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of LIVERPOOL

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Department of Public Health*

**Health Impact Assessment:
Measuring the Effect of Public Policy
on Variations in Health**

FINAL REPORT

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August 2001

HEALTH IMPACT ASSESSMENT RESEARCH AND DEVELOPMENT PROJECT:

The Final Report.

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EXECUTIVE SUMMARY

1. Overview of the Project

This Executive Summary outlines the objectives, methods and findings from a two-year research and development project concerned with applying Health Impact Assessment (HIA) to regeneration initiatives. The research was funded under the Department of Health's Health Inequalities Research Programme and was carried out by a multi-disciplinary team at the University of Liverpool.

The objectives of this study were:

- *to consider a number of conceptual and methodological questions about HIA;*
- *to develop workable HIA methods through regeneration project case studies;*
- *to explore how regeneration impacts upon health determinants and health;*
- *to contribute to the development of the HIA evidence-base;*
- *to make recommendations for the further development of HIA in this field.*

Particular attention was paid to:

- exploring the methodological implications of variations in the timing and depth of HIA;
- assessing the health impacts of different types of regeneration activity through a series of regeneration project case studies.

Case study selection criteria included stage of project implementation, likely health determinants affected, likely access to relevant data and geographical location. There was also a stipulation that the selected schemes were examples of non-health regeneration projects.

The case studies were carefully chosen to represent social, cultural, economic and environmental regeneration approaches impacting upon the following 'health determinants':

- The physical environment;*
- Education, training and employment opportunities;*
- Lifestyles and behaviour;*
- Criminal victimisation and the fear, anxiety and stress of crime;*
- Social capital and community empowerment.*

The case studies and the timing of the HIAs (e.g. prospective, concurrent, retrospective) was as follows:

Mainly Prospective HIA:

- Parenting 2000' - a parenting programme which aims not only to facilitate the development of parents as educators, but also, to develop the skills of those parents re-entering the job market;
- 'New Deal for Communities' Delivery Plan – a programme providing new opportunities for employment and training for local, long-term unemployed people, but also, helping in the physical regeneration of the area.

Mainly concurrent HIA:

- Improving private rented dwellings – a programme designed to improve the quality of private-rented dwellings, particularly accommodation converted for multiple occupation, usually occupied by the most vulnerable tenants;
- 'Stepping Out' – a project aiming to empower young women to make informed decisions about their future, providing alternative choices to criminal and anti-social behaviour.

Mainly Retrospective HIA

- 'Target Hardening' – the project aims to reduce the incidence of repeat burglaries to vulnerable properties by undertaking security improvements to these properties.

The methodology included:

- In-depth discussions within the research team about the nature and meaning of the underlying concepts and approaches to HIA;
- Reviews of the existing evidence base (literature and research) on the health impacts of identified interventions;
- Analysis of Delivery Plans and policy documents;
- Application of HIA procedures and specific methods to selected regeneration projects based on the Merseyside Guidelines.

The methodology enabled 'evidence' to be assembled from previous research, policy documentation, stakeholders (including identified project users) and key informants. A limited amount of quantitative analysis was undertaken on results from questionnaire surveys. Triangulation was achieved by comparing the evidence from different sources and assessing how far this corroborated and reinforced the nature, strength and direction of the identified health impacts.

2. The Health Impacts of Regeneration Approaches

Reducing Anxiety, Stress and Fear

- The health impacts of the burglary reduction initiative in Liverpool (the 'Target Hardening Project') were found to be predominantly positive. They included reductions in levels of psychological distress resulting from the burglary and health-harming coping mechanisms (e.g. increased consumption of alcohol, tobacco) together with improving confidence and self-esteem.
- 40 victims of crime, whose homes had been made more secure, were interviewed. All of those suffering sickness/dizziness, loss of appetite, depression and panic attacks following a burglary claimed, not only, that their condition improved following the installation of security measures in their homes, but also, attributed the change directly to the crime prevention measures and the greater peace of mind that these provided.
- Greater home security (e.g. window locks, door bolts, alarms) also prevented subsequent burglary, thereby, preventing the trauma and associated health impacts of being a victim of crime
- Negative health impacts were mainly thought to arise as a result of the displacement of crime and the fear and trauma associated with it into new areas or through 'crime switch' whereby offenders choose new targets (e.g. vehicles) and, thereby, create new victims (e.g. vehicle owners) whose health may be affected.
- Heightened awareness and anxiety about crime experienced by the victims' families, neighbours and the wider community, which are not being addressed by the project, can also generate negative health impacts
- There is a clear need to 'Link the Thinking' between agencies following a domestic burglary. This might include referrals by crime prevention agencies (e.g. police, Victim Support) to GPs when patients with existing health problems are victimised, and when victims suffer acute psychological distress from the burglary and to social services for vulnerable people in need of care and support, respite or longer term, to maintain their independence at home.

Altering lifestyles and behaviour/ empowerment

- Stepping Out's main impact was increasing the self-esteem of some of the young women involved in the project. Evidence from youth workers, experts in the field and the young women themselves suggested, strongly, that self esteem was closely linked to immediate positive impacts on mental health and well-being, including the development of positive self-concepts and identity, reductions in self-harm, risk-taking behaviour (smoking, alcohol, drug misuse and unsafe sex), eating disorders, anxiety and depression.
- Other important mechanisms through which detached youth work impacts upon the health of vulnerable young women were perceived to be through the development and enhancement of social networks, education and training and the securing of employment.
- Parenting 2000 's main impact (identified through an extensive literature review and interviews with stakeholders and key informants) was the potential to enhance positive parenting and to improve family relationships. A secondary pathway to influencing health determinants was through providing a gateway to other services and resources, including health, welfare rights and advisory services, through the provision of a 'one stop shop' information service. However, as the project was not specifically targeted at the most disadvantaged groups it was unlikely to reduce health inequalities. A locational profile of a sample of existing clients identified disproportionate use of the service by residents from non-deprived communities.

Modifying the physical environment

- The private rented dwellings case study suggested that regeneration initiatives tightly focussed on housing improvements might have unintended effects on a target area's demographic and social structure if rents are raised following improvements forcing existing residents out of the area. The resultant 'gentrification' might reveal improved indicators of overall health status in the target area but this will be for a 'new population' following the displacement of the most vulnerable groups into other areas.

Education, training and employment opportunities;

- The New Deal for Communities (NDC) case study concluded that the Initiative's Delivery Plan had considerable potential for impacting positively on the health of the target area's residents. In the long term, this ten-year regeneration programme could reduce the incidence of degenerative diseases such as heart disease and cancer amongst disadvantaged groups and offer substantial savings to the NHS and social services in terms of treatment and care costs.
- Significantly, the NDC HIA highlighted the very real risk of increasing social polarisation and inequalities in health in deprived areas if the Delivery Plan was only partially implemented (e.g. if outcomes relating to worklessness, education and training are met, but those relating to crime and the physical environment are not). The danger here is of selective out-migration of those becoming more competitive as a result of NDC leading to higher concentrations of people with more severe disadvantage living in increased social isolation.

Targeting and impacts on health inequalities

- It is particularly important, with regard to regeneration projects, that judgements about the size and composition of the 'affected community' (i.e. those for whom health impacts from the policy are being attributed) reflects what a project can realistically achieve. Modestly-funded social regeneration projects usually only reach a minority of those in need. Unless the search for a policy impact, (including any health impacts that can be attributed to it), is broadly proportional to the resources provided for it and their social and spatial distribution, there will be a mismatch between the scale of the policy's resources and that used to detect an impact.
- The impact of regeneration on reducing health inequalities depends on how far such programmes are likely to be/have been effective in both targeting and reaching the most deprived communities. Whilst Stepping Out reached the most vulnerable young women, Parenting 2000 appears to have assisted relative advantaged groups (e.g. higher income group parents already motivated towards 'family improvement'). By not targeting the most vulnerable families (e.g. young parents, single parents, families on low income, families under stress) the project, if successful, will widen the gap between groups of different socio-economic circumstances.

3. Conclusions

Although the research identified how different forms of regeneration impact upon health determinants and health, it also, revealed shortcomings in existing HIA approaches and techniques and identified priorities for the future.

Depth and timing of HIA

- Three of the case studies involved conducting in-depth, comprehensive HIAs. These were labour intensive and time consuming and it would not be practical, or cost effective, to undertake these routinely. There needs to be a more systematic approach for deciding the depth, timing and conduct of HIA for regeneration projects that takes into account the nature of the initiative being examined (number, complexity, timetabling and resourcing of interventions), the availability of skills, knowledge and expertise in conducting HIA, the costs, duration and likely outcomes of the HIA.
- There needs to be further consideration given to an optimal or 'value for money' HIA cost range, for example, 0.1-5% of total project/policy costs. There may be a 'law of diminishing returns' that can be

applied to HIA - investment beyond a certain limit does not generate further insights into the project's health impacts.

- Prospective HIA draws heavily on the analysis of policy blue prints and delivery plans ,but generally, does not explore the health impacts of policy dynamics. Attention needs to be focussed on the dynamic inter-relationship between policy formulation, implementation, learning and revision. HIA should consider, not only the health impacts of the full implementation of policy, but also, those that arise from a partial or altered implementation. A scenario- based approach to prospective HIA of a regeneration initiative would involve making assumptions about:
 - the timetable for delivery (e.g. a slower or faster implementation for all or some of the interventions and the effect on health impacts);
 - the achievement of specific objectives (e.g. building implementation failure into the HIA and removing some objectives entirely);
 - the policy out-performing its objectives;
 - the effectiveness of the policy in reaching its intended beneficiaries (i.e. targeting is effective and all/ most intended beneficiaries are reached/ targeting is ineffective and few/none of the intended beneficiaries are helped).

Identifying affected communities

- The profiling of affected communities was problematic because of the difficulty in obtaining data for regeneration project priority areas. HIAs should move towards defining the size of the population sub-groups targeted and those served or reached by regeneration initiatives. This should include estimating the numbers reached as a proportion of all vulnerable persons within the geographical boundary of the policy under investigation

Health Inequalities Impact Assessment

- Guidelines need to be produced on how HIA can be used to identify policy impacts on health inequalities. Particular consideration needs to be given to:
 - Defining the vulnerable groups within the targeted population, that is who is most likely to be adversely affected by the health determinants the policy is trying to address,
 - Comparing these groups with the groups that are being targeted by the policy,
 - Identifying a wider population for comparison,
 - Identifying the impacts of the policy on each population sub-group,
 - Defining how this affects any health inequalities.

Acquisition and interpretation of evidence

- Evidence from systematic reviews on the effects of non-health care policies, programmes and projects on key health determinants, and their consequences for health outcomes, needs to be consolidated. One way forward would be to make available on the HDA Website, a data base of completed HIAs with links to appropriate websites, for example, the HDA's Evidence 2000 Database, the Cochrane and Campbell collaboration databases.
- Further research and development work is needed on classifying the 'strength of evidence', qualitative and quantitative and criteria for assessing the 'likelihood of impacts' arising from regeneration approaches. Clear definitions need to be produced which describe the terms used for the Probability and Measurability of impacts.

Evaluating the accuracy of HIA

- The effectiveness of the different HIA approaches, in predicting health impacts, needs to be evaluated. This could be achieved by:
 - undertaking a series of prospective HIAs on non health-care policies and projects;
 - taking a non-interventionist and dynamic policy analysis approach;

- undertaking retrospective HIAs on the same policies and projects over appropriate periods of time;
- comparing the predicted health impacts (from the prospective HIAs) with the observed health impacts (from the retrospective HIAs).

Organisation and delivery of HIA

- Ideally, HIA should become an integral part of the continuous monitoring and development of a policy (i.e. where it can shape a policy's progress through time). To realise this, guidelines need to be developed that describe clearly:
 - who is politically accountable for HIA being integrated into the strategic planning process;
 - how accountability is managed by local people;
 - who is responsible for the strategic co-ordination of HIA;
 - who is responsible for co-ordinating HIA delivery;
 - who is responsible for implementing recommendations from each HIA.

SUMMARY OF RECOMMENDATIONS

Recommendation 1

It is recommended that the scope of all except the most rapid, desk-based HIAs should be defined by a Steering Group representing the full range of stakeholders and key informants.

Recommendation 2

It is recommended that a systems approach to HIA is developed consisting of:

- clearly defined levels of HIA which are progressive,
- the skills, knowledge and experience required at each level,
- 'core' components for all HIAs,
- defined threshold criteria for each level of HIA,
- examples of the policies, programmes or projects that meet these criteria,
- examples of the methods used and types of evidence that would be generated,
- the resources needed,
- an approximate duration of an HIA at each level based on one researchers involvement.

Recommendation 3

It is recommended that all HIAs undertake a comprehensive documentary analysis that:

- fully identifies the intentions and strategies of the policy
- distils from policy documentation the health determinants affected
- assesses the scientific evidence that links policy to health determinants
- assesses the evidence that links health determinants to health
- examines relevant local and national policy evaluations
- involves both the HIA team and steering group members

Recommendation 4

It is recommended that a database of Government regeneration strategies should be made available on the DETR website and should include monitoring and evaluation data, and linked to the appropriate websites, for example the HDA's evidence base 2000 database.

Recommendation 5

It is recommended that databases of systematic reviews of evidence on the effects of non-health care policies, programmes and projects on key health determinants, and their consequences for health outcomes should be promoted and extended.

Recommendation 6

It is recommended that all HIAs develop a community profile providing background and contextual information to the thematic or geographical area under investigation, by accessing existing quantitative and qualitative data from the responsible agency, via appropriate Steering Group members

Recommendation 7

It is recommended that for prospective, comprehensive HIAs where reliable predictions are needed, for example to assist in target setting, a health profile with quantitative data is developed by building on the community profile. This will involve:

- identifying baselines for validated measures/indicators;
- setting baselines for new indicators (which may involve a special survey);
- projecting the changes in health indicators/measures over a given time period, enabling the quantification of expected health impacts;
- using expert assistance from epidemiologists (where available).

