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Original Research

Institutionalizing health impact assessment in London as a public health tool for increasing synergy between policies in other areas[☆]

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SUMMARY

Objectives: To describe the background to the inclusion of health impact assessment (HIA) in the development process for the London mayoral strategies, the HIA processes developed, how these evolved, and the role of HIA in identifying synergies between and conflicting priorities of different strategies.

Study design: Case series.

Methods: Early HIAs had just a few weeks for the whole HIA process. A rapid appraisal approach was developed. Stages included: scoping, reviewing published evidence, a stakeholder workshop, drafting a report, review of the report by the London Health Commission, and submission of the final report to the Mayor. The process evolved as more assessments were conducted. More recently, an integrated impact assessment (IIA) method has been developed that fuses the key aspects of this HIA method with sustainability assessment, strategic environmental assessment and equalities assessment.

Results: Whilst some of the early strategy drafts encompassed some elements of health, health was not a priority. Conducting HIAs was important both to ensure that the strategies reflected health concerns and to raise awareness about health and its determinants within the Greater London Authority (GLA). HIA recommendations were useful for identifying synergies and conflicts between strategies. HIA can be successfully integrated into other impact assessment processes.

Conclusions: The HIAs ensured that health became more integral to the strategies and increased understanding of determinants of health and how the GLA impacts on health and health inequalities. Inclusion of HIA within IIA ensures that health and health inequalities impacts are considered robustly within statutory impact assessments.

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Introduction

Health status depends on the risk of developing disease and the treatments available. Health services, although important, contribute much less to the former than socio-economic and environmental conditions.¹ Despite the major effects of determinants of health,² many people involved in policy development at local, regional or national levels of government (apart from those with responsibilities for health policy, health services or environmental health) are often unaware of their ability to influence health or health inequalities by their decisions.

Health impact assessment (HIA) is one way in which policy proposals that affect determinants of health and inequalities can be assessed for both their potential intended and unintended consequences on the health of the population and the distribution of impacts within specific subgroups. HIAs formulate recommendations to improve positive and mitigate negative impacts on health and to reduce inequalities. Beyond that, involvement in the HIA process itself can raise awareness among participants about determinants of health and how these are affected by government and policy decisions

outside the health sector. HIA can be an important tool for engaging with non-health professionals for policy advocacy for health improvement.

Raising awareness of health and its social determinants through HIA has ensured that health is properly considered, and has subsequently led to its integration into wider impact assessments. This paper explains the political background that led to the integration of HIA within the process of strategy development, the HIA method developed and the recent approach of integrating HIA with other types of assessment in integrated impact assessment (IIA). It reports on synergies and conflicts found between the potential health impacts of the first nine strategies that were developed, the effects of embedding health in the policy-making process, and the 'learning' approach taken in the development and mainstreaming/institutionalization of HIA into the Mayor's/Greater London Authority (GLA) regional strategy development process.

London's Regional Government and the London Health Strategy

London is the only English region with a directly elected Mayor and an Assembly with a scrutiny role. The Mayor has a wide

