

Scottish Health and Inequality Impact Assessment Network (SHIAN)

Report

Health Impact Assessment Guidance for Practitioners

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August 2016

Links updated March 2019

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Acknowledgements

I am very grateful to Liz Green, Andrew Buroni, Linda Leighton-Beck and Hannah Austin for providing insightful comments on an earlier draft of this document.

Foreword

I am delighted to write an introduction to this guide to Health Impact Assessment.

All kinds of plans and policies can affect health – the most influential rarely contain health in their title or main objectives. ‘Health in all policies’ is increasingly recognised as a way for public health professionals to work in partnership with colleagues to take account of these links and ensure decisions achieve the best health outcomes. During a period of significant public sector reform and ongoing economic uncertainty, it is important to maintain a focus on ensuring population health improvement while guarding against further entrenchment health and social inequality as a result of public sector policy decisions.

Health impact assessment (HIA) is a structured approach that is a very useful part of a ‘health in all policies’ approach. The Scottish Health and Inequalities Impact Assessment Network – SHIAN - has promoted and supported the development of HIA in Scotland since 2001. The Network has produced this guide that provides practical guidance for each step in an HIA.

The Scottish Directors of Public Health support the use of HIA in our work with colleagues in other organisations. As chair of the Scottish Directors of Public Health group I welcome and endorse this guide.



Andrew Fraser

August 2016

About this guide

This document is a practical guide for health impact assessment (HIA). The guide indicates the approach that HIAs should follow, the principles that should underpin all HIAs and the issues to consider when determining the scope of an HIA or evaluating an HIA report. It is primarily intended for use by practitioners completing HIAs but may also be used by those responsible for specifying and appraising HIAs. It is intended primarily for people working in Scotland and identifies relevant Scottish resources.

The guidance contained here may be used flexibly and adapted to suit particular circumstances. The methods and process should be appropriate to the kinds of impacts identified and the decision making process the HIA is intended to inform.

The guide assumes that practitioners already have some basic public health skills. It does not include detailed guidance on particular methods that may be used within HIA (such as critical appraisal or qualitative research) as other sources of guidance for these are available.

A good understanding of the principles of HIA will be helpful in ensuring health and wellbeing is considered adequately in other impact assessments. This document offers some suggestions about how to do this.

1 About Health Impact Assessment

1.1 Many proposals affect health and wellbeing

Health is not only absence of disease but is defined as ‘a state of complete physical, mental and social wellbeing’ (1). Many factors affect health and wellbeing. The physical and social conditions in which people live, culture, education, transport, housing, employment, crime, income, leisure and other services – these may all affect health either positively or negatively. The factors that affect health are called the ‘determinants’ of health. Plans and policies in any sector can affect people’s health through changes in these determinants, often in unintended ways. Considering these potential health impacts can help identify ways to mitigate adverse health impacts, enhance positive ones, and realise co-benefits.

Ensuring that planning and decision making take full account of the possible impacts on health should facilitate healthier communities, help address current health challenges and prevent some future problems. This supports the preventative approach advocated by the Christie Commission on the Future of Public Services (2).

Putting health ‘onto the agenda’ can be challenging. It may be seen as extra work or an unwelcome distraction to raise health issues that may arise from proposals that are intended to meet other outcomes. It is helpful to take time to build relationships to support this kind of partnership work, and to identify at an early stage proposals that may affect health. A health impact assessment can help to raise the relevant issues. However, it is not always necessary to complete a formal HIA and if done it should be proportionate to the scale and nature of the likely impacts.

1.2 What is Health Impact Assessment?

Health Impact Assessment (HIA) provides a recognised, structured way to identify health impacts in order to inform decisions. The International Association for Impact Assessment defines HIA as follows, based on the World Health Organisation Gothenburg consensus statement (3,4):

Health Impact Assessment is a combination of procedures, methods and tools that systematically judges the potential, and sometimes unintended, effects of a policy, program or project on the health of a population, and the distribution of those effects within the population. HIA identifies appropriate actions to manage those effects.

The purpose of an HIA is to inform decision making about a specific, defined proposal. It should be done prospectively, before the proposal has been implemented.

An HIA should be an impartial assessment of potential positive and negative impacts of the proposal and any other options being considered. It should not be used as a way to support a position that the assessors or decision makers have already decided.

Although similar methods may be used, HIA should not be confused with evaluation of plans or policies that have already been implemented. Nor should it be confused with health needs assessment, which involves defining a population's health status and assessing priority interventions to improve it.

1.3 Health in All Policies

Health in All Policies (HiAP) is an approach to public policy making that systematically takes into account impacts on human health and wellbeing, identifies synergies and seeks to avoid harmful impacts. It builds on previous approaches to developing Healthy Public Policy and recognises that, just as other sectors can impact on health, a healthy population contributes to the achievement of other goals (5). For example, healthy school children are likely to have higher educational attainment and a healthy population is likely to be more economically productive.

HIA can be a useful component of the HiAP approach. The HiAP approach involves work at all stages of policy making, usually as a partnership between health professionals and the relevant policy makers. An HIA is done at a particular stage of policy making, when the proposed policy is sufficiently well defined to allow a formal assessment to be made. The 2015 Review of Public Health in Scotland recommended that public health teams should use HIA as part of a HiAP approach to partnership work (6).

1.4 The range of health impact assessments

An HIA may be completed for any proposal, from a high level policy to a more specific project. Correspondingly, there is a broad range of complexity and detail in HIAs. An HIA may range from a rapid exercise involving a small group of stakeholders to a large comprehensive assessment that collates and analyses a large volume of evidence. All should include a systematic approach to identify impacts and make recommendations to maximise benefits and minimise risks.