Recommendation 8

It is recommended that, for concurrent and retrospective HIAs, steps be taken:

- to obtain anonymised disaggregate postcoded client data on project beneficiaries;
- to undertake analyses that enable the size, social characteristics and geographical distribution of the the affected community to be identified and for this to be expressed as a proportion of the target area population.

Recommendation 9

It is recommended that project users be interviewed prior to implementation, at stages during implementation and, where appropriate, post project to assess and to attribute any observed changes in their health to project interventions. This will require identifying a group of beneficiaries who can be tracked longitudinally as a regeneration project unfolds and post project.

Recommendation 10

It is recommended that all HIAs (rapid, comprehensive, prospective, concurrent, retrospective) collect qualitative data on the perceived health impacts of the policy from key informants and stakeholders, complementing the quantitative data and documentary evidence. This may involve holding workshops linked to the community profiling process in order to 'brainstorm' perceived health impacts.

Recommendation 11

It is recommended that development work on classifying the 'strength of evidence', qualitative and quantitative and criteria for assessing the 'likelihood of impacts' is undertaken. The use of data triangulation needs to be built into the process.

Recommendation 12

It is recommended that development work on models to facilitate the health impact prioritisation process is undertaken.

Recommendation 13

It is recommended that guidelines strengthening HIA practice in reducing health inequalities are developed, and that these guidelines include advice on:

- defining the vulnerable groups within the targeted population, that is, who is most likely to be adversely affected by the policy or by the health determinants it is trying to address;
- how to compare these groups with the groups that are being targeted by the policy,
- Identifying a wider population for comparison,

- Identifying the impacts of the policy on each population sub-group,
- Defining how this affects any health inequalities.

Recommendation 14

It is recommended that guidelines are developed describing mechanisms for integrating HIA practice into the strategic planning processes of public sector organisations at a local level, and that these guidelines clearly describe:

- who is politically accountable for HIA being integrated into the strategic planning process;
- how accountability is managed by local people;
- who is responsible for the strategic co-ordination of HIA;
- who is responsible for co-ordinating HIA delivery;
- who is responsible for implementing recommendations from each HIA.

Recommendation 15

It is recommended that capacity for HIA is developed at a local level within public sector organisations (PSOs) and academic institutions by:

- Undertaking different types of training, for example awareness raising, on-the-job and off-the-job (courses), of key personnel within PSOs,
- Defining skills and competency levels needed at each level of the HIA system,
- Developing HIA course modules aimed at diploma, degree and Masters levels,
- Developing an accreditation and registration scheme.
- Facilitating the integration of effective HIA into the HIA planning processes,
- Ensuring that the HIA conducted meets quality standards.

Recommendation 16

It is recommended that the effectiveness of the different HIA types (or levels in the 'HIA system') in predicting health impacts are evaluated by:

- undertaking a series of prospective HIAs on non health-care policies and projects,
- taking a non-interventionist and dynamic policy analysis approach,
- undertaking retrospective HIAs on the same policies and projects over appropriate periods of time,
- comparing the predicted health impacts (from the prospective HIAs) with the observed health impacts (from the retrospective HIAs).

1. Introduction

1.1 Health Impact Assessment: Background and Policy Context.

During the last two decades the concept of healthy public policy has become central to improving health, as a result of the increasing evidence that non-health sector policies are key determinants of public health. The Black Report, The Health Divide (Townsend et al, 1992), and the WHO's 1985 European strategy 'Targets for Health For All' (WHO, 1985) made important contributions to this understanding. More recently, much of this evidence has been reviewed in the report of the 1998 Independent Inquiry into Health Inequalities (Acheson et al, 1998). But while such reports have created a climate where it is now universally acceptable to talk of the health impact of housing, unemployment or poverty, few if any of them have attempted to assess the scale of that impact.

Health Impact Assessment (HIA) builds on the generally accepted understanding that a nation's or community's health is determined by a wide range of economic, psychosocial and environmental influences, as well as by heredity and health care. Once this is acknowledged, it is clearly important to evaluate the health effects of these influences. This is the aim of health impact assessment, which can be defined as *the estimation of the effects of a specified action on the health of a defined population* (Scott-Samuel, 1998). Ideally, HIAs should normally be *prospective* - in other words, they should precede the introduction of the action concerned, in order that any potential negative health effects can be avoided or reduced, and any positive ones enhanced. In practice, however, there is a real need for governments and other agencies to establish the effects of current projects, programmes and policies on the health of targeted beneficiaries, affected communities and others.

The elements of this approach have much in common with those underlying the established field of environmental impact assessment (EIA). In the 'developed' world, EIA first took off in the USA following the National Environmental Policy Act 1969 (Vanclay and Bronstein, 1995), which made it a mandatory component of the

planning process. Similar action was taken in the European Union in 1985 (Directive 85/337/EEC); the UK followed suit in 1988 with the Town and Country Planning (Assessment of Environmental Effects) Regulations. The development of EIA had arisen out of widespread concern that policies often had unintended negative consequences for the environment.

Health was not an explicit concern in early EIAs; however, it was not long before the social effects of environmental developments became apparent. EIA was soon complemented by social – and later by health – impact assessments of the effects of environmental projects (such as a potentially hazardous factory, a motorway or a nuclear plant). This practice of ‘environmental HIA’ was also developed in Canada, Australia and New Zealand. In Europe, Article 152 of the Treaty of Amsterdam defined the need to ensure the protection of human health in the development and implementation of all community policies. The Health Ministers' Council resolved in 1999 to establish procedures to monitor the impact of Community policies and activities on public health and health care. More recently, Article 5 of the European Public Health strategy, ratified by the European Parliament and Council in May 2000 (European Commission, 2000), detailed objectives to develop mechanisms to analyse the impacts of health determinants and Community policies’ activities on health and health inequalities. The World Health Organisation’s (WHO) European Centre for Health Policy (ECHP) has contributed to this debate by producing a discussion paper on HIA as a tool for intersectoral collaboration on health policy development (Lehto and Ritsatakis, 1999). The publication of the Gothenburg Consensus Paper, which sought to define HIA concepts and terms in order to facilitate understanding in, and implementation of, HIA approaches followed this (Diwan, et al 2001).

During the past five years there have been a number of developments and policies in the UK, as well as in Europe and further afield, which have considered the health-related components of public policies, programmes and projects. These have increasingly included actual health impact assessments.

The first formal example of prospective HIA in the UK was the assessment of the health impacts of the proposed second runway at Manchester Airport undertaken by Manchester and Stockport Health Commissions and submitted to the Airport public enquiry in 1994 (Will, Ardern et al, 1994). This pioneering HIA used methods specially developed by the authors for assessing and estimating potential health impacts.

The Department of Health issued its 'Policy Appraisal and Health' report in December 1995 (DoH, 1995). The concept of HIA that this report describes is based on the Treasury's economic appraisal model. It relies heavily on the quantification and valuation of predicted impacts. However, *qualitative* impacts may be every bit as important as *quantitative* ones – and valuations of actual impacts or their opportunity costs may be very hard to come by. Despite this, the report represented a major advance, not only in terms of the recognition of the crucial importance of public policy as a major determinant of public health, but also acknowledging the need to assess routinely its potential health impact.

Following the election of May 1997, the Labour Government's commitment to addressing the health impacts of its public policies has become clear. All four national consultative documents on public health strategy referred to the necessity for health impact assessment of both national and local policies and projects; more recently, the substantive strategy documents – such as '*Saving Lives – Our Healthier Nation*' (DoH, 1999) - have further emphasised this priority. The English Department of Health has since published Health Impact Assessment – Report of a Methodological Seminar (DoH, 1999) and the Welsh Assembly has published Developing Health Impact Assessment in Wales (National Assembly for Wales, 1999). The Scottish Office's Department of Health is funding a research programme on HIA (SNAP, 2000), and the Department of Health in England is funding a series of HIA pilots, led primarily by health or local authorities across the country.

The need to consider the health impacts of public policies has also been reinforced by the White Paper, '*Modernising Local Government – In Touch with the People*' (DETR, 1998). A new statutory duty has been placed on local authorities to promote the social, economic and environmental well being of their areas and those people who live, work and visit there. Local authorities must develop *Community Plans and Strategies co-ordinated by Local Strategic Partnerships (LSPs)*, which describe how they will do this, and these must be linked to the *Health Improvement Programme* for the area.

The recent National Services Framework (NSF) for Coronary Heart Disease (DoH, 2000) states that 'local players are encouraged to undertake and make public a prospective HIA of major policy decisions that are likely to have a direct or indirect effect on cardiac health' (Chapter 2, para 48). Milestone 2 of the NSF states that 'by

April 2001 all NHS bodies, working closely with LAs, will have a mechanism for ensuring all new policies and all existing policies subject to review can be screened for health impacts’.

Reducing social inequalities, as well as being a central objective of the Government’s economic and social policies, is an important aspect of HIA. Equity is now generally recognised as a key health determinant, in addition to being an important social value. Current interest relates, in particular, to the first recommendation of the Acheson report :

‘..that as part of health impact assessment, all policies likely to have a direct or indirect effect on health should be evaluated in terms of their impact on health inequalities, and should be formulated in such a way that by favouring the less well off they will, wherever possible, reduce inequalities.’

(Acheson et al, 1998)

It is clear that at national and international levels, HIA will play an increasingly important role in public health strategies and will need to become more closely integrated into the planning and implementation of policies that affect key health determinants.

1.2 Urban Regeneration: Definition, Policy Development and Relevance to Health

The focus in this study has been on developing and applying HIA methods to regeneration projects. Regeneration is a fairly broad concept, which is used to describe a wide variety of measures that are designed to revive disadvantaged (mainly urban) areas. This might involve action to improve the physical environment, to encourage economic growth, or to improve the lives of the people who live in such areas in a variety of different ways.

The types of regeneration activity, which have been implemented, reflect the aims and objectives of particular policies and programmes. The following can be distinguished:

- the application of land use planning, deregulation and financial incentives to revive the urban economy;
- attempts at ‘cultural renewal’ and tourism promotion through the creation of museums, theatres and festivals;
- improving the quality of life by reducing crime, improving housing conditions and other aspects of the residential environment;
- empowering local communities through capacity building and the strengthening of social cohesion
- providing education, training and employment opportunities to residents of disadvantaged areas.

A variety of methods have been used to deliver regeneration programmes. There has been and continues to be a concern with spatial targeting (i.e. channeling resources into designated priority areas) incorporated, for example, in past policies such as the Urban Programme, Enterprise Zones, and City Challenge, and currently, in programmes such as the Single Regeneration Budget, the New Deal for Communities and the Crime Reduction Programme. A second focus is the development of partnerships (e.g. between central and local government, voluntary organisations and private companies). The third has been through the creation of new agencies such as the Urban Development Corporations, Task Forces, Housing Action Trusts and, more recently, Regional Development Agencies.

Evolution of Regeneration Policy in Britain

Since its inception in the late 1960s, British urban regeneration policy - that is, spatially targeted and / or thematic public policy initiatives in conurbations - has comprised a mixed bag of measures under the jurisdiction of different central government departments (see Atkinson & Moon, 1994; Blackman, 1995).

Specifically urban initiatives have had a relatively short history. In the early years, several of the key initiatives focused on addressing problems of social deprivation through community-based social projects. Examples include the Urban Programme and the Community Development Projects established in the late 1960s which sought to tackle the social problems and shortcomings of individuals which, in an era of full employment and the welfare state, were perceived as the root causes of deprivation.

Other programmes concentrated on some of the physical manifestations of urban deprivation, in particular, problems of sub-standard housing. Examples here include initiatives such as Housing Action Areas and General Improvement Areas.

The late 1970s, saw the publication of the Inner Urban Areas Act and a change in emphasis away from a concern primarily with social and community development projects towards economic and infrastructure projects and the creation of partnerships between central and local government. The 1980s saw further moves away from social action to a concern with issues of wealth creation and economic regeneration. The main emphasis was on property-led regeneration in which the private sector was to play a leading role. Local authorities became increasingly excluded from the process as many of their powers were transferred to Urban Development Corporations and Enterprise Zones set up to attract inward investment.

During the early and mid 1990s the emphasis changed once again, this time to a concern with improved targeting and the formation of more broadly-based partnerships and alliances involving voluntary organisations as well as public sector agencies and private companies. This period has seen the introduction of resource allocation through the process of competitive bidding first seen in the City Challenge Initiative and later extended to a whole host of capital and revenue regeneration schemes.

Policy co-ordination between departments had not been a particularly strong feature. In 1994, the various strands of urban policy in England were consolidated

into the Single Regeneration Budget (SRB). Government Offices for the Regions (GORs) were established to oversee the management of the SRB and other programmes, and to monitor the efficiency, effectiveness and value for money of the various regeneration programmes. An element of the SRB budget is open to competitive bidding on an annual basis - the Challenge Fund. Significantly, improvements to health have not featured among key strategic objectives in the SRB.

Since the election of a Labour government in May 1997, more attention has been placed on involving local communities in regeneration and towards developing a more holistic approach to tackling the problems of deprived areas in Britain. The SRB has been re-focused to give greater priority to the needs of deprived areas and to capacity building among local communities and a range of new area-based programmes has been implemented. These include the New Deal for Communities (targeting very small areas for intensive long-term regeneration) and the establishment of Education Action Zones, Employment Zones and Health Action Zones. In April 1999, eight Regional Development Agencies were established to oversee sustainable economic development, training, competitiveness, employment and broader regeneration issues such as transportation, housing, social cohesion and, significantly, public health. The RDAs were given responsibility for the Single Regeneration Budget, English Partnerships (the land reclamation and development agency) and EU Structural funds, although, other programmes (e.g. the Home Office's Crime Reduction Initiative) continue to be overseen and scrutinised by the government offices for the regions which coexist with the RDAs.