Synergies

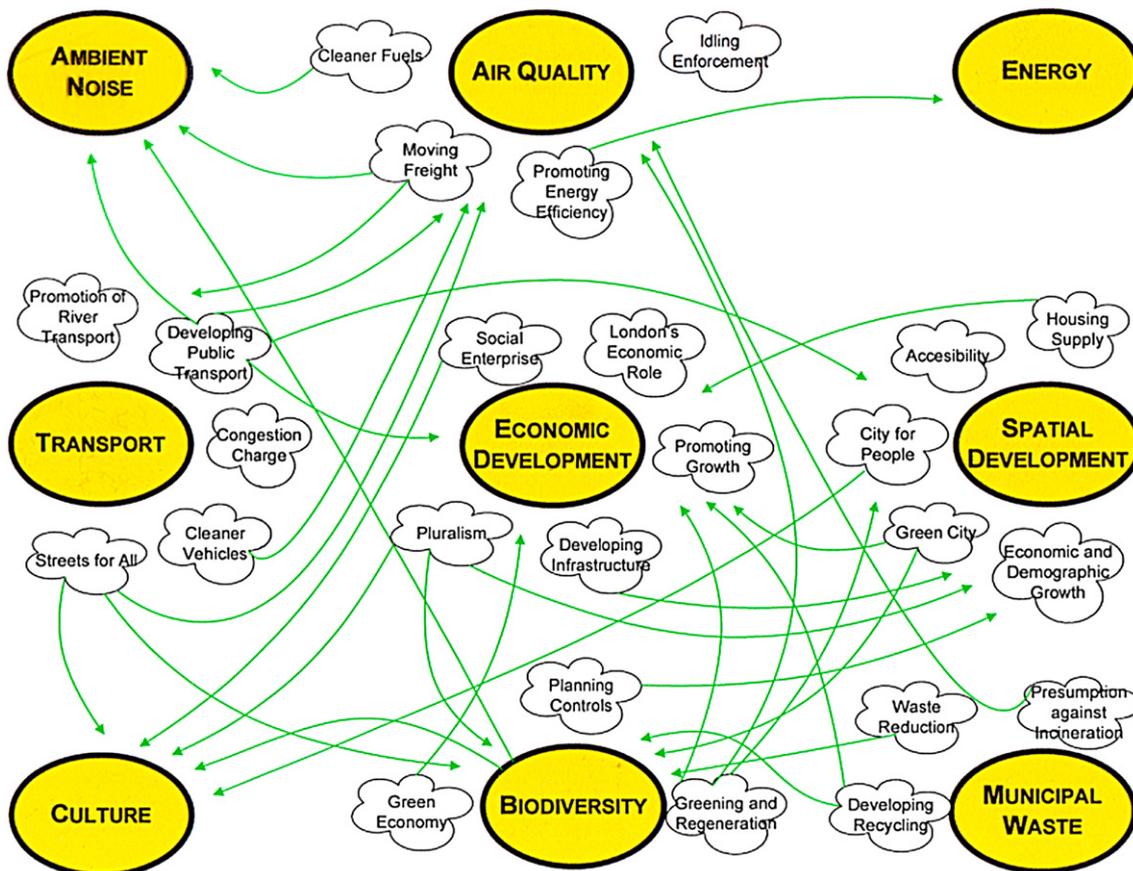


Fig. 1 – Synergies between mayoral strategies identified by health impact assessments. Source: Mindell J, Bowen C, Herriot N, Atkinson S. L'évaluation d'impact sur la santé: un instrument de santé publique dans le développement des stratégies régionales. [Health impact assessment: a public health instrument in the development of regional strategies]. *Télescope* 2008;14:26-37. Reprinted with permission.