The scale of the assessment, evidence and methods should be appropriate and proportionate to the nature, scale and scope of the proposal and kinds of impacts being assessed. All HIAs are bespoke to the decision making process they are intended to inform. An HIA of a high level strategy may focus on identifying the nature of the relevant health issues and ensuring these are recognised in the strategic

outcomes and in plans that follow from the strategy. An HIA of a specific project may identify more specific actions to improve its health impacts, and informing the monitoring of these. An HIA of a planning application may need to fit the specific requirements and timescale defined by the planning authority.

1.5 Integrating assessments

Policy makers are required to complete a range of other impact assessments – for example on equality, human rights, sustainability and the environment. Further information on some of these is given in Appendix 3. Combining assessments can reduce the burden on policy makers and planners, prevent duplication of work and make any trade-offs between different sectoral areas explicit. There is now growing use of integrated assessments, which include environment, health, equality, economic and other impacts as appropriate. Including health within broader assessments can ensure it is considered as part of a wider framework and reduce duplication of work. It is important when doing this to ensure that health and wellbeing are properly considered and that the range of relevant health impacts is identified and assessed.

The emphasis on differential impacts in HIA can add value to other impact assessments, which may not always do this explicitly.

To ensure health impacts are considered adequately, it is helpful for the assessment team to include health specialists with an understanding of HIA.

A useful approach can be to conduct an integrated screening process that considers a range of potential impacts of a proposal. A Health Impact Checklist can be used in this process to identify potential health impacts (see Appendices 1 and 2). The kind of assessment that follows will depend on the impacts identified. If appropriate, an HIA can be completed in parallel with other assessments and the findings incorporated into the report. The evidence about expected impacts of the proposal on a particular determinant may be generated by, for example, an economic or environmental assessment. This can be added to evidence of the impact of that determinant on health to give a fuller picture of the impacts of the proposal.

1.6 Guiding principles for HIA

The values and principles that should underpin HIA have been described by both the World Health Organisation and the International Association for Impact Assessment (3,4) as follows:

Democracy – HIA should involve stakeholders including affected people, and support transparent decision making.

Equity – HIA should consider distribution of impacts and aim to reduce health inequalities.

Sustainability – HIA should consider impacts that are long term as well as short term.

Ethical use of evidence – HIA should use the best available evidence and interpret it robustly. It should not set out to support a pre-determined position.

Comprehensive approach to health – HIA should consider the wide range of potential determinants of health that could be affected by a proposal.

1.7 Equity in HIA

Health inequalities are ‘systematic and unjust differences in the health status between different groups of people’ (6). Most proposals benefit some groups of people more than others, and so may either exacerbate or alleviate existing inequalities or create new inequalities.

Consideration of current and potential health inequalities should therefore be central to all health impact assessments. In practice, this means that a health impact assessment should:

- Identify different groups of people who may be affected by impacts, and show how each group will be affected, positively or negatively.
- Make particular efforts to involve in the assessment people at most risk of poor health and whose views are least likely to be heard.
- Ensure recommendations aim to maximise the benefits to groups with poorest health, and show how to mitigate the effects on those who will be disadvantaged by the proposal.

2 Completing a Health Impact Assessment

2.1 Governance and management of an HIA

Governance arrangements may vary depending on circumstances. An HIA may be completed in-house by the organisation developing the policy if relevant expertise is available; as a partnership, for example between the proponent and the local public health department; or be externally commissioned.

In many cases the team that completes an HIA will report to a Steering Group with the authority to agree the scope of the HIA and to approve the recommendations. If the HIA is externally commissioned, the steering group will hold the responsibility for drafting formal terms of reference and reviewing the output.

If an HIA forms part of an Environmental Assessment to accompany a planning application, the planning authority is responsible for approving the scope and appraising the report, with advice from statutory consultees. It is recommended that health stakeholders, such as the relevant public health department, are also consulted.

The role of the HIA team that completes the work is described below.

2.2 The Steps to take in a Health Impact Assessment

The steps to follow in HIA are now well established, and are based on those established for Environmental Impact Assessment. They are generally described as follows:

Step 1	Screening	Decide whether to complete an HIA
Step 2	Scoping	Set the terms of reference for the HIA
Step 3	Set up and HIA team	Ensure appropriate expertise is included
Step 4	Assessment	Collate evidence from range of sources to identify and assess likely health impacts from the proposal. Evidence may include: <ul style="list-style-type: none"> • Proposal and policy analysis • Community profile • Stakeholder engagement • Published literature
Step 5	Make recommendations	Use findings to recommend changes to the proposal or other changes that would mitigate adverse and improve positive health impacts.
Step 6	Monitor impacts	Monitor actual impacts that arise after implementation of the proposal.

Though the steps above are presented as linear, HIA is usually more iterative as findings and issues that emerge in later steps may mean that earlier steps need to be revisited and the scope and analysis amended accordingly.

2.3 Screening

Screening simply means deciding whether or not to do an HIA. In some cases there may be a clear trigger for an HIA. For example, planning authorities may require HIA of particular types of development (see e.g. (8)), and some public bodies have integrated health impacts into other statutory assessments – see the section on Integrating Assessments for more information about this.

Where there is no pre-defined requirement to do HIA, the main considerations are:

- Is the proposal likely to affect health and wellbeing or health inequalities?
- Is there an opportunity to influence the proposal?
- Is an HIA likely to provide useful information to influence decisions?
- Are there resources to do an HIA?

If the answer to any of these questions is definitely ‘no’, don’t do an HIA.

Sometimes decision makers request an HIA to inform their decision. In other cases the request for an HIA comes from other interested parties but in this case it is essential that findings and recommendations can be fed into the decision making process. Sometimes there is conflict or disagreement about a proposal and an HIA is proposed as a way to resolve this. This situation can present significant challenges. If an HIA proceeds it needs careful consideration of how to take account of the conflicting views of different stakeholders.