Public health is emerging as an issue of strategic importance and is beginning to feature in the mission statements and objectives of RDAs. The NW RDA's report 'Health: A Regional Development Agenda', clearly defines HIA as a priority

A list of the initiatives and programmes relevant to regeneration and public health appear in Table 1.1, below.

A Social Exclusion Unit (SEU) has been formed under the auspices of the Cabinet Office and has commissioned research to identify the barriers to social inclusion and what might be done to overcome them. The SEU's White Paper, *Bringing Britain Together: a Strategy for Neighbourhood Renewal*, emphasised the need for policies to cross reference each other in the interests of achieving synergy and a more consistent joined up approach to problem solving. Area-based regeneration initiatives are being encouraged to establish links and to explore joint

funding with major areas of social policy such as the New Deal and Intermediate Labour Markets and Crime and Disorder Strategies. As a result, areas of common interest are likely to be explored through more intensive inter- agency working. An exciting new interface is that between regeneration projects and Health Action Zones. For example, regeneration projects with a focus on crime prevention are likely to seek collaboration on a range of issues including domestic violence, health in prisons, prostitution, drug misuse and vulnerable young people.

Table 1.1 Selected Regeneration Initiatives in operation in 2000

<ul style="list-style-type: none"> • Health Action Zones • Employment Zones • Education Action Zones • Single Regeneration Budget Partnerships • New Deals: Young people (18-24); Older people (50+); Long-term unemployed • New Deal for Transport • New Deal for Communities • Intermediate Labour Markets • New Commitment to Regeneration • New opportunities Fund • EU Objective 1 Programme • The Regional Development Agencies • Drug Action Teams • Youth Offending Teams • Sure Start • On Track • Joint Investment Plans • Crime and Disorder Strategies • Children's Services Plans • Community Care Plans • Social Exclusion Unit's Task Groups on: <i>Unpopular housing; Anti-social behaviour; Community self-help; Young people; Shops; Better information.</i> • Local authority main programmes: <i>Anti-poverty strategies; Best Value</i>
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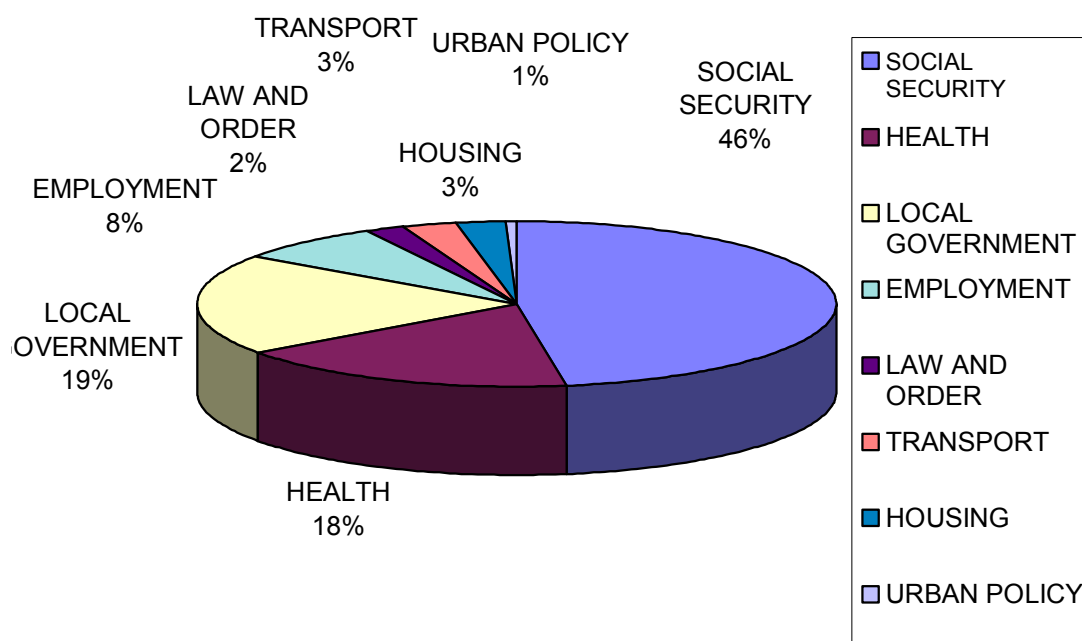
Dilemmas associated with regeneration programmes

The formulation and implementation of regeneration programmes has been subject to criticism. Specific difficulties have been identified with respect to:

- (i) the level of resources going into regeneration activity;
- (ii) the intended beneficiaries (wealth creators and entrepreneurs versus disadvantaged residents);
- (iii) the justification and use of 'spatial targeting'.

As a percentage of all public spending, that provided for geographically targeted regeneration activity amounts to under 5 per cent, although, the total is higher if matching funding from the private sector and other sources is included. However, the amount of spend is relatively small and the extent to which such resources can reverse or even halt urban decline has been and remains limited (Robson et al, 1994). Figure 1.1 shows the level of resources expended on regeneration programmes in relation to other forms of public expenditure.

Figure 1.1 Government Expenditure on Public Policy 1998



Another issue is that of how the resources are targeted. It is perhaps surprising that despite the widespread use of the term *targeting* among politicians and practitioners there does not appear to be a clear definition of it in the literature. The following definition goes some way towards filling this gap. Targeting is:

‘The identification and directing of attention/resources to declared recipient(s)’
(Hirschfield, 2000)

The target or ‘declared recipient’, may be a person (e.g. an unemployed resident), a household or family unit, a social/client group (e.g. elderly people, lone parent families, ethnic groups), a building (e.g. a repeatedly burgled house), an area (e.g. a deprived area, a policy zone, a public place) or an organisation/service delivery outlet (e.g. a general practice, a hospital, a school).

Two additional factors which affect the logistics of targeting are the temporal dimension (i.e. when to target or intervene) and the dynamics of target selection (i.e. whether to stick to the same area, the same the same individuals and social groups over time or to switch to new targets).

Each level and type of targeting requires appropriate data in order to identify the recipients, to deliver the necessary regeneration measures and to keep track of progress over time so that effectiveness can be evaluated. The latter would include

information on people, places and organisations assembled through the use of both quantitative and qualitative techniques. It would also require evidence on how different policies interact, often referred to now as ‘whole systems approaches’. Although regeneration projects often target clearly defined priority areas they may also pursue thematic programmes that are local authority-wide or direct their attention to ‘virtual communities’. In this situation, the context within which the policy intervention occurs cannot be pinned down to a well defined neighbourhood or small area making the profiling of the affected community (routinely adopted in HIA exercises) a particularly difficult task.

As a form of rationing, targeting inevitably focuses minds on who or what is excluded as well as those included in the resource allocation. If priority areas are used as a means of rationing, there will inevitably be debate about the ability of the boundaries to differentiate fairly between high and low levels of need and entitlement. The perceived strengths of using areas or zones as a basis for resource allocation include the belief that:

- Resources are more likely to make a measurable impact if targeted than if spread thinly;
- Objectives become more achievable (spatial rationing);
- Synergy with other programmes is maximised (e.g. other SRB partnerships, European Union-funded programmes, anti-poverty strategies.);

Inevitably, there are also drawbacks of spatial targeting which include the fact that:

- Many disadvantaged residents will live outside the priority areas;
- It is territorially unjust;
- It directs attention away from wider underlying causes of deprivation which impinge upon society as a whole and cannot wholly be tackled locally (Deakin and Edwards, 1993).

The extent to which it is possible to tackle the causes of deprivation by targeting areas of high deprivation is a more fundamental point. The extent to which problems *in* deprived areas are problems *of* deprived areas is debatable. These factors

are influenced by broader social, demographic, economic and cultural changes operating at regional, national or at international levels rather than at that of the neighbourhood. In this sense:

'there is a futility in drawing lines around areas on maps on the assumption that by so doing the forces leading to decline could be cornered, countered and even reversed'

(Atkinson and Moon 1994, p.75).

Unlike social welfare policies which target individuals, families, social and 'client groups' (e.g. single parents, elderly people, disabled people), the actual recipients or beneficiaries of geographically-targeted regeneration programmes are often difficult to identify. Part of the problem is that of ensuring that benefits go to appropriate individuals within the target areas. Programmes seemingly aimed at regenerating deprived areas, have often benefited, not those in greatest need, but rather, relatively highly skilled and previously employed workers often living outside of the designated areas, who commute in to take up new the employment opportunities on offer. Evaluations of employment generated through a range on inner city initiatives found that, on average, only 17% of jobs went to previously unemployed inner city residents (Haughton, 1990).

A further criticism is that some of the areas being targeted for regeneration initiatives have been areas of opportunity rather than the areas of need. The argument here is that the driving force underpinning the choice of 'targets' has been to pick areas that will flourish and do well rather than focus attention on communities that face more difficult and intractable problems.

The current emphasis towards targeting those most in need and the drive towards a more holistic approach to regeneration, especially the pooling of data on conditions which disadvantaged communities experience, is encouraging and should lead to a higher proportion of beneficiaries being reached in future.

Regeneration and Health

Because of their diversity, regeneration policies can potentially influence a wide range of health determinants. These include, for example, income, housing, transportation, education, employment and working conditions, social cohesion, crime and community safety and environmental quality. More specifically, economic and social regeneration policies impact upon health through:

- modifying the physical environment (e.g. road construction, traffic calming, street lighting, parks / green areas, housing conditions);
- altering lifestyles (e.g. through encouraging community development and participation, strengthening social cohesion, influencing anti-social / criminal behaviour);
- improving leisure opportunities (e.g. providing / improving access to clubs, facilities, play areas for young children);
- enhancing the training and employment prospects of local residents;
- reducing stress, anxiety and fear (e.g. of debt, crime, anti-social behaviour, discrimination, domestic violence, abuse);
- strengthening people's control over their lives and fostering empowerment;
- improving access to public services (drop-in centres, advice centres, one-stop shops);
- enhancing relationships between local residents and public sector agencies.

In some cases, the link between regeneration policy and health will be a direct one, where, for example, noxious industries are attracted into an area in the interests of job creation, but to the detriment of local residents' health. In most cases, however, the relationship will be mediated through a range of intervening variables, namely, the health determinants themselves. Examples include the creation and distribution of wealth, employment opportunities, learning opportunities (especially for young people and the long term unemployed) and improvements to physical safety and security. The ways in which the various types of regeneration activity impact upon key 'health determinants' to produce health impacts for client groups within the population is represented diagrammatically in Figure 1.2 .

The yellow boxes in Figure 1.2 distinguish social, economic and environmental regeneration projects. These will influence one or more of the health determinants (in orange) that will impact upon the quality of life and the health of project users.

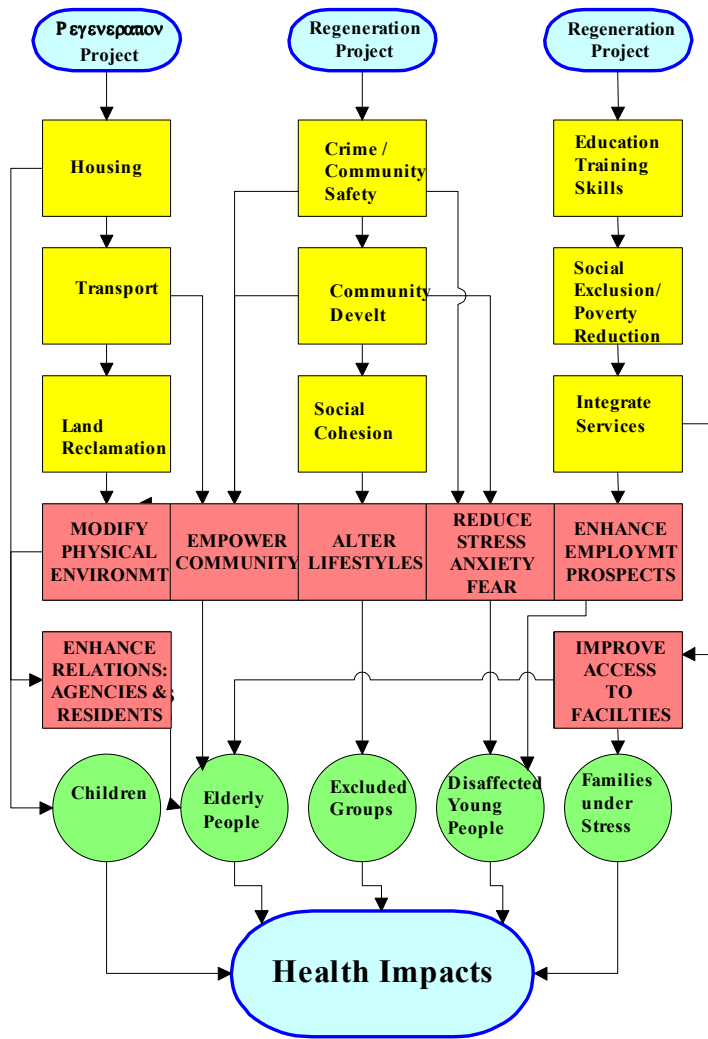


Figure 1.2 Regeneration and Health: A Systems view

Wealth creation and income distribution are particularly relevant to health inequalities because regeneration policies which exclude lower income groups - as was the case with the gentrification associated with some of the early Urban Development Corporation initiatives (Atkinson and Moon, 1994, Imrie and Thomas, 1999) can increase health inequalities between the excluded groups and the rest of the community. Conversely, economic and social regeneration policies which deliver lasting and sustainable benefits (e.g. providing employment opportunities to unemployed people) , and/or which increase social interaction within the community, protect those most vulnerable to discrimination and abuse, reduce the fear of crime and empower people, are likely to result in health gains.