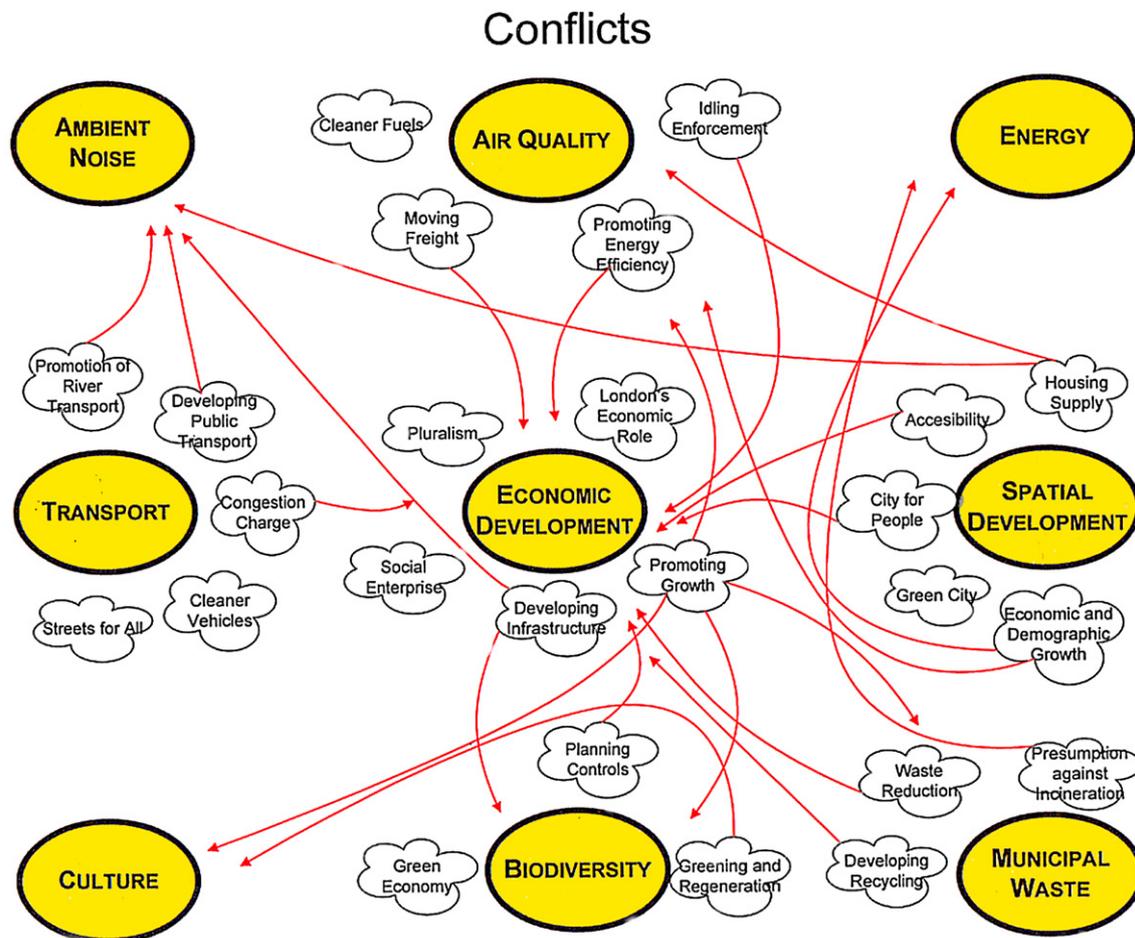


Fig. 2 – Conflicts between mayoral strategies identified by health impact assessments. Source: Mindell J, Bowen C, Herriot N, Atkinson S. *L'évaluation d'impact sur la santé: un instrument de santé publique dans le développement des stratégies régionales. [Health impact assessment: a public health instrument in the development of regional strategies].* *Télescope* 2008;14:26–37. Reprinted with permission.

range of powers devolved from national government and responsibility for setting regional policy for the Greater London area. Information about London and the development of regional strategies is given in a web appendix (www.sciencedirect.com).

The GLA Act 1999 sets out the Mayor's powers³. Section 30 states that the Authority must exercise its power in a manner calculated 'to promote improvements in the health of persons in Greater London'. Making the case for 'social determinants' impacting on health enabled this inclusion in the GLA Act. In 2007, the Mayor of London's responsibilities for health were increased in the GLA Act 2007⁴ that requires the Mayor to publish a Health Inequalities Strategy that contains all the policies that are aimed at reducing health inequalities. This amendment in the 2007 GLA Act was as a result of the cross-government review of the original GLA Act, and was influenced by the success of HIA and other health-related activities that had been enabled by the original Act's health requirement.

In the 18 months before the first mayoral elections (held in June 2000), the Regional Director of Public Health led a multi-

agency project to develop the London Health Strategy. HIA, a structured method for assessing and improving the health consequences of projects and policies in the non-health sector,^{5,6,7} was advocated, by this multi-agency project, as an underpinning theme.

The Mayor agreed that HIA should be undertaken during development of each of his strategies, as it provides a mechanism to fulfil his legal responsibility to 'take the health of Londoners into account' in policy-making.

Methods

HIA methods have developed over the course of the 8 years that they have been used for the Mayor's strategies. A rapid appraisal HIA method was the first approach developed. It was used on statutory strategies and several early non-statutory strategies developed by the first Mayor of London (Table 1). Since 2004, the GLA has developed and piloted IIA. This

Table 1 – London mayoral strategies published between 2000 and 2008.