The most difficult question to answer at screening stage can be whether, and how, the proposal is likely to affect health. It may be useful to use a formal exercise at screening stage to identify impacts before deciding whether a fuller HIA is needed. A useful approach to this is to go through a health impact checklist (see Appendices 1 and 2) with a group of stakeholders in order to identify potential impacts.

If this exercise identifies potential health impacts, judgment is required to decide if further assessment of evidence would be useful in informing or changing the proposal or other actions. Often screening may identify potential impacts that were not previously considered and this may in itself inform changes without the need for a more detailed assessment. If further assessment is required, the impacts identified in the exercise can inform the scope of this.

The possible outcomes of screening are:

There are no likely significant health impacts	⇒	No further action required
There are likely health impacts but recommendations to gain maximum benefit from the proposal are obvious and no further assessment is required	⇒	Decide who should make and implement the recommendations
There are possible significant health impacts and uncertainty about which impacts are most significant and how, or if, the proposal should be adjusted	⇒	Set terms of reference for further assessment

2.4 Scoping

The scoping stage involves establishing the terms of reference for the HIA. If the work is externally commissioned, the steering group will be responsible for specifying formal terms of reference. In this case, the terms of reference should specify clearly the specific objectives and outputs that are expected.

If the work is completed internally or as a partnership, the scope of the work should be agreed between the partners. Terms of reference may define:

- The aim of the HIA
- Whether the HIA will be in-house, or externally commissioned
- The resources available to do the HIA
- The roles of the Steering Group and/or HIA team
- The proposal to be assessed, including alternative options to be considered and phases of implementation
- Whether HIA is standalone or integrated with an equality impact assessment or environmental assessment
- The geographical area over which to consider impacts
- The timescale over which to try to predict impacts.
- The different population groups to be considered
- Stakeholders and informants to consult
- The impacts to be assessed
- The methods and evidence to be used
- The decision making framework for the HIA and reporting deadlines
- Reporting and dissemination of the HIA.

Often during an assessment new issues become apparent, and the scope has to be reconsidered.

2.5 The health impact assessment team

A team can be established to carry out the HIA. The team may be involved in scoping the work if this is not specified before it is established. Other roles may include:

- Brainstorming to identify likely impacts
- Reviewing the relevant data and evidence and assessing its local relevance
- Consulting stakeholders
- Doing any further assessment that might be required, for example prioritising the impacts and estimating how many people will be affected by the different impacts
- Debating and agreeing the recommendations
- Producing a report.

The team should have, or identify a way to gain, knowledge of:

- The specific proposal
- Policy and practice in the topic area
- The local area and population
- Health and health determinants.

Some of the relevant skills required may include:

- Policy appraisal
- Critical appraisal
- Framing an assessment in terms of health impact
- Epidemiology and statistics
- Collation, analysis and interpretation of all types of evidence to predict impacts
- Engaging with different stakeholders
- Communicating results to various audiences
- Formulating recommendations.

Health specialists can help with framing the assessment, and appraising the final report as well as collating, analysing and interpreting health evidence. Specialists in other sectors may be needed to collate, analyse and interpret complementary evidence related to their field.

It is also helpful to involve the proponent, project lead and/or the decision maker. They have insight into the rationale and background to the proposal, often have an understanding of potential unintended impacts as well as the intended objectives and know what changes to the proposal are possible and practical.

2.6 Analysis of the proposal and policy context

In order to identify impacts and ensure recommendations are appropriate, the HIA team will need to understand key features of the proposal, geographical and social context, and the wider policy context. This may be as simple as a brief description of the proposal and its rationale. A policy review may range from simply noting the policy background to a proposal to a detailed collation of many related policy documents with an analysis of how the proposal fulfils their requirements. It is important to consider policy constraints that may influence the potential recommendations.

2.7 Identifying health impacts

An HIA can highlight positive and negative impacts, vulnerable groups who may be affected, and unintended consequences. To do this, the HIA team should be systematic, open and transparent about how impacts are identified. It is important to think broadly, as impacts often arise in an indirect way, and can occur at different stages of a causal pathway.

A stakeholder workshop using a health impact checklist to identify impacts can be an excellent method to identify impacts. This may be held at screening stage to determine whether an HIA is required, at scoping to help set the terms of reference for the HIA, or during the appraisal stage if not already completed. Further guidance is available in Appendices 1 and 2.

Other ways to identify impacts include reviewing the evidence on health impacts of similar proposals, reviewing HIA reports for similar proposals and the HIA team brainstorming other possible effects of the proposal.

2.8 Appraisal

This step usually forms the bulk of the assessment as it is where the team collects, analyses, interprets and presents different sources of evidence. The appraisal is defined by the terms of reference defined in the scoping stage.

The purpose of the appraisal stage is not simply to describe health impacts but to inform recommendations. Sometimes simply identifying impacts and the populations most affected is enough to inform recommendations. For larger and more complicated proposals further evidence and analysis may be needed. This may include cross-

referencing the assessment of impacts with the local profile and investigating the mechanisms and causal pathways through which actions may lead to impacts. This information will help, for example, to decide which impacts are 'significant' as defined below, to weigh up benefits and harms or to suggest ways to mitigate adverse impacts.

For each of the potential health impacts that have been identified, the HIA team should define the questions that need to be answered, and the sources of evidence to answer these. Questions may include, for example:

- How many people, from which population groups, will be affected by each impact?
- Will any population groups with existing poorer health be affected?
- What is the research evidence that the proposal is likely to have the intended and unintended health impacts? (positive or negative)?
- What are the pathways by which impacts will occur?
- Is there research evidence to support the predicted steps in the pathway?
- What value do people place on each impact?
- How do residents/local people perceive the risks and benefits?
- What priority do affected people give to each impact, compared with the other impacts or other factors?