The relationship between regeneration and health is discussed in a report commissioned by the Department of Environment as part of its SRB dissemination programme (DoE, 1996). The authors of this report refer to the importance to the health and well-being of local communities of '*wider programmes which promote employment, improved housing, reduced crime and a better environment*' (DoE, 1996,12). However, the primary focus of the report is on health promotion projects *within* regeneration initiatives, in particular as part of the City Challenge programme, rather than on the health impacts of non- health projects. However, it is precisely the latter area that needs to be addressed and it is this which is the subject of the Liverpool research project. Acheson emphasises in a very clear terms the gaps in our knowledge in this area and, by implication, the need for further research:

'The relative benefits (on health) of different measures, including social and economic regeneration projects and greater provision of services for young people are not known' (Acheson, 1998, p. 55).

The need to document the health impacts of all relevant public policy articulated by Acheson poses tough challenges for the development of a methodology for HIA in this field. The approach taken in this Research and Development Study to tackle the problems associated with undertaking this is outlined in Sections 3 and 4, below.

1.3 The HIA Research and Development Project

Although research has emerged during the last two decades that demonstrates that public policy is the most important determinant of the public's health, especially in relation to housing, employment and poverty (Milo 1981, Townsend, Davidson and Whitehead, 1992, Draper, 1991, Benzeval, Judge and Whitehead, 1995) there has not been any systematic attempt to assess either the scale or direction of health impacts emanating from specific policies, programmes and projects.

The complexity and technical nature of the many issues which need to be appraised calls for a multidisciplinary approach by researchers developing HIA methodologies and the active collaboration of practitioners and partners in the policy community. Urban regeneration partnerships, such as those funded through the Single Regeneration Budget, are prime examples of cross-sectoral collaboration and as such represent ideal candidates for developing and piloting health impact assessments. Moreover, they typically have multiple objectives and seek to tackle inequalities across a range of resource allocation markets in the drive to improve the quality of life of residents in the priority areas which they target (Bailey, 1995). This provides an opportunity to explore, via the mechanism of the HIA, the links between health inequalities and other inequalities (such as in housing or employment) that are their determinants.

However, the assessment of the health impacts of non-health programmes is not without its difficulties. These stem from the fact that:

- (i) the initiatives are not aimed directly at influencing health;
- (ii) resources do not always reach the intended beneficiaries sometimes making it difficult to identify an appropriate population for the assessment of health impacts;
- (iii) the health impact of a programme may be confounded by the influence of other policies on the health of local residents (e.g. other urban initiatives, local authority main programmes, health promotion projects / campaigns, or national welfare benefits policies);
- (iv) information on health is not collected routinely as part of the continuous monitoring process.

There is a need for research that will address these problems directly and identify appropriate action, which can be taken to ameliorate them. In-depth case studies are needed that determine the relevance, in health terms, of the aims, objectives and strategies of selected regeneration programmes (addressing i, above); the identification of the beneficiaries of the selected initiatives and the influence of the latter upon them (ii and iii) and the acquisition of primary data on the health impacts from those responsible for and those affected by such programmes (iv).

Much can be gained by examining policies and projects which are not focused explicitly on health outcomes (in contrast to, say, screening or treatment programmes or health promotion projects) but which - like most public policy initiatives - impact on the public's health. The impact of non-health policies upon health is an area where the evidence base is weak and one that stands to benefit the most from further research. It is also one that has been accorded a high priority by both the government and the public health profession making this the right time to take this further.

Focusing upon urban regeneration also provides an opportunity to explore the positive and negative impacts of policy initiatives on the health of the disadvantaged groups targeted by them - such as disaffected young people, under-skilled adults, long-term unemployed people, vulnerable elderly people, victims of crime, abuse or of racial harassment, and families under stress.

This two year study which was funded under the Department of Health's Health Inequalities Research Initiative, was designed specifically to address some of these problems and to add to the evidence-base on the health impacts of different forms of regeneration approach. The objectives of the project were:

- *to consider a number of conceptual and methodological questions about HIA;*
- *to develop workable HIA methods through regeneration project case studies;*
- *to explore how regeneration impacts upon health determinants and health;*
- *to contribute to the development of the HIA evidence-base;*
- *to make recommendations for the further development of HIA in this field.*

The research was carried out by a multidisciplinary team from the Departments of Civic Design (Town and Regional Planning) and Public Health at the University of Liverpool. The team consisted of the Project Co-ordinator (0.5 FTE), two researchers (1.4 FTE) and academic support (0.2 FTE). Skills within the research team included expertise in:

- public health and the study of health inequalities;
- the analysis and evaluation of regeneration policy;
- the analysis of resource allocation and targeting (including spatial analysis and the use of Geographical Information System);
- social policy approaches to social welfare and inequalities;
- qualitative social survey techniques.

One major focus of the project has been on specific Single Regeneration Budget initiatives on Merseyside. As one of the most disadvantaged urban regions in the European Union, Merseyside has a plethora of urban policy initiatives (over 40 SRB-funded urban regeneration partnerships are currently operational). The choice of Merseyside as the study area has enabled the project to benefit by building upon established contacts with key members of the policy community - including the (then) Government Office for Merseyside, SRB initiatives, health and local authorities.

In undertaking the case studies it was intended that the project explore the validity and practicalities of applying HIA both prospectively and retrospectively to policy initiatives. Although there is a clear justification for Prospective HIAs in that any changes identified to maximise health benefits and limit negative impacts can be 'negotiated' with policy makers/ practitioners, there is also a justification for retrospective HIA on the grounds of political expediency and because prospective assessments need to be informed by evidence from retrospective studies. Therefore, some of the case studies comprised regeneration projects, which have run their course or are nearing completion to which HIA has been applied retrospectively. Others are regeneration programmes which are either at the planning stage or in the initial stages of implementation to which HIA has been applied prospectively.

The case studies were carefully chosen to represent interventions and strategies impacting upon:

- The physical environment;
- Education, training and employment opportunities;
- Altering lifestyles and behavioural change
- Social capital and community empowerment
- Criminal victimisation and the fear, anxiety and stress of crime.

The chosen case studies included:

- ‘Stepping Out’ – a project aiming to empower young women to make informed decisions about their future, providing alternative choices to criminal and anti-social behaviour;
- ‘Parenting 2000’ - a parenting programme which aims not only to facilitate the development of parents as educators, but also to develop the skills of those parents re-entering the job market;
- Improving private rented dwellings – a programme designed to improve the quality of private rented dwellings, particularly accommodation converted for multiple occupation, usually occupied by the most vulnerable tenants;
- ‘New Deal for Communities’ Delivery Plan – a programme providing new opportunities for employment and training for local, long term unemployed people, but also helping in the physical regeneration of the area;
- ‘Target Hardening’ – the project aims to reduce the incidence of repeat burglaries to vulnerable properties by undertaking security improvements to these properties.

A National Advisory Group (NAG) and a Local Steering Group (LSG) were formed to offer advice and support to the project. These groups provided a wider strategic context and reference for the research team through their membership. The members were key informants themselves, providing expertise on HIA and other associated research methodologies, access to other key informants, relevant research documentation or data sources.

The two groups performed different roles. The remit of the LSG was to provide relevant information about regeneration projects on Merseyside, to advise on suitability of projects as case studies and to facilitate access to projects and key contacts. The LSG comprised academics, local public health specialists, officials from

the Government Office for Merseyside (subsequently to become part of the Government Office for the North West), local government policy planners and voluntary sector practitioners.

The role of the NAG was to provide guidance on the priorities and direction of the project, to review progress, to comment on drafts of papers and to identify the possible implications of the research for public policy. It comprised of leading academics in the fields of urban regeneration, spatial analysis and public health together with representatives from central government (DoH and DETR) and the Audit Commission.

The methodology that has been developed and applied has built upon current HIA experience, including the Merseyside HIA Guidelines, as well as approaches to other impact assessments, such as environmental and social impact assessment, and urban and social policy evaluation. This is described in detail in Section 2. Section 3 expands on HIA methodological concepts.

The findings from each case study have been compiled into separate reports (Annexes 1 - 5). Section 4 compares and contrasts the results from each case study, identifying the common health/health determinant impacts from regeneration projects.

Finally, the analysis of the lessons learned from the study as a whole regarding HIA methodology, its use in reducing potential health inequalities generated from public policy, and its application to policy planning, is described in Section 5.

2. Methodology

2.1 Introduction

This section describes the research methods that were used during the study. A number of approaches were adopted. Some involved debating and thinking through existing concepts that underpin HIA and how it should be applied; others were more directly concerned with the logistics and practicalities of distilling information about the health determinants affected by, and the resultant health impacts likely to emerge from, different types of regeneration activity. In summary, the methodology comprised of:

- In-depth discussions within the research team about the nature and meaning of the underlying concepts and approaches to HIA;
- Debates within the Project's Local Steering Group and National Advisory Group about HIA concepts, HIA approaches and the logistics of undertaking the research;
- Derivation of appropriate criteria for the selection of a sample of regeneration projects for HIA case studies based upon their relevance to specific health determinants;
- Analysis of Delivery Plans and policy documents relating to Single Regeneration Budget-funded regeneration initiatives on Merseyside;
- Application of HIA procedures and specific methods to selected regeneration projects based on the Merseyside Guidelines;
- Collection, analysis and interpretation of data from this process.

The practical steps taken during research included:

- (i) the identification of regeneration projects in the North West and their stage of development or implementation;
- (ii) the identification of broad health determinant categories and the classification of the regeneration projects under these broad categories;
- (iii) the short-listing of regeneration projects for HIA based on representation from the different category areas;
- (iv) the development of specific regeneration project selection criteria and the application of these to the short-listed projects;
- (v) the assignment of researcher/supervisor pairs to the selected regeneration projects, including field work support where necessary;
- (vi) the application and, where appropriate, the adaptation of the Merseyside Guidelines, including the selection of methods appropriate to the timing and nature of the specific project, by the research pairs;
- (vii) the analysis of the findings from each HIA, including the comparative and critical analysis of the methodology used in the case studies;
- (viii) the distillation of common methodological considerations or 'lessons learned' from all of the HIAs, and the synthesis of recommendations to address them;
- (ix) documenting the results and recommendations in individual HIA regeneration project reports and a final research project report.

The remainder of this Section describes particular aspects of the methodology in greater depth.

2.2 The nature and meaning of concepts and approaches to HIA

Regular team meetings were held to discuss conceptual and methodological issues concerning the design and implementation of HIA for non-health projects.

During these meetings particular attention was paid to the following:

The timing of HIAs:

- The identification and definition of policy cycle-related HIA (prospective; concurrent; retrospective);
- The extent to which all HIAs of regeneration schemes should be prospective;
- The purpose and role of concurrent HIAs (i.e. taking place during rather than prior to project implementation);
- The purpose and role of retrospective HIA (i.e. once a project has ceased operation)
- The feasibility and resource implications of carrying out concurrent and/or retrospective HIAs.

The distinctiveness of the HIA approach:

- How far prospective HIA can be/should be distinguished from policy appraisal;
- How far concurrent/retrospective HIA can be/should be distinguished from policy evaluation;
- The relationship between HIA, Social Impact Assessment, Strategic Environmental Assessment and other approaches (e.g. EIA).

The scale of analysis for undertaking HIAs of regeneration initiatives:

- How far the units of analysis for regeneration initiatives should be entire policy domains, programmes, projects or interventions within projects (i.e. project activities);
- How far the profiling of ‘affected communities’ should identify direct and demonstrable beneficiaries of regeneration projects
- How far it is possible to identify ‘affected communities’ in the absence of policy evaluation data.

The duration of HIAs

- The meaning of ‘rapid’ and ‘comprehensive’ HIA;
- The purpose and role of rapid versus comprehensive HIA;
- The extent to which HIAs of regeneration initiatives should be rapid
- The extent to which HIAs of regeneration initiatives should be comprehensive

- The practical implications of carrying out comprehensive HIAs.

These discussions certainly formed an important component of the project's methodology because the decisions, which emerged from them, influenced both the fieldwork and the interpretation of the findings from the research.

Some of the issues being debated also appeared on the agendas of the LSG and the NAG. This enabled HIA practitioners, commissioners, academics and other HIA stakeholders to contribute to the development of ideas and approaches. In addition to the regular meetings to review updates on the project's progress, there was also an opportunity, through a mid-project HIA colloquium, to explore national and international experience relevant to the project, as well as trends in HIA.

The results of these deliberations on concepts and approaches appear in Section 3, below.

2.3 Derivation of Selection Criteria for Regeneration Projects

The Merseyside Guidelines provide a template for screening projects for their suitability as candidates for HIA as part of the procedures for commissioning and implementing HIA. The screening criteria identify a number of factors which should influence the decision (usually that of a service delivery organisation) to conduct or not to conduct the exercise. These factors include the size of the project and of the population affected; the costs of the project and deployment of resources; the likely frequency (incidence / prevalence rates) of potential health impacts and the likely severity of potential health impacts. Using these criteria, projects are likely to be screened out (i.e. rejected for HIA) in situations where the costs of conducting the HIA far outweigh the costs of implementing the project, where projects are 'one off' exercises and not likely to be repeated or where the health impacts are likely to be marginal. The criteria are designed to help resource managers to make the most efficient use of available expertise and resources for HIA and to ensure that resources are not wasted. These criteria might also be used to screen out projects which are not political priorities.

