sector is essential. Many of the changes recommended will be at the margin but may still achieve important improvements in health.

We did not cost or prioritise the recommendations. We recognise that it is useful to present the recommendations as options, but perhaps the relevant policy developer should carry out any further work to develop them, including costings.

As these were primarily pilots of the methods and approaches, we did not present the findings in different formats for different audiences. We would recommend that this be done in future.

Having made recommendations, their implementation and the future impacts on the health of the population should be monitored. It is not clear who should be responsible for this, but it is likely to vary with individual circumstances.

Project management and review

The two completed HIAs adopted different procedures to manage the work. The NEAR HIA used the Merseyside guidelines[15], with a steering group to project manage the process and agree recommendations, and a working group to carry out the work. The transport HIA had a less formal project management structure, being led mainly by one member of the group with input from others at key stages of the work. The NEAR group made recommendations to the steering group, the Transport group made recommendations to the developers of the CEC transport policy, the NHS and the transport industry. There are obvious advantages to having an agreed project management arrangement, and a steering group can be a way to involve stakeholders and gain ownership of the results. It is important to have a mechanism to feed the results in to policy development and the appropriate way to do this will depend on local circumstances.

Neither of the groups seemed to have defined terms of reference or clear objectives for the work. This may reflect their status as pilots, developing methods and approach as the work progressed, but it makes it difficult to evaluate whether they were successful or not. We suggest that clear aims and objectives are defined for future HIAs. Quality criteria should also be defined so that HIAs can be evaluated.

Resources and skills

The main resource used in the case studies was the time of those involved. A research assistant was employed to support all the case studies. The NEAR HIA cost an estimated £10,000. This includes the cost of employing a facilitator for the focus group discussions and the time of those involved. The transport HIA cost an estimated £13,000. In this case no outside researchers were employed, the costs are solely the time of those involved.

The case studies took longer than planned. Much of the delay was in writing up the reports, and this partly reflects the need to write two reports for each: a 'real' report and a summary with lessons learned. The NEAR HIA took six months to do and five months to write up, the transport HIA was done in 8 months and took a further eight months to write up the report. It is clear that HIA needs time and cannot just be added to existing workloads.

A range of skills was needed to carry out the HIAs. Critical appraisal, quantitative data analysis, qualitative research, community development, and negotiation skills were employed. Individuals with public health and health promotion backgrounds led the case studies. The expertise of professionals from the relevant sectors was crucial, to help us to understand the policies being assessed, their likely or actual consequences and what practical constraints there were to the recommendations. HIA needs a range of perspectives and skills depending on the topic. In other circumstances it might be led by the policy developer, drawing on public health professionals as 'experts' to study identified impacts. There is a need to build the capacity of professionals in health and other sectors to do HIA.

Integrating into policy development process

The case studies reported benefits from building on structures already in place. For example, the NEAR HIA benefited from the SIP infrastructure and the tradition of inter-agency working and community participation in the area.

It is only by feeling a sense of ownership that the agencies involved will be motivated to ensure that the recommendations are implemented. The initial problems experienced in Castlemilk demonstrate the difficulties that are encountered when commitment to the process has not been gained. HIA should ideally be commissioned by those who hold the power and responsibility to make changes. Careful negotiations have to be carried out before embarking on HIA to ensure that all the relevant agencies are committed to the process. Input from the policy developer is also needed to understand the policy and what the possibilities are for change.

There is a tension between the need to involve the policy developers fully in the HIA and the perceived need for the HIA to be 'independent' and unbiased. The proponent has a vested interest and may bias the results. This means that it is important to seek other views in any HIA. HIA may also be commissioned by affected communities or outside organisations as part of health advocacy.

Selecting topics for HIA

Not every policy or project can be subjected to HIA. There will be a need to prioritise topics for HIA, to ensure that the resources used to undertake HIA are used to best effect.

Screening criteria have been devised to select projects that should undergo Environmental Impact Assessments. Work to develop an HIA screening tool is being done by the University of Northumbria at Newcastle (personal communication). Clearly a major criterion must be the importance of the likely health impacts and existing knowledge about them. The priority topics might reflect national or local priority health concerns or priority groups. A high level of conflict surrounding an issue might suggest a need for formal HIA to explore the issues. It has also been suggested that HIA should focus on areas where changes are possible. [18]. Our pilots supported this, demonstrating particularly the need for the commitment of partners as discussed above. There is little point in spending time and resources on the work if it is not practically or politically possible to implement the recommendations. The resources and time available to do the work should also be considered.