HIAs use a variety of sources of evidence including, but not limited to:

- The community profile
- Involvement of stakeholders and affected populations
- Literature review of relevant research findings
- Other primary data or quantification.

HIA does not require new methodologies. The methods and evidence used will depend on the type of information that is needed to inform decision making, the kinds of impacts identified and the scope of the proposal. Both quantitative and qualitative methods may be appropriate. Sometimes it may be necessary to commission additional work to address specific questions.

2.9 Community Profiling

The purpose of the community profile is to inform identification of impacts, characterise the relevant population groups who may be affected by these impacts, and to provide the background information needed to help apply literature evidence to the specific context. This involves collating available data on:

- Demographic make-up of the local population: especially any groups that may be particularly susceptible to poor health or who are socially excluded, as identified in the scope
- Health status of the local population including common health conditions: again, consider susceptible and socially excluded groups
- Social, cultural, economic features of the local area covered by the proposal
- Features of the local area: eg facilities and amenities, environmental challenges
- Current provision relevant to the specific proposal.

The data used in the profile will include routine demographic and health data and also other routine data relevant to the policy area. Potential sources of data on greenspace, transport and housing are suggested in the Scottish HIA Network guides to HIA of these topics. The HIA team should include someone with knowledge of the policy area, and part of their role is to suggest and interpret suitable data sources for the profile. In some cases it may be appropriate to collect primary data for the profile. For example, primary qualitative evidence may inform a descriptive profile of an affected community.

2.10 Involving stakeholders

Stakeholders are people with an interest in the proposal being assessed, and include potentially affected people. Informants are people with relevant information, such as knowledge of the local area or of the topic area. Many people will be in both these groups. Both stakeholders and informants should be involved in the HIA. Groups to involve include:

- Affected communities
- The proponent, author or project lead
- The decision maker
- People with relevant expert knowledge
- Interest groups.

The assessment should seek where possible to involve the different population groups included in the scope.

There are several reasons to include these groups. Firstly, they hold some of the evidence that is needed for the assessment. They may give insights into, for example, different ways the proposal could affect health; whether mitigating measures are likely to work in the local context; and what values affected communities place on different impacts. Secondly, involving stakeholders helps ensure their views and values are taken into account. Explicitly setting out the potential health impacts of a proposal can also increase transparency of decision making. Involving people in the assessment should promote wider acceptance of the findings and recommendations. Finally, being involved in HIA may give a voice to groups that are not otherwise heard and may build

community capacity. Conversely, if done badly a HIA may further disempower and disenfranchise vulnerable people – for example if their views are misrepresented, or not taken into account.

A variety of methods may be used to obtain views. The assessors need to clarify why each of the relevant stakeholders is being involved and to use appropriate methods that will gather the appropriate information. Focus groups, questionnaire surveys, open meetings, workshops and other methods can all be used. The health impact checklist in Appendix 1 can be used to structure discussions that are seeking to identify potential impacts. Specific topic guides or questionnaires will need to be developed for discussions that are seeking to explore in more detail any specific issues or impacts that have been identified. A range of participatory prioritisation methods may be used to help groups prioritise impacts or recommendations.

Involving stakeholders can be difficult, and demands time and resources. Communities are not homogenous and include people with different and changing views. It is important to consider how representative the stakeholders involved in the HIA are, and make particular attempts to seek views of people who are not involved in formal representative structures or less confident to raise their concerns. It is important to take account of differences in health literacy. This may mean altering the language used, being careful not to make assumptions about people's knowledge and beliefs and using a range of different kinds of methods to involve people by, for example, including visual aids as well as written materials.

For some controversial proposals there may be lobby groups with strongly held and well-argued views. It is important to take account of their views and also other perspectives. The HIA team should avoid becoming either the advocate or opponent of one perspective and remain independent and impartial.

Decision making is often subject to considerations other than health. It is therefore important that participants understand the role of the HIA and do not have unrealistic expectations.

2.11 Literature review

The literature review provides information on findings of research on the health impacts of similar proposals. The literature review may also explore the evidence for each link in the hypothesised pathway by which the proposal is expected to impact on health. This will mean exploring the link between proposed action and determinants as well as the link between the determinants and health. The review may also seek evidence on the likely effectiveness of the HIA recommendations.

The team should formulate the questions to be addressed in the literature review, based on the evidence that is required to predict impacts and make recommendations.

The review will consider health literature and also literature relating to the policy area of the proposal. This means searching a range of databases. A member of the HIA team who is a specialist in the policy area should help identify relevant literature. Several reviews have been produced that summarise the evidence on the health impacts of key policy areas. These include the Scottish HIA Network guides. Reviews contained within other HIA reports of similar proposals can also be helpful.

Impacts in another setting or location may differ from those that arise in the context of the HIA. When carrying out an HIA the research evidence should be integrated with other kinds of evidence about the local context to inform a judgement about whether the research findings are transferable. This would include the local profile and qualitative evidence from key informants who have knowledge of the local context and how previous proposals have affected the local area.

Often there is a lack of research evidence about the links between a proposal and health, although there may be plausible theoretical grounds to expect an impact. In other cases, there is good evidence for parts of a causal chain but not for other links in the chain. For example an HIA of a park redevelopment may note that there is strong evidence of an association between regular walking and health, and less strong but suggestive evidence of a link between park design and walking. In these cases, poor or insufficient evidence should not be confused with evidence of no effect. But the HIA should make clear the strength of the evidence for the impacts.

The London Health Observatory has produced a very useful Guide to Reviewing Published Evidence for Use in Health Impact Assessment (9).