Strategy	Date published	HIA, IIA or none
<i>Mayor's statutory strategies</i>		
Mayor's Transport Strategy	July 2001	HIA
Mayor's Economic Development Strategy	Summer 2001	HIA
The Mayor's Air Quality Strategy	Autumn 2001	HIA
The Mayor's Biodiversity Strategy	January 2002	HIA
Municipal Management Waste Strategy	September 2003	HIA
First London Plan	February 2004	HIA
The Mayor's Ambient Noise Strategy	March 2004	HIA
The Mayor's Culture Strategy London: Cultural Capital – Realising the Potential of a World-class City	April 2004	HIA
The Economic Development Strategy: Sustaining Success	January 2005	HIA
London Plan (early alterations)	December 2006	
London Plan (consolidated with alterations since 2004)	February 2008	IIA
Housing Strategy	November 2008	IIA
Climate Change Adaptation Strategy	(2008)	IIA (in progress)
Refugee Integration Strategy	(2008)	IIA (in progress)
Health Inequalities Strategy	(2008)	IIA (in progress)
<i>Other mayoral strategies</i>		
From Street to Stability – the Mayor's Rough Sleepers Strategy	March 2001	
1 in 4: the London Domestic Violence Strategy	November 2001	
The London Childcare Strategy: Towards Affordable Good Quality Childcare for All	November 2003	
Mayor's Children and Young People's Strategy: Making London Better for all Children and Young People	January 2004	HIA
Mayor's Energy Strategy: Green Light to Clean Power	February 2004	HIA
A Crack Cocaine Strategy for London	December 2004	
Second London Domestic Violence Strategy	November 2005	
Mayor's London Food Strategy: Healthy and Sustainable Food for London	May 2006	HIA
Mayor's Older People's Strategy – Valuing Older People	September 2007	HIA
HIA, health impact assessment; IIA, integrated impact assessment.		

incorporates the key components of rapid appraisal HIA into other types of assessment.

Process

The GLA strategy lead is responsible for ensuring that the HIA/IIA is undertaken. It is included in project planning so that it fits the strategy development timeline and budget. The assessment is undertaken by an independent group, but the strategy team is involved in the appraisal process so that they can utilize the outputs effectively in the strategy development.

A steering group oversees the process of the HIA and IIA. The membership usually includes health, sustainability and equalities experts, the GLA, the London Health Commission (LHC), the Regional Public Health Group and the London Health Observatory. The steering group provides oversight of the assessment process, ensuring that it is independent, and provides expert advice on the content and methods employed in the HIA/IIA.

The stages of the rapid appraisal HIA and the way in which these stages are used in IIA are described below.

Screening

The first Mayor of London was responsible for developing eight high-level statutory regional strategies. Each strategy tackled at least one, and generally several, important

determinants of health. It was agreed that an HIA would be done on all of these initial strategies, providing an opportunity to make recommendations and incorporate health into the policy-making process.

For later non-statutory regional strategies and those developed since 2004, there has been an informal screening process to decide whether a policy needs an impact assessment and, if so, whether it needs an HIA or an IIA. The Mayor is required by the GLA Act 1999³ to consider the impact of his policies on health, health inequalities, sustainability and equalities. There is also national legislation that requires sustainability appraisal (SA), strategic environmental assessment (SEA) and equalities impact assessment (EqIA) of some of the mayoral strategies. The screening stage allows the strategy team to establish which impact assessments are required, and then decide whether to undertake separate impact assessments or an IIA.

Rapid appraisal HIA

The HIAs initially took place prior to public consultation. Usually, there was less than 2 months in which to complete the whole HIA process, from scoping to delivering the final report to the Mayor and the Assembly. A rapid appraisal approach was developed, which includes: (1) scoping, (2) reviewing published evidence, (3) a stakeholder workshop, and (4) preparation of a draft report, review of the report and recommendations by the LHC, and submission of the final report and recommendations to the

Mayor and the GLA officers. Later HIAs have been conducted in parallel with the 3-month public consultation period in the strategy development process, increasing community involvement and contributing to the evidence used to inform the HIA.

Planning and scoping the HIA

For each HIA, a steering group develops the process and organizes the HIA. The steering group decides on the scope of the HIA based on the potential health impacts of the strategy, the level of controversy associated with the strategy, and engagement with health advisors in strategy development.