The selection of regeneration projects for researching the feasibility and effectiveness of HIA methods is a different type of exercise to that of screening

projects to ensure best value and efficiency in the management of an organisation's HIA budget. The screening procedures in the Merseyside Guidelines did not accord particularly well with the aims and objectives of the research project. The latter were concerned with identifying how regeneration activity influences health determinants and the feasibility of applying different types of HIA (prospective, retrospective, rapid, comprehensive) to schemes differentiated by their overall regeneration approach. Thus, projects had to be selected primarily for their relevance in terms of the health determinants influenced and their stage of implementation. Other factors (e.g. size of budgets, etc) that would be of greater importance to a manager planning the use of an annual budget for HIA work did not apply in this case. Thus the choice of regeneration projects for the case studies required identifying fresh selection criteria that reflected the aims and objectives of the research. These criteria included stage of project implementation, likely health determinants affected, likely access to relevant data and geographical location. There was also a stipulation that the selected schemes were examples of non-health regeneration projects. An in-depth discussion of how the case studies were chosen appears in Section 4, below.

2.4 Analysis of Regeneration Projects Delivery Plans

Another component of the methodology was the close scrutiny of policy documentation and the delivery plans of regeneration partnerships on Merseyside to aid the selection of case studies (see above). There is an hierarchy of regeneration activity that needs to be broken down and classified so that components of policy at different stages of implementation and affecting different health determinants can be identified. Local partnerships are the bodies responsible for the implementation of regeneration initiatives funded by the Single Regeneration Budget. Each partnership will be overseeing a number of regeneration projects. These will tend to have different aims and objectives, different implementation timetables, they will vary in the resources allocated to them (and in their actual spend) and they may target different groups of intended beneficiaries and different neighbourhoods and areas. Within each project will be a number of specific interventions or activities which in turn will be at different stages of implementation and have different foci. By extracting relevant information from the policy documentation it was possible to build a data base on projects and interventions which was then used to inform the case study selection

process. The data base contained details of project aims, target areas, main interventions and implementation timetables, intended beneficiaries, budget allocations and key performance indicators.

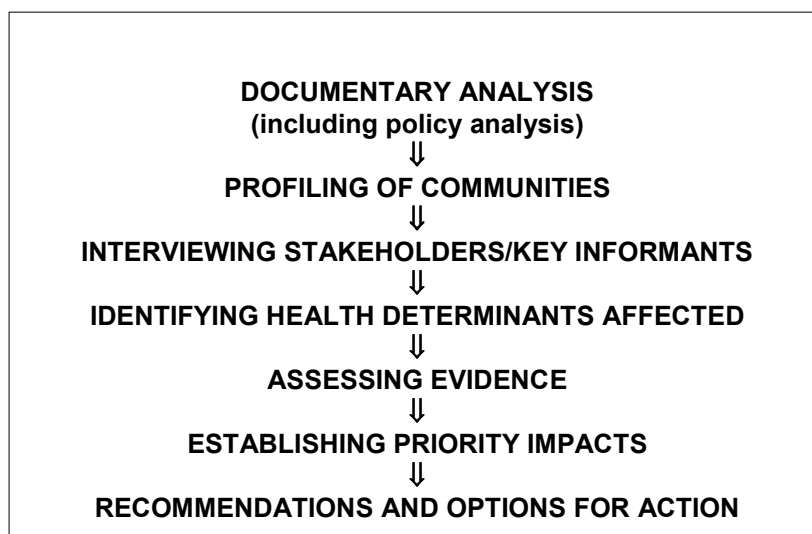
2.5 Application and Appraisal of HIA Methods and Procedures based on The Merseyside Guidelines

Current HIA methodology tends to vary according to the particular model of health being ascribed to. HIA methodologies with a 'broad perspective' reflect the socio-economic model of health and generally emphasise democratic, participatory approaches, whereby, relevant data and 'evidence' is collected from 'lay' community stakeholders, as well as from practitioners and other 'expert' informants. Both quantitative and qualitative methods may be employed. By contrast, HIA methodologies based primarily on a medical model of health have a much narrower perspective and emphasise epidemiological approaches dominated by quantitative data analyses and attempts to measure health impacts in more precise terms (National Assembly for Wales, 1999).

One of the challenges of this project was to define an HIA methodology that could be applied successfully to non-health regeneration projects and that would also break new ground and add to the available toolkits for undertaking HIA.

The HIA methodology singled out in this research project for appraisal, refinement and further development was the 'Merseyside Guidelines for HIA' (Scott-Samuel, Birley, Arden, 1998). The Merseyside Guidelines combine the following methods in a systematic process:

Figure 2.1 HIA Methods in the Merseyside Guidelines



A full description of the methodological approach is set out in the guidelines (Scott-Samuel, Birley, Ardern, 1998). Examples of some of the activities involved in different stages of the methodology include:

The profiling of affected communities which involves the production of socio-demographic profiles, community vulnerability ('at risk' groups from, e.g. environmental justice / social inequality perspectives), environmental risk factors, institutional risk factors (capacity and capabilities of all health-relevant agencies).

The identification of health determinants affected and potential positive and negative health impacts, in conjunction with key informants, including members of affected communities. This would include impacts identified at both the preparatory stages (e.g. during building, construction, and site preparation) and during the main operational stages of the programme.

A risk assessment of health impacts – involving the estimation of the probability of occurrence and of the measurability for each potential impact.

The quantification of potential impacts (where possible), including ranges of uncertainty and risk. This entails identifying the most important potential impacts and of the outstanding information /research needs for each impact.

Option appraisal, which is the assessment of choices where the findings of the HIA imply a range of possible alternative actions

Recommendations for the management of health risks (e.g. suggestions about how best to maximise potential health benefits and minimise negative impacts).

The procedures and methods which form the Merseyside Guidelines are based on a 'broad perspective' HIA model reflecting a socio-environmental model of health, which emphasises the interaction between different layers of health determinants, including individual factors, social factors, living and working conditions and general socio-economic, cultural and environmental conditions. It has its philosophical roots in phenomenology and, as such, the methods used have tended to be qualitative and participatory. The methods and approach are under-pinned by an explicit value system of social, material and environmental equity.

These guidelines were the first to be used in the UK and are still frequently and widely applied (McIntyre & Petticrew, 1999; Griffiths, et al, 2000). They were designed as an aid to public policy decision-making for public health professionals and 'lay' community members alike. They were not designed to make definitive predictions with mathematical precision, and clearly state:

'It is important to emphasise that HIA is not strictly a science. Having said this, it most certainly draws on a scientific knowledge base...'

(Arden, Birley, Scott-Samuel, 1998)

However, within these parameters, there is clearly a need to ensure that the Guidelines represent a rigorous methodology.

The holistic focus of the Merseyside Guidelines seemingly lends itself well to being used in HIAs of regeneration projects which, by their often eclectic nature, embrace a wide range of strategies and activities involving and affecting different stakeholders.

This research project has involved testing out the procedures and methods recommended in the Merseyside Guidelines to determine how far they could be applied and how well they performed in the HIA of regeneration projects. A particular interest has been to identify how guidelines that were designed primarily for comprehensive, prospective HIA would perform in more intensive concurrent and retrospective HIAs, as well as rapid HIAs. It was envisaged at the outset that this research would identify the extent to which these existing methods would require modification when applied in new and innovative ways.

The methods adopted in each case study are outlined in Section 4 and described in detail in the case study reports. In they comprised:

- Literature reviews
- Documentary research
- Focus groups
- Semi-structured interviews
- Semi-structured discussion groups
- Structured interviews
- Observational techniques

2.6 The Collection and Analysis of Data

The fieldwork for the five regeneration case studies was staggered over a two-year period. During this time the methods and procedures used in these HIAs were assessed by the project research team and a number of core 'lessons' on HIA methods were distilled.

Inevitably, there were different types of lesson to learn. Some of these concerned how well the HIA procedures and methods worked in the field and where changes were required. Others concerned the timing of HIA viz a viz the policy cycle and the depth of the analysis. But there were also lessons about how to triangulate the information and insights collected through face to face interviews and focus group sessions with the evidence-base available from the research literature. Finally, there were lessons to be learned about how different types of regeneration project impact upon health determinants and health and how to maximise the positive and ameliorate negative influences.

The assessment process involved feedback from researchers at team meetings on experiences of undertaking the fieldwork and an in-depth analysis of case study reports (interim and final) with a particular focus on the methods used, how well they performed and the scope for improvements.

To facilitate this analysis, a checklist was devised of criteria by which the effectiveness of any HIA methodology might be judged. Key items of the checklist included:

- Depth of analysis - What criteria were used to determine the level of HIA undertaken (rapid or comprehensive)?

- Evidence from documentary analysis/literature review – What was the strength of the evidence from the documentary analysis/literature review? How relevant was the evidence available to the policy etc under investigation? Where were the gaps in evidence?
- Profiling Affected Communities –What is an ‘affected community’? How can it be identified? Are there sufficient data to do so? What role did/should the profiles of affected communities play in the HIA? How available or accessible were data? Did the data that were available provide useful contextual and background information to the HIA? How recently were these data produced?
- Evidence from key informants and stakeholders (where appropriate) – Who were the stakeholders? How were they identified? Who was omitted from the analysis? What methods were used to collect data from them? Who were identified as key informants? How were they selected? What instruments/tools were used to obtain information/ views from them? How were the data processed and analysed from stakeholders and key informants?
- Resources – How much resource input was required (i.e. number of researches, time expended, travel and equipment, etc) for undertaking HIAs of regeneration projects? How did this vary by timing (prospective, concurrent, retrospective HIA) and by depth of analysis (rapid, comprehensive HIA)?
- Analysis and assessment of evidence – How far was it possible to identify the health determinants affected by the policy? What were the sources of evidence of these impacts? How far was it possible to identify likely health outcomes from the health determinants affected?
- What were the sources of evidence of these impacts on health outcomes? How were the risk, measurability, latency and scale of impacts determined?
- Prioritising impacts - How were the health impacts prioritised? How was the variance in prioritisation between stakeholder groups resolved?
- Recommendations - Were the recommendations evidence-based? Were the recommendations accepted and implemented by the responsible agency? How was this achieved? Did the recommendations address the health impacts directly? Were they costed? What arrangements were made for monitoring and evaluating the implementation of the policy?
- Other process inputs, outputs, outcomes (project specific and general) - What were the elements in the process that were common to all case studies? What were the main differences? How did this affect the impacts identified? What were other outputs and outcomes of the HIA process, e.g. developing awareness of the impacts of non-health care sectors on health? Was the process and were the methods easy to use?

Involving a team approach in the collection, analysis and interpretation of data helped to strengthen the HIA. In addition to this, records from meetings and relevant documentation also contributed to ensuring rigour in the research. However it has been recognised that additional reliability could have been achieved by a more systematic assessment of rigour in the case study methodology applied, particularly concerning investigator bias, and also the use of a wider range of methods.

3. Development of HIA Concepts, Approaches and Techniques

3.1 Some important conceptual and methodological questions

Part of the methodology in undertaking this project has been to explore the meaning of the various concepts and approaches that underpins HIA. These discussions have identified some important *selection* and *dimension* issues for HIAs, which need to be considered before applying the technique to regeneration projects and other aspects of public policy. The most important of the issues that need to be addressed are:

Screening stage

- Timing - when should an HIAs be undertaken in relation to a policy's stage of implementation?
- Policy scale - what level of activity (e.g. an entire area of policy, a programme within a policy, or a project within a programme) should an HIA be applied to?

Scoping stage

- Depth - what level of detail should the HIA go into?
- Duration - how long should the HIA take?
- Relative resource/impact scales - what are the most appropriate social, spatial and temporal scales for detecting the health impacts on policy beneficiaries and others?
- Differential distribution of impacts - The measurement of impacts of policies, programmes and projects on health inequalities.

3.1.1 The timing of HIA

HIA can be applied at different stages in the policy development process; this applies to all levels of HIA depth. Figure 3.1, cross-references the timing of an HIA in terms of a policy's development with the level of detail or depth of analysis involved in an HIA.

Figure 3.1 HIA: Timing and Depth

DEPTH OF HIA <i>(level of detail)</i> → TIMING OF HIA ↓	Rapid	Intermediate or in-depth	Comprehensive
PROSPECTIVE	→	→	→
Retrospective Element CONCURRENT Prospective Element	↔	↔	↔
RETROSPECTIVE	←	←	←

The direction of the arrows represents the trajectory of the analysis that underpins the HIA. For example, forward arrows (prospective HIA) represent extrapolations into the future or more specifically, projections of how a policy is likely to influence health determinants if it is implemented according to plan. Backward arrows (retrospective HIA) represent the analysis of historic data or, more specifically, that of a policy's 'track record' and the observed effects that it has had on health determinants and health. Dual-headed arrows, where forward and back arrows appear together (concurrent HIA), reflect a policy that is part way through its period of implementation. In theory, there should be sufficient scope to look backwards and explore the health impacts of what has transpired and to look forward making projections as to the likely health impacts of the policy for the remaining period of implementation.

Each period of HIA will now be considered in more detail.

Prospective HIA

Prospective HIA is undertaken prior to the implementation of a policy, programme or project, before or during policy formulation. The emphasis is on scrutinising proposals for their *likely impact* upon health determinants before they are underway. It utilises evidence from policy documentation (proposals, delivery plan other statements of intent), stakeholders and key informants to predict the likely effect of the policy on health determinants and health. There are no users or actual policy beneficiaries to interview, although, it is possible to interview a sample of potential beneficiaries to canvass their reactions and views about the intended policy and its likely impact upon health determinants. However, it is important that the policy's objectives, interventions, outcomes and beneficiaries can be distilled during the HIA process if discernible impacts are to be identified.

Through its assessment of potential (future) health impacts, prospective HIA can contribute to the decision making process by making recommendations about ways in which the policy, programme or project can be modified in order to maximise the potential health benefits and minimise the negative ones. It can also be used as a tool for raising awareness of health issues particularly among those outside the health field (e.g. managers and beneficiaries of regeneration projects).