2.12 Additional analyses

Some HIAs may include further research or analysis, for example to quantify impacts or collate more detailed information on the affected populations.

Quantification of the number of people likely to be affected by impacts is most commonly done by applying estimates from the literature to the affected population. When doing this it is important to note in the report the susceptible populations who are most likely to be affected by adverse impacts.

In some cases more detailed methods such as comparative risk assessment, scenario building, or mathematical modelling may be used. These would usually require specialist expertise. Some models have been developed specifically for HIA.

For example:

- The ARMADA (Age Related Morbidity And Death Analysis) model which aimed to quantify the number of cases of respiratory disease that a change in transport would bring (10).
- The WHO Health Economic Assessment Tool enables quantification of the health impacts of travel proposals (11).
- The Dynamo-HIA software allows predictions about the health outcomes associated with changes in smoking, alcohol consumption and body mass index (12).
- The Scottish Public Health Observatory *Informing Investment to reduce health Inequalities in Scotland* tool allows estimation of impacts relating to income, employment, active travel, tobacco taxation, smoking cessation, alcohol brief interventions and weight management programmes (13).

In Scotland it is usually possible to obtain sufficient information on the population's baseline health from routine data sources such as the Scottish Morbidity Records (SMR) or census data collected by the National Records of Scotland (NRS). However there may be occasions when further information is needed and a survey is required.

More often HIAs may include more detailed qualitative research to identify the views of affected populations and increase understanding of why and how the predicted impacts may arise. This may include the use of focus groups and interviews.

Finally, further analysis may include the use of formal prioritisation of impacts using methods such as questionnaires and Delphi surveys.

In all cases, the methods used must be appropriate to the questions that need to be addressed in order to understand how impacts may arise and inform recommendations.

2.13 Assessing significance

Often there are many identified impacts and a need to focus on and prioritise those that are most significant. 'Significant' impacts may be:

- potentially severe or irreversible negative impacts
- impacts affecting a large number of people
- impacts affecting people who already suffer poor health or are socially excluded
- positive impacts with potential for greater health improvement

2.14 Collating and presenting findings

The assessment should show clearly how the actions within the proposal will impact on health determinants and thereby on health. It is often helpful to do this with a diagram mapping the causal pathway. Alternatively, the links between a proposal and its impacts can be outlined in words.

Mapping the causal pathway can help the assessors to think critically about the likelihood of the impacts and evidence base for each step in the pathway. It can also be a useful way to demonstrate to others the links between the proposal and health. It may also help inform the recommendations by identifying points in the pathway where changes could be made to improve the health impacts.

One way to present the findings is to prepare a matrix like the one below, showing impacts and population groups. This should help make explicit who will be affected by each impact and indicate the overall balance of positive and negative impacts on each population group.

Example Section of a Health Impact Matrix

Issues	Health Impact	Positive or Negative	Affected populations	Likelihood: definite probable possible	Severity: major moderate minor	Number of people affected
Parking/ Transport						
Potential increase in parking spaces	Less stress	Positive	Staff Venue users	probable	minor	1000s
	Increased car use Adverse impact on environment Reduced physical activity	Negative	Staff Venue users	probable	moderate	1000s
Improved public transport access Targeted green transport plan Walking groups	Increased use of sustainable travel modes Reduced adverse impact on environment Increased physical activity	Positive	Staff Venue users Specific user groups: cyclists; walking groups	probable	moderate	1000s

2.15 Making recommendations

The overall aim of an HIA is to inform decisions to improve health, so it should include recommendations and/or suggestions. These aim to mitigate any adverse impacts arising from a proposal and enhance health benefits.

The HIA team should develop the recommendations based on the available information and evidence collected. The team should consider recommendations for all the options considered within the proposal.

Recommendations should be reported to a group with the appropriate authority to approve and implement them.

Recommendations should focus particularly on groups with, or at risk of, poorer health who may be affected by impacts from the proposal.

Recommendations should be clearly specified and feasible – this means they should be practical, realistic and acceptable.

Recommendations may be broader than the proposal being assessed. For example, the assessment of a transport proposal may make recommendations about land use policy. It should be made clear to whom each recommendation is directed.

Recommendations should flow from the assessment and relate directly to the identified impacts. The team may also need to review the evidence that the recommendations are likely to work, and consult with stakeholders to ensure that they are practical in the relevant context.

There are usually different degrees of evidence available to inform different recommendations, so it can be helpful to provide an indication of the type of evidence informing a recommendation. For example, the recommendations could be graded as follows:

- *Research evidence*: there is research evidence that implementing the recommendation will improve health.
- *Observational evidence*: there is research evidence to support an impact but no evidence the recommendation will improve the impact.
- *Best practice*: recommendation is in line with best practice statements.
- *Stakeholder consensus*: there is stakeholder consensus to support a recommendation.

The recommendations should not go beyond the expertise of the HIA team and evidence they have gathered. For example, the HIA may recommend that measures to reduce noise should be adopted, but need not stipulate the technical specification of these.

An HIA of a high level strategy may recommend health and wellbeing objectives that should be included among strategic outcomes. It may also make recommendations about the scope of HIAs of subsequent proposals that follow the strategy.

If appropriate, the HIA team or Steering Group may develop recommendations into actions within a Health and Wellbeing Management Plan or Action Plan. This will define the actions that flow from each recommendation, who will implement them, timescale, resources and how their implementation will be monitored.

2.16 Monitoring impacts

HIAs often include a recommendation that future health impacts in the affected population(s) should be monitored once the proposal has been implemented. This may allow changes to be made to address unanticipated impacts, and adds to the evidence base for future HIAs.