In carrying out the pilots, we debated whether to assess a localised project or a more general policy. Projects can be more clearly defined, and the population affected is also usually more clearly defined. So it is usually easier to assess the health impacts of projects. But policies have more wide-ranging effects, and have wider resource implications. This makes it arguably more important to identify and assess their health impacts. A similar problem applies to EIA: traditionally, EIA has been carried out on well defined projects but the wider effects of policies are now increasingly recognised and attempts made to submit policies to EIA. In many cases, a specific project arises from a wider policy or programme and it may in fact be more cost-effective to use the limited resources available to assess the wider policy.

It must be finally a local decision whether a HIA should be carried out or not. Some factors to consider in deciding whether an HIA is appropriate are presented below.

Factors to consider in prioritising topics for HIA

Policy/Project Factors

- *Scale/Resources*

High level policy/major resource project — **Local/ low resource level**

- *Degree of Conflict*

Differing interests - conflict — **Non contentious issue**

- *Health Awareness/Existing relationships*

Obvious impact - good links — **Less obvious impact on health - weak links**

- *Potential for change*

Policy fixed or already implemented — **Policy still in development**

Resource Factors

- **Time available**
- **Funding available**
- **Knowledge of Area/Community**
- **Knowledge of Topic**
- **Information sources/data available**

Timing of the HIA

The timing of the HIA presents another paradox. In order to carry out an assessment, we must clearly define the policy/project and the population affected. This suggests waiting until the policy or project is in a late stage of development. But in order to implement any necessary changes to the policy/project, we want to do the HIA and make recommendations as early as possible in the planning. The two completed pilot HIAs were carried out when the policies were being reviewed or developed. The urban regeneration group discussed the utility of retrospective HIA. It thought that retrospective HIA was most useful to explore methods, but could also be part of evaluation, where there was potential for changes to the policy or programme.

Gaining support

HIA differs from EIA in lacking a statutory requirement for it to be carried out. This means that we must rely on the good will of partners and the enthusiasm of those carrying out the HIA. Both of these are likely to vary widely. Our pilots are not perfect examples, but they do demonstrate the benefits of systematically assessing the health effects of different initiatives. We believe they will lead to health benefits and greater understanding of health and its determinants. We hope that they will lead to support for further HIAs to be done, and that resources will be made available to support this.

The Community Plan is a plan for a local authority area that is developed in partnership by the main organisations working in that area. One of the aims is that all partners take shared responsibility for shared objectives. Within the community planning process, policy proposals could be identified that should be subjected to HIA. HIA offers a methodology and approach to enhance health opportunities in joint work, and can ensure that policies in many sectors enhance health benefit.

Ethics, values and HIA

HIA is underpinned by values and there are ethical decisions in doing HIA that should be recognised. The choice of model of health, degree of public participation sought, and assumptions underlying the assessment all reflect the values of the investigators. The definition of timescale and population are also ethical decisions. In defining the scope of the timescale and population to be considered, some impacts might not even be recognised. There may be present benefits and future costs, or different costs and benefits for different groups. Health impact assessment should make these explicit, rather than using any formal method to make trade-offs between them. But HIA should include recommendations to maximise health gain and this inevitably involves value judgements. This means that the values of the investigators should be made explicit.

WHO suggests that the following values should underpin HIA:

- **democracy,**
- **equity**
- **sustainable development**
- **ethical use of evidence**

Source: World Health Organisation European Centre for Health Policy, 1999[8]

5. CONCLUSIONS

The case studies were HIAs of large-scale policy initiatives, carried out in order to learn more about the process of doing them and to help others to undertake HIA in the future. This was a very ambitious but important first step in assessing the potential for a systematic and strategic approach to HIA in Scotland. It was difficult to separate the 'live' HIA intended to inform practical recommendations from the aim of piloting methods and approaches, but we hope we have drawn some useful conclusions.

The primary aim of HIA is to make explicit the health consequences of decisions. It can form the basis of further discussion between different interests, and provide a firmer basis on which to make choices. We recognise that the health impacts are not the only consideration in making decisions, but HIA provides a way to consider the health consequences in the decision making process.

We also found that HIA has wider benefits. We found that it was a useful way to work in partnership with other sectors. We learned more about the work of other sectors and found many areas of agreement. HIA is just one component in the development of health sensitive planning. It is more a way of thinking than a method or tool.

We believe that HIA has great potential to improve health through policies in many different sectors. We hope that it will become a part of decision-making in many sectors at all levels in Scotland.

The way forward

How should HIA be part of planning and policy-making?

General principles

- HIA should be seen as one element in the range of partnership work to promote health and consider health in planning. It should not be separate from other joint planning activities, but be part of a palette of methods and approaches that can be used by those involved in this work.