Rapid review of the evidence base

The steering group organizes a rapid review of the evidence base for health in relation to each of these specific strategies (e.g. transport and health,⁸ noise and health issues⁹). Searching and reviewing the evidence is undertaken by a commissioned expert prior to the strategy being available, usually over the course of 2–3 months. Once the draft strategy is available, the evidence base is summarized and used to decide the focus of the HIA. The process has been refined with each HIA; the summaries of evidence have been made clearer to ensure that the evidence is accessible for lay participants in the workshops, and are published for others to use in similar policy proposals, initially on the London Health Commission website^{10,11,12} and, more recently, via the GLA website (e.g. for the recent Health Inequalities Strategy).¹³

As the HIA method developed, an initial policy assessment was undertaken prior to the stakeholder workshop. The workshop is now used to test and further develop the policy assessment.

The HIA stakeholder workshops

The majority of rapid appraisal workshops are half-day events, but the HIA of the London Plan was a full-day event (detailed method in web appendix, www.sciencedirect.com). The events include:

- a presentation about the strategy and the major policy objectives within the strategy;
- a short presentation about the public health evidence related to the strategy (from the evidence base);
- an explanation of what HIA is;
- small group work; this was the focus of the assessment process and participants were asked to consider:
 - Which determinants of health are likely to be affected by the strategy?
 - How may health determinants change as a result of the strategy?
 - How might the expected changes affect the health of people?
 - What might be the outcomes for health?
 - What do you think should be recommended in this area?
- feedback.

The HIA report

An external consultant, who attends the workshop, drafts the report using the notes taken by the rapporteurs from the small

group workshops, the feedback and discussion of recommendations, and the commissioned evidence review. Recommendations are formulated on the basis of the policy assessment, including workshop discussions and, where it exists, supporting evidence is cited in the report. The draft report is circulated to all the workshop participants for comments, with responses incorporated into the report before it goes to the LHC for debate and ratification. The report is then submitted to the Mayor, the Assembly and the strategy development team.

Incorporating HIA into the strategy

Where feasible, in the early HIAs, the recommendations were incorporated into the draft strategy before it went out for public consultation. The strategy development team reported back to the LHC on whether recommendations were incorporated into the strategy, or why they had not been included.

Integrating health into other impact assessments

Strategies developed at the GLA are now subject to a number of statutory assessments including SA, SEA and EqIA. Due to overlaps in the methods and outputs from these assessments, an IIA method, drawing together health, sustainability and equalities, was developed. The IIA method fuses the statutory requirements of SA, SEA and EqIA, and involves key elements of the HIA method described above.

HIA was initially a short process undertaken before the strategies were publically released for consultation. However, IIA, in line with other statutory assessment processes, is an ongoing process working in parallel with the strategy development process. Table 2 outlines the stages used in the rapid appraisal HIA and how these elements were first adapted for including health in other impact assessment processes and then embedded within IIA.

The method used for the IIA changes depending on the types of assessments that are being integrated and decisions made about the approach at the scoping stage; however, the following key elements of HIA are integrated into the IIA method:

- a health representative is involved in all aspects of the assessment;
- a literature review is made of the relevant health evidence;
- key findings from the initial assessment are tested at a health stakeholder workshop and the outcome from the workshop is fed into the assessment;
- a report is written, bringing together the health findings of the assessment; and
- the implementation of health recommendations in the strategy following the assessment is reported back to the LHC.

Results

HIA of individual draft mayoral strategies

Whilst some of the early drafts of strategies encompassed some elements of health, health was not a priority. It was an

Table 2 – Overview of rapid appraisal health impact assessment (HIA) and health in integrated impact assessment (IIA)