A prospective HIA would ideally be undertaken at the policy formulation stage (i.e. prior to implementation) and would enable the assessor:

- to take a strategic overview of the bid from a health perspective and to assess the likely health impacts of the overall programme;
- to help identify gaps in the coverage of the delivery plan in order to strengthen it in its early stages;
- to start to make the links between the proposed plan and health status more explicit and to facilitate the process of “joined up” thinking and working;
- to identify broad categories of health determinant/outcome impacts that may be affected by the policy and the likely contribution to health inequalities (*rapid, prospective HIA*)
- in some cases, to estimate the potential health impacts of the policy (*comprehensive, prospective HIA*)
- to begin to consider what data would be needed for monitoring and evaluating the programme, to map current data availability against these requirements and to start to explore ways in which the gaps in data availability could be filled.

The logic behind prospective HIA is that it is undertaken in time to effect changes to an intended policy to prevent any deleterious health impacts arising from it. HIA represents an opportunity, through negotiation, to alter and adjust a policy so that a more positive future in terms of health, emerges. However, in the absence of any solid evidence of the actual performance of the policy under examination, prospective HIA must be based on assumptions about likely implementation. Several scenarios can be identified where an HIA is being undertaken prospectively on a regeneration initiative:

1. The prospective HIA assumes that the policy will be implemented entirely according to its ‘blue print’ or delivery plan;

2. Alternative assumptions are introduced about the timetable for delivery (e.g. a slower or faster implementation is posited for all or selected strategies and the impacts on health are varied accordingly);
3. Alternative assumptions are introduced about the achievement of specific objectives (i.e. implementation failure is assumed and some objectives are removed entirely from the HIA ; the health impacts of partially implementing one or more of the policy's objectives is posited and the impacts on health are varied accordingly);
4. Assumptions are made about the policy out performing its objectives;
5. Assumptions are made about the effectiveness of the policy in reaching its intended beneficiaries (i.e. targeting is effective and all/ most intended beneficiaries are reached/ targeting is ineffective and few/none of the intended beneficiaries are helped);
6. Prospective HIA can also be used to raise awareness and build partnerships, facilitating 'building healthy public policy'; it can also provide a starting point for monitoring and evaluation.

These assumptions might be influenced by ex post evaluations of similar regeneration initiatives implemented elsewhere that demonstrate a reasonable degree of success in achieving aims and objectives. However, as a policy unfolds it may become subject to a number of influences that cannot be easily predicted or foreseen at the outset. Those that affect regeneration initiatives typically include a changing 'external environment', changes in project management, the confounding effects of other policies and regeneration projects, changes in political control, budget cuts, and so on.

A purely prospective HIA offers only a *partial understanding* of how public policy influences health because it focuses attention on the intentions of the policy rather than on the dynamic inter-relationship between policy formulation, implementation and revision. The processes by which the knowledge gained from policy implementation is *used* to modify objectives and change strategies is particularly important as this reflects the ability of an organisation, agency or partnership to 'learn' from experience and, thereby, improve its effectiveness. A limitation of prospective HIA is that it is not able to predict all of these changes and so take account of this 'policy dynamics'. Policy changes will obviously change the health impacts of these policies and this needs to be recognised, especially in the context of evaluating the effectiveness of HIAs.

Pertinent questions on policy dynamics include: What effect are changes in the policy's aims, objectives and strategies likely to have on health impacts? What is the likely scope of these changes? How are the relationships between the stakeholders changing? Are they changing in a way that is likely to have a positive influence on health impacts? Are there clear lessons for health and equity emanating from the policy? How are these lessons being acted upon?

Concurrent HIA

Concurrent HIA is undertaken during the period of implementation of a policy, programme or project and may incorporate elements of both prospective HIA (for those areas where implementation has not yet started) and retrospective HIA (where components of the policy programme or project implementation have been completed).

A concurrent HIA should be able to tap into the body of evidence that is available on what a policy has achieved and the impact that it has had (e.g. on actual beneficiaries) as well as information on policy development and learning. There may be beneficiaries or users who can be interviewed about how the policy has affected them together with other information of its effects (e.g. on key health determinants). But it should also be possible to assess prospectively the likely health impacts that will emerge in the remaining period of its operation

In concurrent HIA there is, in theory, an opportunity for the prospective element of the HIA to be informed or influenced by what has been learned about the past performance and impacts of the policy from retrospective analysis. As such there is also a greater opportunity to consider and respond to the dynamics of the policy. The extent to which aims and objectives have been met, outcomes realised and intended beneficiaries targeted could all be taken into account when assessing likely future impacts on health determinants and health.

Ideally, concurrent HIA should feed in to a policy's monitoring and evaluation strategy and should be used to recommend modifications to implementation processes that impact positively, or negatively, upon health.

A concurrent HIA would enable the assessor:

- to assess the health impacts of the policy to date and, using this evidence as a guide, to estimate the likely health impacts in the future;

- to explore ways in which the potential positive health impacts from this stage onwards could be maximised and the negative one minimised;

Retrospective HIA

Retrospective HIA examines the policy's 'track record' and examines the observed effects that the policy has had on health determinants and health. It draws upon empirical evidence of the ways in which policy has been implemented and the outcomes (intended or otherwise) that can be attributed to it and scrutinises this for health impacts. Unlike prospective HIA there are recipients or users of policy to interview and other evidence of impacts that can be examined and analysed. It differs from policy evaluation in that it looks beyond the *expected* outcomes and explores the *actual* outcomes, including changes to health determinants, health outcomes and the policy process.

Retrospective HIA can be used to complement and to add depth to a monitoring, evaluation, review and revision process inform future policy formulation and contribute to the evidence base about the impact of specific activities, or combinations of activities, on health determinants and health status.

A retrospective HIA would enable the assessor:

- to generate information on the health impacts of recently completed and historic policies (where baseline data could be retrieved);
- to flag up strategies and instruments of policy that have potentially harmful health impacts and to identify those that result in health gains;
- to add to the evidence base on the health impacts of public policy for use in prospective HIAs.

3.1.2 Depth of HIAs

The amount of detail, time and effort that goes into an HIA will vary according to the priority assigned to the HIA, the resources that are available and the speed with which the results are required. Three categories of HIA are represented in Figure 3.1 (rapid, intermediate, comprehensive), although, there are no hard and fast rules as to the length of time involved or the quantity and level of resource inputs for undertaking HIA within each of these categories. However, the depth of an HIA may also depend on the complexity of the policy being studied and how much of the policy

is being included in the HIA (the policy scale) as well as the coverage of the study (e.g. a local, regional or national study).

Rapid HIA

Rapid HIA, also referred to as a 'mini' HIA (Parry, 2001), incorporates a range of approaches. At one end of the spectrum it involves a quick mapping of the health issues which may be influenced by the policy, programme or project in question, based on readily available evidence and expertise. In practice this involves working through an HIA tool - checklist similar to those used for screening policies, programmes and projects for their suitability for the applications of HIA. Examples of such checklists can be found in the Merseyside Guidelines (Scott-Samuel et al, 1998), in British Columbia (Ministry of Health, BC, 1994) and in Sweden (Federation of Swedish County Councils, 1998). The completion of the tool may be a desk-based exercise undertaken by an assessor, or it may be a collective process involving various stakeholders. The utility and validity of the rapid HIA will be largely dependent on the validity and rigour of the tool that is used.

At the other end of the spectrum, rapid HIA can also involve a more systematic appraisal of potential or actual health impacts, based on the same principles as a more in-depth or intermediate HIA and using a similar framework. It can be particularly useful if undertaken early in the policy development process in order to highlight key issues and areas on which a more in-depth HIA should focus. The data collection is normally limited to a documentary analysis and literature review, but may include some involvement with stakeholders and key informants. Its duration for a single assessor ranges from a few days to a few weeks depending on the policy complexity and stakeholder involvement.

Rapid HIA has been shown to be of value, for example, by

- giving an overview of key health issues and priorities;
- providing a rapid appraisal of the potential health impacts of a policy, programme or project;
- acting as a starting point for making recommendations about the ways in which opportunities for health gain can be maximised;
- raising awareness of health issues and gain support for a health-focussed approach in public policy and planning; and
- starting to flag up issues which need to be explored further.

Its advantages are that it is relatively quick and cheap to undertake and requires generic public health skills. In theory it is an approach that could be readily applied by organisations and communities having undergone basic HIA training. It relies largely on qualitative information and views which are readily available within the knowledge and experience of those involved in the process.

Rapid HIA does, however, have limitations. Perhaps the most important is that rapid HIA can only go so far in identifying potential positive and negative health impacts and what can be done to maximise or minimise them and it may, therefore, be only a starting point for flagging up further work which needs to be done. The reliance on qualitative information can also be a problem. Whilst qualitative data can be invaluable - and should, indeed, carry a validity comparable to that accorded to quantitative data - a lack of quantification can too easily be perceived as a weakness in the findings of a rapid HIA and a reason for not acting on them. In a climate where issues of resource allocation are as pertinent as ever it is all too common for decisions about funding to be based on "bottom line" measurements. In addition, by virtue of the methods used it also represents a deductive process, with all the associated limitations. Finally it depends largely on the availability of an evidence-base in a particular policy area to support the HIA process; sadly, this is often not available.

Intermediate HIA

An intermediate or in-depth HIA is more resource intensive than a rapid appraisal or rapid HIA and is likely to include a more comprehensive review of the evidence base, involvement of a range of stakeholders and informants and the collection of primary data. As with rapid and comprehensive HIA it is usually undertaken within a ready made or adapted framework. Although it should be emphasised that, similarly, more detailed HIA should not be expected to provide definitive answers to policy or planning issues, it does have some advantages over a more rapid approach. These include the ability to go some way towards giving a broader and more comprehensive picture of the health issues affected by any given policy, programme or project by combining qualitative and quantitative data and involving a wider range of stakeholders. It can also provide a sound baseline against which processes and outcomes can be monitored and evaluated in order to make an ongoing assessment of the relevant health impacts so that policy and practice can be

adjusted accordingly on a concurrent basis. It also allows a more inductive approach to be taken enabling stakeholders to contribute to the hypothesis building of what and how the policy affects health determinants and health outcomes. On the down side, a more detailed HIA can be expensive and time consuming and it requires a range of specialist skills - disadvantages which must be weighed against the value expected to accrue from a more in-depth approach.

Comprehensive HIA

A comprehensive HIA is all encompassing and more akin to a long-term academic study. It is extremely resource intensive. Whilst it has the advantage of being able to add considerably to the evidence base, unless the HIA can deliver its findings within the policy development stage it may be difficult to use to amend the policy. This is a fundamental issue for HIAs. A prospective, comprehensive HIA should only be embarked on if its findings and recommendations can be delivered in order to contribute to the policy's development before it becomes operational. Similarly the findings from a concurrent comprehensive need to be able to influence the policy's revision, and should be one of the factors determining what depth of HIA is undertaken. Comprehensive HIAs should be able to contribute to the policy option appraisal process.

3.1.3 Duration, Depth and Timing of HIAs

The length of time taken to complete, or *duration* of, an HIA is closely related to:

- the level of detail at which health impacts have been assessed;
- the timing of the HIA in the policy cycle, and the point *within* the prospective, concurrent or retrospective stage;
- the complexity of the policy, programme or project;
- the number of assessors working on the HIA;

These variables are represented in the Figure 3.2, below (the duration range depends on the complexity and number of assessors involved - greater complexity, fewer assessors, longer duration).

Figure 3.2 HIA Duration and Depth

		Duration		
		<2 weeks	2-6 weeks	6wks – 6mth
Depth	Checklist / matrix / document review	Rapid	N/A	N/A
	above + some qualitative fieldwork	Rapid	Intermediate	N/A
	above + detailed qualitative fieldwork + quantitative approaches	N/A	Intermediate	Comprehensive

With respect to the timing in the policy cycle, if it is undertaken before there is a clear idea of the content and nature of the policy, programme or project, a rapid HIA may provide an appraisal of the main health issues likely to be involved, raising awareness of them amongst policy makers and planners. A more detailed HIA *could* be undertaken, but this would involve working with the policy team to elucidate information about the policy (in practice this may involve translating uncommitted ideas into policy reality), and as a consequence would be more time consuming initially. However, if it were undertaken at a later stage of the policy's development, a more in-depth study would also be possible, but would involve less HIA assessor time.

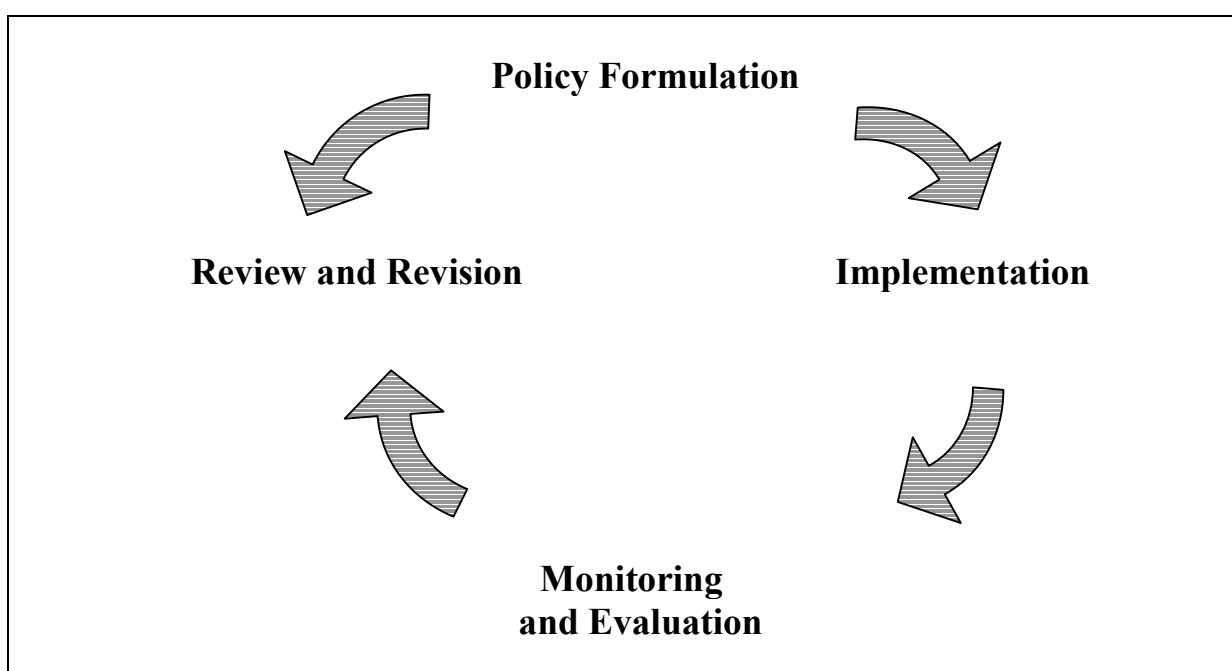
In practice, the scope for carrying out intermediate and comprehensive HIA is likely to be greater where a large body of historic evidence on the policy exists (e.g. in concurrent or retrospective HIA) and less so for policies in their pre-implementation stage. This is not to say that prospective, comprehensive HIAs are precluded, but that the impacts will be potential rather than observed impacts.