- A formal HIA should be considered when there is uncertainty or concern about possible health risks, or possible opportunities to increase health gain, from a proposal.

- HIA should be integral to the planning process and be carried out at a stage when it is possible to make changes to the proposal.

- HIA should be jointly owned by health and other relevant partner(s). They should jointly decide when a formal HIA is needed, and it should be jointly commissioned. The final decisions and responsibility for implementing recommendations rest with policy makers or planning authorities.

- Where Environmental Impact Assessment is carried out, it should be integrated with Health Impact Assessment. Health input should be sought from the beginning and throughout the assessment to ensure coverage of health impacts. This should not be the only model for HIA and should not prevent HIA of policies that do not require EIA.

- Health impact assessment may also be carried out independently of formal planning mechanisms, as a way to present evidence for health advocacy.

National level

- The Scottish Executive should develop mechanisms to consider health in national policy making, and to support this at other levels.

- Scottish Executive departments responsible for health and local government should jointly promote health impact assessment as part of routine policy making in local authorities and other public bodies.

- As outlined in *Towards a Healthier Scotland,* the Public Health Strategy Group will play a pivotal role to 'ensure the integration of policies and initiatives with health implications...and encourage the use of Health Impact Assessment'. This should include ensuring that health is considered in all national policies, identifying policies that should be subjected to HIA, supporting the use of HIA and its integration into national decision-making.

- The Chief Medical Officer also plays a key role as chief health adviser to all government departments. The CMO is therefore placed to ensure the integrity of HIA and support its use as part of decision-making processes.

- Possible mechanisms to consider health in national and local policy making include:

  - The development of a simple checklist to identify health relevant policies for use by policymakers in all sectors. This should be used routinely as part of the policy development process in all sectors. It would help identify areas where some public health advice or input might enhance opportunities for health gain, or where more formal HIA might be indicated.

  - A 'case-finding' procedure, similar to that used in the Netherlands, could be developed to identify health relevant policies. This would include criteria to identify and prioritise policies which should be subjected to HIA. Responsibility for case finding would lie within the Scottish Executive Health Department.

  - Cross departmental audit could be carried out to study whether health is considered appropriately in policy making.

  - The CMO Annual Report could highlight health implications of national policies in different sectors, including the findings of more formal HIA as appropriate.

  - Monitoring requirements for initiatives like Social Inclusion Partnerships, New Community Schools, New Deals could include outlines of their health implications and mechanisms to do and act on HIA where appropriate.

  - External auditors could study whether health is considered in policy making in a range of national and local organisations. This could use a model and methods similar to the Accounts Commission.

- The proposed HIA Network should be closely associated with the Public Health Institute and be integrated with other inter-sectoral work to promote health at national level. Possible areas of work for the network include:

- Work with health and other government departments in the development of the checklists and criteria to identify health relevant policies.

- Be available to advise health and other government departments if a formal HIA of a national policy is being considered.

- Do, lead, or commission and appraise HIA of national policies.

- Keep a database of completed and current HIAs and share information and experiences of policy areas subjected to HIA and the methods used.

- Provide advice on methods and approaches to those carrying out HIA at all levels.

- Provide training for health professionals, policy makers and others in HIA.

- Develop quality standards for HIA.

- Link with and share international experience of HIA.

- Raise awareness of HIA and encourage its use as part of partnership work at all levels.

- Audit the use of HIA as part of partnership work at all levels.

- Develop screening criteria to help decide when HIA is needed at local level.

- Develop frameworks for topic areas or sectors to prevent duplication of work. The frameworks could include:
  - Literature review of evidence on health impacts of that sector/topic
  - National policy context
  - Key questions to ask of local policies: eg what the health relevant issues are; what the key contextual factors are that influence the health impact; how to identify if further HIA is needed at local level
  - Relevant secondary data sources that can be used for HIA in that topic area
  - Suitable indicators for monitoring

These frameworks would also help inform proactive development of health sensitive policies in a range of sectors.

- The Scottish Executive and CoSLA should endorse and encourage HIA as part of Community Planning.

- CoSLA public health officers and Best Value officers should work together to encourage the inclusion of health impacts in Best Value reviews.

Health Board/Local Authority level

- Local Authorities, as well as Health Boards, should have a formal duty to promote health.

- At local level, the responsibility for commissioning, funding and doing HIA should rest jointly between health boards and partner organisations.

- The Local Authority led Community Plan should highlight the health implications of key areas of work. This would raise awareness of health and health inequalities, and identify where more formal HIA could add value to decision making. No matter what approach is taken in community plans, HIA should be incorporated into their evaluation.