Rapid appraisal HIA	IIA	Health in IIA
<i>Screening</i> HIA of all Mayor's strategies from 2000 to 2004	<i>Screening</i> Strategy lead assesses which assessments are legal requirements	Mayor's duty to consider health and health inequalities
<i>Scoping</i> Scope main topics for policy assessment/appraisal	<i>Scoping</i> Method to be used, baseline data collection, identify issues and problems, develop appraisal framework as a series of objectives to test strategy against	Ensure key health issues are included in the objective Ensure relevant health data are included in baseline Include review of health literature from experts
<i>Obtaining/reviewing evidence</i> Steering group commission a review of evidence from experts/academics. Used to focus assessment and the workshop		
<i>Stakeholder workshop</i> Strategy and evidence presented to stakeholders Small group assessment of impacts	<i>Developing and refining options</i> With a range of stakeholders and experts	Workshop for health stakeholders Health stakeholders contribute to other workshops
	<i>Assessing effects</i> Option testing, evaluating plan effects, considering mitigation, proposing monitoring measures and preparing appraisal report	Include health in assessing plan against objectives and developing alternatives Suggest relevant measures to monitor effects
<i>Preparation of draft report</i> External consultants summarize evidence, workshop output and recommendations	<i>Preparation of draft report</i>	
<i>Review of report by LHC</i> Discussion of recommendations and report ratified by LHC	<i>Public consultation</i> On the impact assessment along with the draft strategy for consultation	Health contribute to consultation Input to revisions
<i>Submission of report to Mayor and GLA</i>	<i>Monitoring</i> Use impact assessment to inform the development of indicators to monitor significant effects of the strategy	Input to methods to monitor health impacts of implementation
<i>Inclusion of recommendations in strategy</i> Report by strategy leads to LHC on response to recommendations in HIA	<i>Recommendation report</i> Strategy leads publish a report that sets out how recommendations of IIA have been included (or not) in the strategy	

LHC, London Health Commission; GLA, Greater London Authority; IIA, integrated impact assessment.

important exercise to conduct HIAs to ensure that the strategies reflected health concerns and opportunities, and to raise awareness about health and its determinants within the GLA.

Of the first two strategies to be developed, the draft Economic Strategy did not overtly reflect health concerns. The draft Transport Strategy's main health emphasis was on air pollution.¹⁴ There was brief mention of walking and cycling, but the HIA ensured that these featured more prominently in later versions.^{15,16} Health became more integral to both strategies as a result of the HIAs.^{15,17}

Use of HIA to assess cross-linking themes

The key messages from all the initial HIAs have been summarized.¹⁸ Consideration of the HIA findings from the first nine strategies (Table 1) also identified large numbers of policies that overlapped. Many recommendations from the HIA of one strategy would also benefit the aims of other strategies, while other strategies had health consequences that were in conflict. Figs. 1 and 2 show these overlaps. The

first nine strategies are presented in ovals. The 'clouds' around them indicate relevant policy recommendations that affect health. In Fig. 1, recommendations from one strategy that also contribute to the desired outcomes of another strategy are shown as arrows. In Fig. 2, arrows indicate where recommendations from one strategy could cause tension with the objectives of another strategy.

One example of synergy between strategies can be seen for policies identified within the Municipal Waste Strategy to develop recycling to reduce landfill and incineration of waste: this would also aid delivery of the Biodiversity Strategy. Similarly, moving freight (or waste) by river, rather than by trucks, would not only improve air quality and transport, but would also reduce ambient noise, supporting the delivery of commitments made in all three strategies.

However, the HIAs also identified areas where the aims of one strategy could oppose an objective of another strategy (Fig. 2). For example, promoting growth for economic development could make targets to reduce municipal waste and to improve biodiversity harder to achieve. Promoting energy

efficiency was proposed in both the Air Quality and Energy Strategies but could impinge adversely on economic development. Although moving freight by river could reduce noise over a wider area, promotion of river transportation could increase ambient noise in certain areas of London.

The complexity of these various interactions, both synergies and conflicts, are represented in the figures; policy-makers, who may have knowledge of one area, may not see the potential impact on other policies.

Integrating impact assessments

The rapid appraisal HIA approach forged working relationships across disciplines, raised the profile of health in regional policy development, and created the opportunity to integrate different types of impact assessment. The IIA method is now being applied to a number of strategies in London. The IIA approach was piloted on the further alterations to the spatial plan for London, which was completed in 2007.¹⁹ The timing of the IIA facilitated interaction with the strategy team from the early stages of drafting, and it was an iterative process that allowed health to influence the policy throughout its development. A result is that improving health, reducing health inequalities, and providing health and social care facilities are overarching objectives of the London Plan.