None of the categories that (of timing or depth) that appear in Figure 3.1 is rigid and there is often a degree of overlap between them. For example, where a project has already started, the HIA may be partly retrospective, partly concurrent and partly prospective.

3.1.4 HIA and policy development

Despite this blurring of the edges, an understanding of where any HIA fits into this scheme may be helpful in determining its scope and the ways in which it can be used to influence policy development. Policy, programme or project development is a dynamic process encompassing formulation, implementation, monitoring and evaluation as illustrated in Figure 3.3 below and HIA may be undertaken at any point in this cycle – prospectively, concurrently (i.e. during the life course of a policy) or retrospectively.

Figure 3. 3 The policy development cycle



The most effective way to ensure that health features in the formulation, implementation, monitoring and review of policy is to better understand the dynamics of decision making in non health-care public policy and the evidence base used to reappraise and review policy. Thus in shaping the future, and helping to ensure that health is given a prominent position in policy development, it is also necessary to better understand the policy making process and how policies develop, grow and mature over time. In short there is a need to examine the links between theory, policy implementation and organisational learning.

3.1.5 Units of Analysis: The Policy Scale

One issue that needs to be resolved at an early stage is that of the scale or units of analysis for assessing regeneration initiatives and for measuring impacts on health determinants.

The terms “policy”, “programme” and “project” are often used interchangeably although on closer examination they refer to different points within a hierarchy of planned activity.

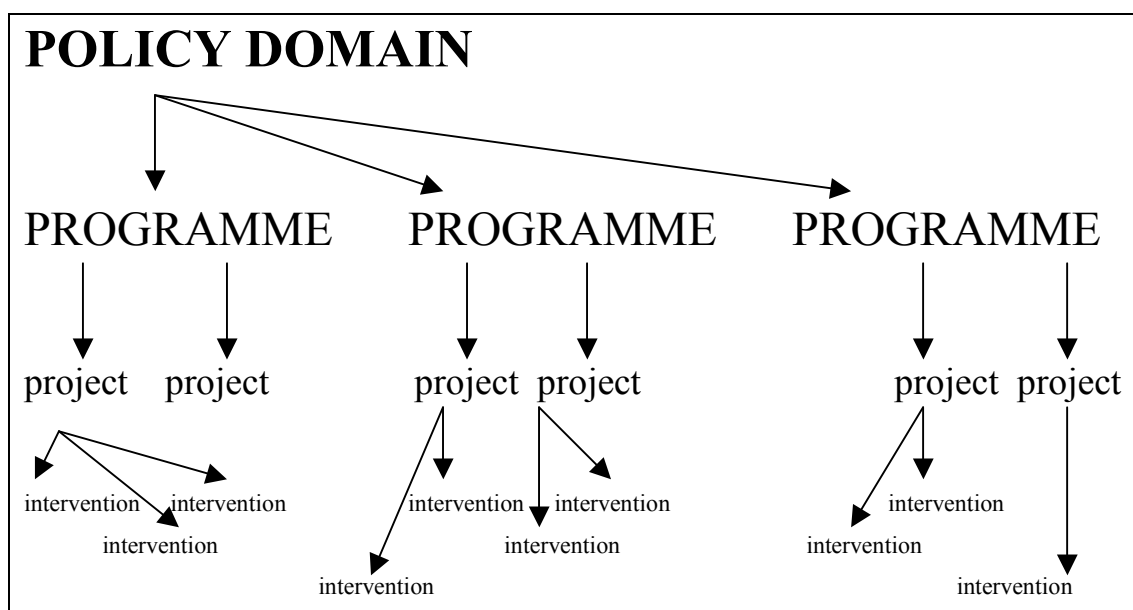
A policy is usually broad in scope and is best defined as “the existence of goals and objectives which aim to achieve a desired result or change”. Policies occupy entire domains of government action. Examples of public policy would include transportation policy, for example Transport 2010, social policy, for example, Opportunities for All, regeneration policy, for example New Deal for Communities, crime prevention policy.

A programme is a component/area of policy that typically comprises a series of actions or projects designed to achieve objectives that form a sub-set of the policy. An example of a programme might be the burglary reduction initiative that is a component part of the government’s crime prevention policy.

Projects are more narrowly defined still, being associated, for example, with one specific client group or key issue. An example of a project might be the Liverpool Target Hardening Scheme that is part of the Home Office’s Burglary Reduction Initiative (the programme), that forms part of the government’s crime prevention policy (the policy domain).

Single Reduction Budget SRB-funded Partnerships are effectively local programmes that form part of the government’s regeneration policy. SRB partnerships have specific goals – such as tackling social exclusion, improving training and employment opportunities for local people, developing greater community awareness and participation, regenerating local housing and so on. They typically comprise of a series of projects, which in turn are involved in implementing various activities or interventions in order to meet their aims and objectives. The full hierarchy of planned activity or the ‘policy scale’ is shown in Figure 3.4.

Figure 3.4 Components of the ‘policy scale’.



An important question at the screening stage for HIA is that of which policy scale to choose. Should an HIA on regeneration focus on an entire policy area, a partnership programme with a mix of regeneration approaches or an individual regeneration project? HIA can be applied at a number of different levels - to policies, programmes or projects. Recent examples of HIAs done elsewhere at these levels include

- at *policy* level, a HIA of globalisation on the population of London (Parsons and Atkinson, 2000) and the Foresight Vehicle Strategy HIA (Abrahams and Doran, forthcoming);
- at *programme* level, a prospective HIA of the regional transport strategy in Merseyside (Fleeman, 1999); and
- at *project* level, an in-depth HIA of an SRB project to address housing issues on an estate in south Greenwich (Barnes and Macarthur, 2000) and four of the case studies in this research.

An entire policy domain (e.g. urban regeneration policy) is likely to embrace a wide range of implementation approaches and instruments in pursuit of its objectives. It is likely to comprise several programme areas (e.g. social, economic, housing, environmental), which collectively make up the policy. The programme areas will, in turn, comprise a number of individual regeneration projects.

It is not unusual for a number of separate projects each of which is working in different ways to improve an area and the quality of life of its residents, to be subsumed under the umbrella of a single 'regeneration partnership'. In terms of assessing the health impacts of partnership arrangements, it is important to bear in mind that the constituent projects are likely to vary in the resources at their disposal, have different implementation timetables, possibly different groups of beneficiaries, employ different strategies and, most importantly, impact upon different health determinants.

The approach taken in this research project has been:

- to identify regeneration partnerships and obtain details of their programmes;
- to examine the range of projects that the partnerships intend to/ have implemented;
- to identify the health determinants most likely to be influenced by each project;
- to choose projects for HIA case studies whose impacts are likely to influence specific health determinant areas (e.g. education, training, employment; the physical environment; community cohesion; empowerment; lifestyle /behavioural change).

The decision to select case study projects with distinct approaches affecting specific health determinants was taken in order to identify the health impacts of clearly defined 'regeneration approaches', for example approaches focussing on regenerating the social or physical environment. This brief was particularly appropriate for a research and development project with the dual objectives of adding to the evidence base on regeneration policy and health and seeking to test, develop and refine HIA tools. However, alternative approaches could have been chosen. One way forward would have been to have chosen the partnership programme rather than the regeneration project as the unit of analysis and to have explored the health impacts of the entire programme. This option was rejected by research team and the project's two advisory groups on the grounds that:

- Attempting to assess the health impacts of several projects simultaneously would have presented significant logistical problems for the fieldwork team because of the difficulty in identifying stakeholders, key informants and beneficiaries for each project;

- The ability to isolate the health impacts of specific regeneration approaches would have been lost;
- The results would be too closely tied to the particular constellation of projects and partnership management approach to have wider applicability.

Despite these problems, there remains a need to test and develop existing HIA methodology on entire policy domains and programmes rather than more narrowly focussed projects. This is an important area for further research.

The selection of case studies for this project is discussed in Section 4.1, below.

3.1.6 Detecting Policy Impacts on Beneficiaries

A common dilemma confronting all forms of evaluation and impact assessment is that of the mismatch between the deployment of the resources, on the one hand, and the scale needed to detect an impact on the other. Assessing the health impacts of a regeneration project does require some thought to be given to the ability of that project to effect change. A regeneration project that fails to tackle the needs of a community through an incorrect diagnosis of the problems that they face (theory failure) or through poor management and ineffective targeting (implementation failure) is unlikely to make any discernible impact. If there is no impact attributable to the project there cannot be a health impact.

Particular problems arise in assessing the impacts of regeneration projects because the resources tend to be targeted into areas and not at individuals. This can lead to leakage of benefits away from intended beneficiaries to unintended beneficiaries. An example of this would be where suburban commuters, who were previously employed, come into the inner city to take up employment opportunities intended for unemployed inner city residents. However, even when the intended beneficiaries are reached by a regeneration project, the budget may not stretch sufficiently to help more than just a fraction of those in need. This is where confusion can set in about the perceived expectations of a policy and the reality of what it can achieve.

Unless the search for a policy impact (including any health impacts that can be attributed to it) is broadly proportional to the resources provided for it and their social

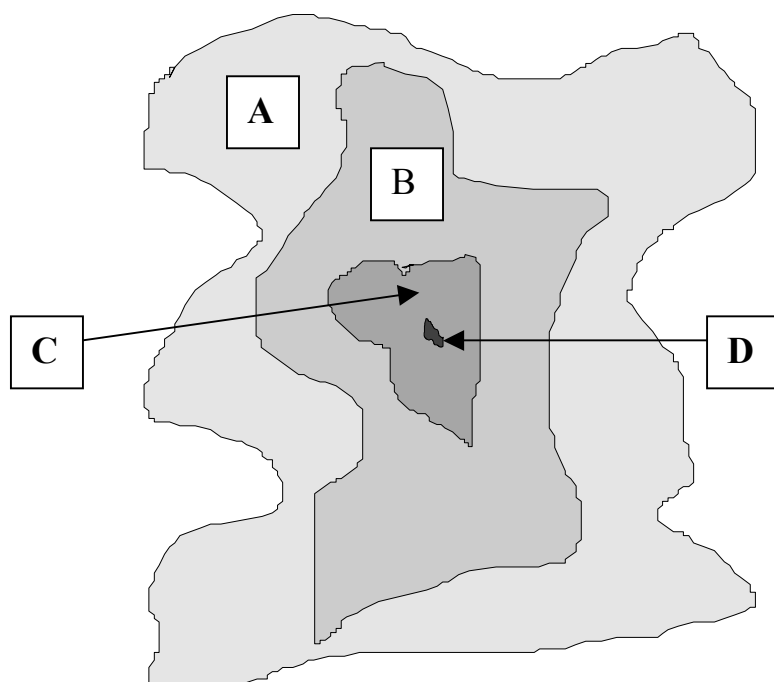
and spatial distribution, there will be a mismatch between the scale of the policy's resources and that used to detect an impact. For example, it would be unrealistic to expect that a modest training programme providing skills to 20 unemployed young people in a deprived inner-city ward alone is going to make a statistically significant difference to the inner city's unemployment rate or even to that of the ward. This is one example of this type of mismatch.

The dilemma surrounding this mismatch is illustrated in the diagram in Figure 3.5. This is a hypothetical map showing the distribution of four population groups. The regeneration project that it is illustrative of this is the Stepping Out HIA Case Study (See Annex 1) which aims to empower socially excluded young women in Bootle through outreach and detached youth work.

The entire map represents all young women aged 11 to 24 in the project's target area. The largest sub-division on the map (Area A in light grey) depicts women aged 11 to 24 who are neither vulnerable nor deprived. The second largest subdivision (Area B, in darker grey) shows young women aged 11 to 24 who are on the margins of deprivation but who are at low risk in terms of vulnerability (e.g. in terms of long term unemployment, peer pressure, anti-social/criminal behaviour). Area C (in dark grey) represents young women in the age cohort who are vulnerable, deprived and lack self-confidence but who have *not* received any assistance or support from the project because sufficient resources have not been available to help everyone in need. The smallest sub-division (Area D, in very dark grey) represents young women aged 11 to 24 with levels of vulnerability and need equal to those in the neighbouring area (Area C) but who have directly benefited from the detached youth work project by engaging with youth workers and through participation in activities and special events involving trips out of the area (i.e. residential).

When assessing the impacts of the youth work project, including those on health determinants, one would expect the greatest impact to be on Group D and a much smaller impact on Group C through diffusion effects and spill over (e.g. where those assisted by the project behave more responsibly and positively to their peers and family outside of the project's influence). However, one would not expect a significant impact on Group B and none at all on Group A. Attempting to measure an impact on the entire area (A+B+C+D) would be unreasonable and would be a clear case of not matching the scale to detect the impact with the deployment of resources.