- Partners in the Community Planning process should demonstrate decision making structures that:
  - facilitate identification of health impacts,
  - allow formal HIA if required, and
  - show how the findings of these are taken into account.

- Best Value reviews of services and programmes should include their health impacts.

- Public Bodies should report on the health implications of their policies in their annual reports.

- Health Improvement Programmes should demonstrate commitment and resources for partnership work, including HIA.

- Health Improvement Programmes should show commitment to assessment of the broad impacts of health sector activities.

- Revitalised annual reports of the Director of Public Health could be pivotal to the work of health boards as public health organisations. The DPH annual report should include a description of the overall health implications of strategies being developed by partner organisations. This will help identify areas where HIA would be appropriate. The report should also report on current HIAs in progress and the findings of completed HIA.

What criteria should inform the selection of topics for HIA?

- Not all proposals can be subjected to formal HIA, due to constraints of time and resources. Screening is therefore required to prioritise topics for HIA.

- The decision on whether to do HIA will depend on individual circumstances. There are no *absolute* criteria to select policies or projects that require HIA. Policies in many sectors influence health and the extent of those health impacts are determined by a range of factors. Selection of topic areas for HIA means *prioritising* those where the most health gain may be achieved by a formal assessment of impacts.

- Impacts on national and local priority topics or groups should be considered when prioritising topics for HIA.

Other factors to consider in prioritising topics for HIA are:

Policy/Project Factors

- Scale of proposal and resources to be employed
- Degree of conflict
- Awareness of likely health impacts
- Potential for change to proposal

Resource Factors

- Time available
- Funding available
- Knowledge of Area/Community
- Knowledge of Topic
- Information sources/data available

How should HIA be done?

- There is no single 'blueprint' for HIA that will be appropriate for all circumstances. Different approaches and methods will be required in different situations.

- A range of skills and disciplines is needed to undertake HIA. The expertise required will vary in each case, but is likely to include both a public health perspective and the relevant sector.

- From our work we have developed a set of principles to help those undertaking HIA. Not all of these will be appropriate in all cases, but they highlight the key issues to consider. The principles are presented overleaf.

Key principles for Health Impact Assessment

The Health Impact Assessment process should:

- **Screen: Not all policies can be subjected to HIA, a screening process should be applied to select and prioritise the topics with important health impacts.**
- **Negotiate: The scope of the HIA and implementation of recommendations should be agreed with decision-makers.**
- **Share ownership: The HIA should be jointly owned by the decision-makers, the investigators, the affected community and other stakeholders.**
- **Be timely: The initial HIA should be carried out when the policy is clearly defined but it is still possible to influence decision-making.**
- **Define and analyse the policy: It is important to understand the policy being assessed, including its rationale, its objectives and evidence of the results of similar policies elsewhere. This includes consideration of the policy context.**
- **Define and profile the population: The population whose health is being considered should be defined and its health status, health problems and capacity should be profiled. This should include separate identification and profiling of relevant subgroups.**
- **Use an explicit model of health: The scope of the health impacts to be identified, and the nature of causality assumed should be clear. This requires a framework to define health impacts, health determinants, and influences on health and health determinants.**
- **Be aware of underlying values: HIA is as much art as science. Judgements must be made in prioritising potential impacts, estimating risks and benefits and making recommendations. This is necessarily value laden. Investigators should be explicit about the values or political position from which HIA is undertaken.**
- **Be systematic: The HIA should be carried out in a systematic way, using a comprehensive framework to identify all relevant impacts and a transparent, credible approach.**
- **Think broadly: All relevant impacts should be identified and considered, including indirect and long-term impacts.**
- **Use appropriate evidence: Both quantitative and qualitative methods may be used in an HIA and the method mix will vary with circumstances. The evidence and methods gathered should be appropriate to the impacts identified and the importance and scope of the policy.**
- **Involve the community: They have unique insights into how the proposal might affect their lives, their community, and their health-related behaviour.**
- **Take into account local factors: HIA combines evidence from elsewhere with consideration of local differences that might influence how and by whom the impacts are borne locally.**
- **Recognise difference: Communities are not homogenous. Different impacts are borne by different sectors of the community and HIA should make these explicit.**
- **Monitor impacts prospectively: Having carried out an initial prospective HIA, there should be a procedure for continuous monitoring of resultant impacts, to identify any unexpected impacts and inform future prospective HIA of similar policies.**
- **Make practical recommendations: Recommendations should seek to mitigate adverse and enhance beneficial impacts, be practical to implement and should aid the most effective use of limited budgets.**

(Note: 'policies' is used here to mean policies, programmes or projects)

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