It is important to clarify the aims of monitoring and define in advance the determinants and/or population(s) and outcomes to be monitored. In most cases it is better to monitor changes in determinants as well as – or instead of - monitoring changes in health. It is often very difficult to determine if changes in health-related behaviours or outcomes are attributable to a specific proposal. This is particularly the case if the expected changes are small, or the outcomes are affected by other factors, especially if these are also changing over the period when the proposal is being implemented. Also, if only health outcomes are monitored it means there is no opportunity to intervene and address the issue before it becomes a manifest health issue. Determinants to measure could include, for example, air quality, noise or community complaints, depending on the impacts identified in the HIA.

Monitoring may use routine data or require prospective collection of new data. It should ideally be part of standard/routine monitoring processes. If there is a Community Action Plan or equivalent it is useful to include monitoring within this. This will define who is responsible for monitoring, the specific measures, and who results are reported to. It should define the levels at which action would be needed to prevent adverse health impacts.

2.17 Reporting

An HIA report should include sufficient information for it to be appraised by others and to justify the recommendations made. The content of the report may include:

- Summary of findings and recommendations
- The proposal and options assessed
- Methods used in the assessment
- Policy context
- Evidence from community profile
- Evidence from stakeholder engagement
- Evidence from literature
- Description of each impact including affected populations, size, certainty, causal pathway
- Matrix of impacts and affected populations
- Recommendations, and if appropriate Health Management Plan
- Conclusions, which may include reflection on the HIA process.

It is good practice to produce a short version for those who may not want to read the technical report. The HIA team may want to disseminate findings through other routes such as presentations, meetings and articles in local newsletters, as appropriate to the audience(s).

2.18 Resources

The resource implications of HIA include not only the resources required to undertake HIA but also the resources that may be required to implement the recommendations. The costs of doing an HIA vary greatly depending on the scale and scope of the work. As noted above, the work done for an HIA should be proportionate to the scale and nature of likely impacts.

Integrating health into other assessments can reduce the overall cost while increasing the utility of the assessment.

2.19 Evaluating and Appraising Health Impact Assessments

If a steering group is in place, its role will include appraising the HIA and reviewing whether it has achieved the outputs defined in the scoping statement or terms of reference.

Evaluation of HIA may include both process and impact evaluation. Process evaluation will consider such issues as whether the HIA used a systematic process, engaged appropriate stakeholders, and critically reviewed appropriate evidence. Impact evaluation will consider whether (and why) the HIA was effective in influencing the decision.

The following questions can be used to appraise an HIA report.

- Was the HIA done prospectively, before implementation of the proposal?
- Were the aims and the scope of the HIA clearly defined?
- Was the HIA conducted from an impartial stance, rather than a predetermined position on the proposal?
- Did the assessors use a systematic way to identify potential health impacts?
- Were relevant stakeholders engaged appropriately?
- Does the HIA include a profile of health, health determinants and susceptible populations in the potentially affected communities?
- Are the methods and sources of evidence clearly stated and appropriate to the assessment questions?
- Does the HIA clearly present and characterise the health impacts, including pathways and affected populations for each?
- Are the impacts clearly supported by the evidence presented?
- Do the recommendations flow from the assessment of impacts?
- Are the recommendations feasible, clearly specified and do they define who should implement them?
- If a Health Management Plan is included, are the actions SMART (specific, measurable, achievable, resources, time-bound)?
- Is the report logically structured and clearly written?
- Have the recommendations been accepted and implemented?

APPENDIX 1: Health Impact Checklist

This is an example of a health impact checklist that includes a list of populations and a list of health determinants. Appendix 2 describes how this can be used to identify potentially affected populations and impacts.

Populations

Population Groups (Remember many people are in several of these groups which may add to their vulnerability)	How could these groups be affected differentially by the proposal?
<ul style="list-style-type: none"> • Older people, children and young people • Women, men and transgender people (include issues relating to pregnancy and maternity) • Disabled people (includes physical disability, learning disability, sensory impairment, long term medical conditions, mental health problems) • Minority ethnic people (includes Gypsy/ Travellers, non-English speakers) • Refugees & asylum seekers • People with different religions or beliefs • Lesbian, gay, bisexual and heterosexual people • People who are unmarried, married or in a civil partnership • People living in poverty / people of low income • Homeless people • People involved in the criminal justice system • People with low literacy/numeracy • People in remote, rural and/or island locations • Carers (include parents, especially lone parents; and elderly carers) • Staff (including people with different work patterns e.g. part/full time, short term, job share, seasonal) • OTHERS (PLEASE ADD): 	

Health Determinants

What positive and negative impacts do you think there may be? Are there any impacts about which you feel uncertain? Which groups will be affected by these impacts?

<p>What impact will the proposal have on health-related behaviour?</p> <ul style="list-style-type: none"> • Diet & nutrition • Exercise & physical activity • Substance use: tobacco, alcohol or drugs • Sexual health • Learning & skills 	
<p>What impact will the proposal have on the social environment?</p> <ul style="list-style-type: none"> • Social status • Employment (paid or unpaid) • Income and income inequality • Crime & fear of crime • Family support & social networks • Stress, resilience & community assets • Participation & social interaction • Influence and sense of control • Identity and belonging 	
<p>What impact will the proposal have on the physical environment?</p> <ul style="list-style-type: none"> • Living conditions • Working conditions • Natural space • Pollution – air, water, soil • Climate change (waste, energy, resource use, transport patterns) • Unintentional injuries & public safety • Transmission of infectious disease 	

<p>How will the proposal impact on access to & quality of services?</p> <ul style="list-style-type: none"> • Healthcare • Transport and connections • Social services • Housing quality, mix, flexibility • Education provision • Culture, leisure and play provision 	
<p>What impact will the proposal have on equality?</p> <ul style="list-style-type: none"> • Discrimination against groups of people • Promoting equality of opportunity • Tackling harassment • Promoting positive attitudes • Promoting good relations between different groups • Community capacity building 	

APPENDIX 2: Using a health impact checklist to identify health impacts

A useful way to identify potential health impacts is to go through a checklist of health determinants. This can be used at different stages of an HIA. During screening or scoping, it can help determine whether further assessment is required, and then help define the relevant impacts and questions to address during the assessment. If not already done during screening or scoping, the checklist can be used in the appraisal stage of an HIA to gather stakeholders' views on the potential impacts. In all cases, it is best used in a group exercise as one person working alone cannot identify all the relevant impacts.