The IIA method is currently being used for 'London Enriched – the Draft Strategy for Refugee Integration'²⁰ and the Health Inequalities Strategy for London.²¹

Discussion

Ensuring that potential health impacts are considered in the development of the Mayor's statutory strategies has been a real opportunity to embed health into the work of the GLA and its functional bodies. Along with public health input during the writing of the strategy, the HIA process has been an opportunity to create more understanding about the wider determinants of health, and how the work of local and regional government impacts on health and health inequalities, and to incorporate health into the strategies.

The HIA process evolved as more HIAs were conducted. In particular, there were changes to the timing of the HIA in the strategy development process; timing and extent of the policy assessment; and the role, format and content of the stakeholder workshops.

An area debated widely and identified for further development in the early independent evaluation of the HIA method related to community involvement in the HIA process. In the 2006 HIA of the Mayor's Older People Strategy, the HIA was conducted in parallel with the public consultation stage of the strategy development, and 'community intelligence'/'evidence' from the public consultation was included in the rapid appraisal of evidence informing the HIA

The London HIA process for assessing the health impacts of regional strategies was innovative when it started. At that time, most HIAs examined projects or programmes.²² Methods and detailed guidance²³ for rapid appraisal workshops were being developed elsewhere, in parallel with this work in London, for use primarily in assessing local projects

and, occasionally, policies. As the steering group became more confident about the process, they looked for more interesting and creative ways of developing the participative nature of the HIAs (e.g. in the Culture Strategy).²⁴

Over time, the awareness that HIAs were being undertaken led the GLA strategy development teams to incorporate consideration of the wider determinants of health into the strategy during development. The evidence review was seen by the strategy developers as particularly useful. For example, when the draft London Plan was being developed, members of the strategy development team worked with public health specialists to ensure that health was central to the strategy. Thus, workshop participants welcomed an expressed concern for health that was already apparent in the draft strategy documents.

Whilst the evidence reviews were focused specifically for London, they provide the basis of evidence that could be used by others undertaking HIAs on similar topics and were therefore made available on public websites.^{8,10,11,12,13} Use of rapid evidence reviews also led to a project to improve their quality, accepting that the rapid timeframes generally precluded a systematic review.^{25,26}

The GLA funded an external evaluation of the HIA process which showed that HIA did lead to changes in strategy, with more focus and inclusion of health issues and recognized health determinants.²⁷ An impact evaluation⁶ of the first (Transport) strategy had also demonstrated this.¹⁶

Incorporating HIA into the strategy development has had other benefits. It has provided an overt mechanism for the Mayor to fulfil his duties to consider health and health inequalities as cross-cutting themes, and has ensured that many officers working at the GLA are more aware of health and its determinants, and of their ability to affect these. This increased understanding of health led to development of the IIA method, and recognition of the opportunities and overlaps between existing impact assessment processes.

The IIA method is evolving as it is used in different contexts. Experience to date has demonstrated that the advantages of integrating health into the SA, SEA and EqIA processes include:

- resources are focused on a single assessment process and the joint approach has engendered learning across both the health and sustainability sectors;
- health is considered as part of the statutory impact assessment processes; and
- health is considered throughout the strategy process.

However, there is a need for active management to ensure that health is properly considered in the IIA. The HIAs completed by the GLA have mainly been undertaken by sustainability issues consultants; having a health expert in the team is specified in the consultant brief. The health expert on the steering group also champions the inclusion of health in the IIA.

The IIA method is now being mainstreamed in the GLA, and is currently being used on the Mayor's Housing Strategy and the replacement London Plan, Economic Development and Transport Strategies. Experience to date suggests that health may be incorporated into this IIA process. However, an evaluation of IIA is planned to determine whether health is adequately addressed in this way.

The additional powers for the Mayor and the GLA in national legislation in 2007 gave the Mayor new lead roles on housing and adult skills, a strengthened role over planning, and additional strategic powers in a range of policy areas (including waste, culture and sport, health inequalities and climate change).⁴ In 2008, there was a change of political leadership in the GLA, from Labour to Conservative, with a new Mayor of London being elected. As the new areas of responsibility all impact on health, it is anticipated that HIA and IIA will continue to be integral to strategy development.

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Competing interests

None declared.

Appendix. Supplementary data

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