The checklist does not contain questions with factual answers but is intended to stimulate thinking in a 'structured brainstorm'. The group discussion allows several perspectives to be heard, and important recommendations often emerge in the interaction between participants.

The checklist is intended to help participants:

- Identify relevant populations and potential impacts
- Suggest recommendations to improve the impacts
- Identify where further evidence may be required to demonstrate impact and inform the recommendations.

It is important to note that the checklist is a tool to help *identify possible* impacts. The engagement process will start to define how these impacts may arise, but further evidence may be needed to determine their likelihood and severity.

Who to involve

The checklist can be used in a group exercise involving 6-12 people, or in larger participatory workshops in which participants are divided into smaller groups to use the checklist. It is useful to have a facilitator and a scribe.

At least some of the people involved in the group should have knowledge of the proposal, and ideally have been involved in its development. This also increases the likelihood that recommendations will be feasible and that planners will be committed to implementing them. If participants do not have detailed knowledge of the proposal already, they should be given a detailed (written or verbal) briefing, and have the opportunity to ask questions about it before the exercise begins.

Process

Participants should each have a copy of the checklist to structure the discussion of the group.

The group first jointly identifies the different population groups who may be affected by the policy, plan or strategy. These may include:

- The intended target group(s)
- Other groups who may receive the intervention
- Groups who may be affected unintentionally (positively or negatively)
- People who are excluded from benefiting from the proposal.

The group should then consider the groups of people suggested in the checklist and agree which may be differentially affected by the proposal, and how.

Population groups need not be mutually exclusive – for example, many people will have one or more protected characteristic and also be in, or at risk of, poverty.

The group then considers possible impacts on health and wellbeing. The checklist is intended to help people think broadly about the indirect and unintended effects of the proposal as well as the direct intended ones. Impacts do not have to be limited to the issues shown but these should stimulate thinking. Participants are asked to identify both positive and negative impacts.

A useful approach is to ask group members to work individually for 10 minutes or so to go through the determinants on the checklist and make a note of the impacts they think the proposal may have on the spaces on the checklist. Then the group discusses these ideas collectively.

The group should try to specify whether each identified impact will be positive or negative, or whether this is uncertain and needs further investigation. The group should also identify which population groups will be affected by each impact. Sometimes impacts are positive for some populations but negative for others. Sometimes some members of the group think an impact will be positive but others think it will be negative. In these situations the group can often identify recommendations to promote a positive impact. Impacts may last for a short time or continue for a longer period. Some impacts may be negative in the short-term but neutral or positive later on. Timescales should therefore be mentioned if they are relevant to the proposal and potential impacts.

The scribe should try to capture the group's understanding of *how* each impact will arise, as well as documenting the impacts. Often the same underlying impact will be identified at different points in the checklist. For example, a proposal may bring employment and so also impact on income. In this case the underlying issue to identify

in the exercise is the potential employment – further assessment might focus on the quality of the employment, who would benefit etc.

At the end of this stage it is helpful for the facilitator to summarise the impacts identified. This helps to highlight the impacts that the group thinks are most significant and lead discussion about further evidence and recommendations.

Having identified impacts, the group identifies what further information is needed, the questions to be answered and kinds of evidence that would be appropriate.

Adapting the process

The process can be adapted for use in other situations.

Several different groups of participants can each use the checklist to identify impacts and results from these can then be triangulated. Often existing community groups are willing to be involved in this. It can be useful to involve groups that consist of different affected populations to gain a range of different perspectives. The information gained from the groups can be added to the other evidence gathered for the HIA and inform the questions to be addressed.

The checklist can work well in large participatory workshops. Workshop participants are divided into smaller groups to use the checklist. Each group may, for example, be asked to assess a specific part of a larger strategy with multiple components; or to consider impacts on particular specified populations. In whole day events the morning can be used to go through the checklist and in the afternoon the groups can be asked to prioritise impacts or define them in more detail.

APPENDIX 3: Other Impact Assessments

There is a growing number of impact assessments now required as part of policy making and planning. These include economic assessment, strategic environmental assessment, environmental impact assessment, sustainability appraisal, equality impact assessment, human rights impact assessment, assessment of effect on families, assessment of effect on law and order and many more. Most of these are determinants of health so many of these assessments will consider some aspects of health.

Environmental Impact Assessments and Strategic Environmental Assessments are required for defined proposals by European legislation. They should include impacts on human health although in practice these are often restricted to those resulting from environmental hazards.

Environmental Impact Assessment is an assessment of the environmental impact of projects. European Union legislation specifies the types of project for which EIA is required, in order to 'contribute to a high level of protection of the environment and human health' (14). The EU Directive was revised in 2014 and the changes must be transposed into UK and Scottish legislation by May 2017. The new directive includes requirements to consider the direct and indirect significant effects of projects on 'population and human health' and the interaction with other factors listed, such as biodiversity, climate, and the landscape. It also requires consideration of the risks to human health due, for example, to accidents or disasters. Scottish and UK guidance on this are not yet available.

Strategic Environmental Assessment (SEA) is environmental impact assessment as applied to strategies, plans and programmes rather than projects. SEA aims to ensure that significant environmental effects are identified, assessed, mitigated, communicated to decision makers, monitored and that opportunities for public involvement are provided. The EU directive on SEA (15) was introduced in July 2004 and includes a list of project proposals that must be subject to an SEA. In Scotland the scope of SEA was expanded to cover all public sector strategies, policies, plans and proposals in the Environmental Assessment (Scotland) Act 2005 (16). Development of SEA in Scotland is led by the Scottish Government SEA Gateway. Under the European legislation, SEA requires explicit consideration of significant impacts on 'population and human health'. The SEA process and format of the reports are laid down in the legislation and associated guidance. This does not currently mandate consideration of differential impacts.

Equality Impact Assessment (EQIA) considers potential differential impacts on the basis of protected characteristics as defined in the Equality Act 2010(17). The protected characteristics include age, disability, sex, gender reassignment, maternity, sexual orientation, race, religion or belief, and sexual orientation. The Act only applies

to public bodies and impact assessment is used to ensure they meet their duties to: Eliminate unlawful discrimination, harassment and victimisation; Advance equality of opportunity; and Foster good relations between groups with and without the protected characteristics.

Recently there have been pilots that incorporated consideration of Human Rights into EQIA. There are different approaches but they commonly compare the proposal against the articles in the European Convention on Human Rights (18) and Human Rights Act (19) as a way to identify potential breaches of human rights legislation. There may be similarities in some of the issues identified in a Human Rights Impact Assessment and an HIA, but they will be framed differently.

Both EQIA and Human Rights Impact Assessment focus on impacts on people, and on differential impacts so there is an obvious synergy with HIA. However they may not consider all the groups of people at risk of the poorest health. For example socio-economic status is a strong driver of health inequalities but is not a protected characteristic. They are also unlikely to consider wider impacts on health determinants unless expanded to consider issues beyond legal compliance.

Health Inequalities Impact Assessment is an integrated assessment that includes health, equalities and human rights. It was originally developed in Scottish Government and is now routinely used by NHS Health Scotland (20). NHS Lothian and partner local authorities have developed an approach to Integrated Impact Assessment that considers health, equality, environmental, economic and human rights impacts (21).

APPENDIX 4: Glossary of acronyms

EQIA	Equality Impact Assessment
EU	European Union
HIA	Health Impact Assessment
HiAP	Health in All Policies
HRIA	Human Rights Impact Assessment
NRS	National Records of Scotland
SEA	Strategic Environmental Assessment
SHIAN	Scottish Health and Inequalities Impact Assessment Network
SMR	Scottish Morbidity Records
SMART	Specific, measurable, achievable, resourced, time-bound

APPENDIX 5: Links and resources

- Scottish Health and Inequalities Impact Assessment Network (SHIAN)
<http://www.scotphn.net/networks/scottish-health-and-inequalities-impact-assessment-network-shian/introduction/>
- Society of Practitioners of HIA (SOPHIA)
<http://hiasociety.org/>
- Wales HIA Support Unit
<http://www.wales.nhs.uk/sites3/home.cfm?OrgID=522>
- Institute for Public Health in Ireland HIA resources
<http://www.publichealth.ie/hia-resources>
- World Health Organisation HIA site
<http://www.who.int/hia/en/>
- International Association for Impact Assessment
<http://www.iaia.org/index.php>
- CDC HIA pages
<http://www.cdc.gov/healthyplaces/hia.htm>
- HIA connect (New South Wales, Australia)
<http://hiaconnect.edu.au/>
- HIA Gateway (archived in 2013 but still has useful reports)
<https://webarchive.nationalarchives.gov.uk/20130315182929/http://www.apho.org.uk/default.aspx?RID=44538>

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7. World Health Organisation. Glossary of Terms. Undated.
<http://www.who.int/hia/about/glos/en/index1.html>
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<http://discovery.ucl.ac.uk/id/eprint/122644>.
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11. WHO Health Economic Assessment Tool www.heatwalkingcycling.org/

12. DYNAMO-HIA <http://www.dynamo-hia.eu/>
13. Scottish Public Health Observatory. Informing Investment to reduce health Inequalities in Scotland. ScotPHN, 2014.
<https://www.scotpho.org.uk/comparative-health/health-inequalities-tools/informing-interventions-to-reduce-health-inequalities-triple-i/>
14. Directive 2014/52/EU of the European Parliament and of the Council of 16 April 2014 amending Directive 2011/92/EU on the assessment of the effects of certain public and private projects on the environment. (EU EIA directive)
<http://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32014L0052&from=EN>
15. Directive 2001/42/EC of the European Parliament and of the Council of 27 June 2001 on the assessment of the effects of certain plans and programmes on the environment (EU SEA Directive) <http://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32001L0042&from=EN>
16. Environmental Assessment (Scotland) Act 2005
<http://www.legislation.gov.uk/asp/2005/15/contents>
17. Equality Act 2010 <http://www.legislation.gov.uk/ukpga/2010/15/contents>
18. European Convention on Human Rights
http://www.echr.coe.int/Documents/Convention_ENG.pdf
19. Human Rights Act 1998 <http://www.legislation.gov.uk/ukpga/1998/42/contents>
20. NHS Health Scotland 2011. Health Inequalities Impact Assessment
<http://www.healthscotland.scot/tools-and-resources/health-inequalities-impact-assessment/what-is-an-hiia>
21. NHS Lothian. Impact Assessment
<https://www.nhsllothian.scot.nhs.uk/YourRights/EqualityDiversity/Pages/ImpactAssessment.aspx>

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Website: <http://www.scotphn.net/networks/scottish-health-and-inequalities-impact-assessment-network-shian/introduction/>