Figure 3.5 The mismatch between resource deployment and the scale for detecting impacts



The implications of the resource / impact scale mismatch for conducting HIA are that:

- The identification of actual/likely beneficiaries and stakeholders in respect of the project (i.e. the affected communities) needs to accord with what the project has/is likely realistically to achieve;
- The anticipated health impacts (both positive and negative) must be realistic given the capability of the project to effect change;
- The distribution of health impacts (both within a defined population and geographically) should be broadly in line with the social and spatial distribution of the actual/ likely project beneficiaries.

3.1.7 Measuring the impacts of policy on health inequalities

The conceptual underpinnings of HIA include, not only, an adherence to a socio-environmental model of health, but also, an acceptance that considerations of equity and the reduction of health inequalities should be a desirable outcome of public policy.

The meaning of health inequalities and the approaches to measuring them require closer scrutiny. A key question is that of inequality between whom? In other

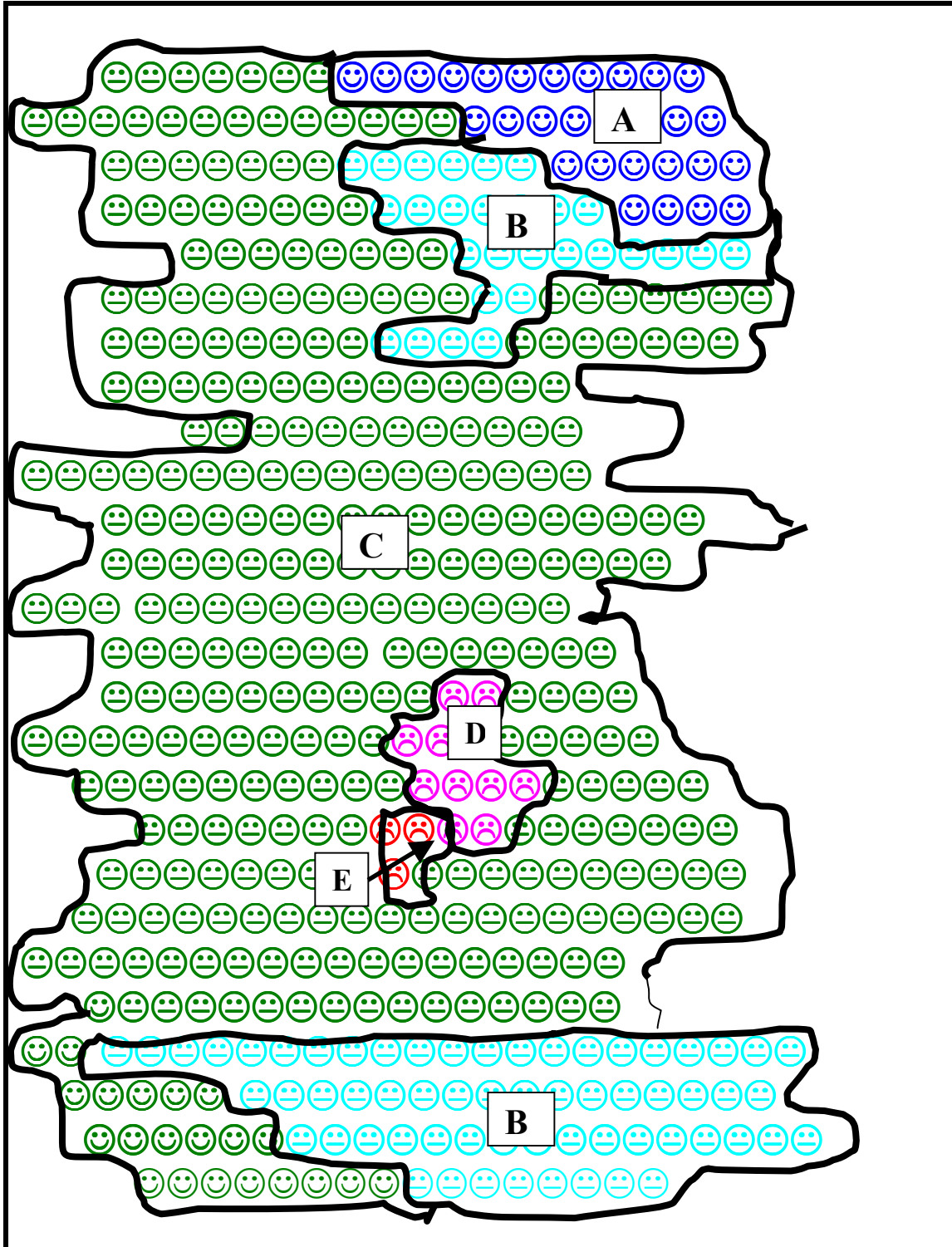
words, which is the base group (i.e. the affected community) and which is the comparison group? (i.e. the group with whom health status is being compared). These questions are not as straightforward as would appear at first sight.

Figure 3.6 is an attempt to depict a range of scenarios that might apply in assessing health inequalities in a HIA. The deep blue smiling faces (Group A) represent the affluent minority within the community. The light blue faces (Group B) are people on above-average incomes. The majority of green indifferent faces (Group C) represent the majority of the population who are on average or near average incomes. The pink sad faces (Group D) are those who experience disadvantage but who, for various reasons (e.g. inefficient targeting, residence in the wrong area) do not benefit from regeneration projects. Finally, the much smaller group of sad red faces (Group E) are disadvantaged people who are being reached and who may well be on an upward trajectory in terms of their health and quality of life.

The question is, should a HIA examine changes in the health gap between:

- (i) disadvantaged policy beneficiaries (Group E) and disadvantage non- beneficiaries (Group D) ?
- (ii) or between disadvantaged policy beneficiaries (Group E) and those on average incomes (Group C) ?
- (iii) or between the disadvantaged (Group E) and the privileged (Groups A and B) ?
- (iv) or between any other set of combinations?

Figure 3.6 Inequalities between whom ? Some alternative base and comparison groups



The effect of these alternative base/comparison group combinations for assessing the impact on health inequalities are that:

- different data sets would be needed for each comparison;
- some of these data sets might be readily available, others hard to obtain;
- each set of comparisons might imply different policy responses in order to reduce the observed inequalities (i.e. halving the gap between the highly disadvantaged and the marginally deprived might be easier than halving that between the highly disadvantaged and the very privileged);

One approach may be to consider the base group, for example 'vulnerable' 11-25 year old young women against similar groups across the socio-economic spectrum of groups within a defined spatial area. Alternatively, if communities have undergone health equity audits, a HIA may want to comment on its impact on population sub-groups identified as at the advantaged/disadvantaged ends of the spectrum.

3.2 Data and Evidence

The purpose of HIA whether prospective, concurrent or retrospective is to gather information on the health determinants affected by and the actual/potential health impacts to emerge from policy, programme or project activity. Just as there are different levels of HIA, there are also different levels of information about the context within which the policy operates and its attributable impacts. These different levels of information can be described as data and evidence. Data refer to quantities or descriptions of entities that are relevant to the phenomenon / system of interest. Data become evidence when they are processed and analysed in such a way as to shed light on the workings of a process or a phenomenon and/or outputs that emanate from it. Thus, evidence is a much stronger term than data and refers to information that can be used to demonstrate probable causal links between two or more phenomena. All evidence is derived from data, but not all data becomes evidence.

HIA relies on evidence to inform its estimates of likely health impacts. However, not all of the information that is gathered for the purposes of HIA is evidence nor is it always strictly relevant. An abundance of basic statistics and data on

demography, social conditions, land use, mortality and morbidity and other factors does not necessarily amount to a robust ‘evidence-base’ for an HIA unless links can be established between these factors, the policy and changes in a health determinant (e.g. employment, housing, income levels, etc).

One case where data often do not equate to an evidence base that can be used to assess a policy’s health impacts is that of community and area profiling – commonly performed in the early stages of an HIA. This can arise where the data assembled for a profiling exercise do not relate directly to the context within which a policy has been implemented (e.g. because they cover an area that is far too large) or are unconnected with the impacts that the policy is having on the community (e.g. because they describe a largely unaffected population). This is much more of a problem when assessing the health impacts of relatively small-scale geographically targeted regeneration initiatives than broader national policies that consume larger volumes of public resources.

Where intelligence is indicative of processes affected by policy it will form part of the evidence base. However, there are different types of evidence that can be utilised in an HIA and these will vary by the timing of the HIA and its depth. For example, prospective HIA will draw more heavily on evidence of relationships between policy and health determinants from the research literature (such as it is) whereas, in addition to this, in a retrospective HIA there will be opportunities to collect primary data on such relationships from stakeholders and project beneficiaries. However, the extent to which quantitative analyses of these data are statistically reliable will depend on the number of cases (small numbers will be subject to random fluctuations) and the time period that they cover.

Several categories of data and intelligence can be defined. These include:

- General background data;
- Data on policy activity;
- Evidence on policy achievements;
- Evidence on achievements of other similar policies;
- Evidence on social reactions to policy;
- Evidence on changes to the physical environment as a result of policy;
- Evidence on the health impacts (direct and indirect) of the key health determinants influenced/likely to be influenced by the policy

There will be variations in the degrees of quantification of different types of evidence. Some will come from empirical research featuring quantitative analyses,

some will be derived from statistics in censuses and surveys and others will be generated using qualitative techniques. Qualitative data has a dual role in HIA. Firstly, it plays a 'hypothesis-generating' role, enabling the assessor/s to construct a model of the relationship between the policy, health determinant and health outcome changes, based on the data provided by stakeholders and key informants. Secondly, as part of an iterative process, they complement and add detail to the 'hard' data, which that tests the relationship model between policy, health determinants and health. It provides local perceptions and insights into how health determinants influence the health and well being of the local population, especially that of vulnerable groups. Data sources include local people themselves, including representatives from vulnerable groups, as well as key stakeholders.

Each of the main categories of data and evidence is now described. For a more extensive discussion on the availability and use of routine data sources for HIA see Hansell and Aylin, 2000.

1. **General background data (selected examples):**

Demography – for example, population totals, age structure, gender, ethnic status, housing – from the population census. Some local authorities will have their own small area population estimates and projections that update the census.

Disadvantage – for example, indices of poverty and deprivation for wards from the Index of Multiple Deprivation 2000 (DETR, 2000). Local authorities and the Benefits Agency will have access to employment figures, including unemployment rates and welfare benefit claimants by small area.

Health status - for example, *vital statistics*, such as birth and fertility rates, Standardised Morality Ratios (SMRs) for all and selected causes of death, perinatal and postneonatal mortality rates, Years of Lost Life or Burden of Disease. Data on *Morbidity*, for example, use of health services, and *Well Being*, for example, mobility and self esteem, also needs to be included. Health service data is the primary source of information, for example hospital admission rates. Well being data is more likely to have been compiled as a result of a special local or national survey, for example Quality of Life or Health and Fitness Surveys. This may be available through a Healthy Cities/Health For All unit, Health Action Zone team or from the agency commissioned to conduct the survey. Data on lifestyle should be available from primary care data or from national surveys.

Education - for example, provision of early years education and education attainment levels available from the local education authority. Data on adult

education and training will be available from the Lifelong Partnerships being established, and the Training and Enterprise Councils.

Families and carers - Data sources on family and community life, for example on family and social support, caring responsibilities, social networks, may be harder to come by; however, some information may be available as a result of special local or national surveys, for example, surveys on carers.

Crime and Disorder – There is no single consistent information source on crime and disorder for local communities. However, the Crime and Disorder Audits led by local authorities and police constabularies will provide local crime data, although the quality and content will vary from place to place.

Table 3.1 lists the background data sources that were sought or used for community profiling in the case studies of this HIA Project.

Table 3.1 Background data sources identified through the case studies (*Italics = not readily available/accessible data*)

HEALTH STATUS/ DETERMINANTS	INDICATORS	DATA SOURCES
Physical morbidity	<ul style="list-style-type: none"> • Prevalence of chronic disease, e.g. for heart disease, asthma • Prescribing rates • Limiting long term illness 	<ul style="list-style-type: none"> • Hospital admission rates for heart disease, asthma attacks • Prescribing data • Census data
Psychological morbidity	<ul style="list-style-type: none"> • Prevalence of mental health problems, eg depression, post traumatic stress disorder • Prescribing rates 	<ul style="list-style-type: none"> • Primary care data • GHQ 12 scores. ONS • Prescribing data
Physical, psycho-social well being	<ul style="list-style-type: none"> • <i>Mobility, confidence, self-esteem</i> 	<ul style="list-style-type: none"> • Allied Dunbar Health & Fitness survey • Local Quality of Life surveys
Health-related behaviour	Rates of: <ul style="list-style-type: none"> • Smoking prevalence • Alcohol consumption • Drug misuse; • <i>Diet and Activity</i> 	<ul style="list-style-type: none"> • Health & Lifestyle survey • Primary Care data • Attendance rates at sports centres, City Council data
Income	<ul style="list-style-type: none"> • Unemployment rates • Households in receipt of benefit • <i>Households below ½ national income</i> • <i>Regeneration activity, eg business start-ups</i> 	<ul style="list-style-type: none"> • Benefit Agency data • Business development, City Council data
Education and Training	<ul style="list-style-type: none"> • <i>Uptake of adult education</i> • <i>Availability/uptake of vocational training opportunities</i> 	<ul style="list-style-type: none"> • Adult education enrollment data, City colleges • Training scheme data
Family & Community Life	<ul style="list-style-type: none"> • <i>Social integration/social exclusion rates</i> 	<ul style="list-style-type: none"> • Social capital data, Public Health, City Council
Crime	<ul style="list-style-type: none"> • Recorded burglary rates • Recorded repeat burglary rates 	<ul style="list-style-type: none"> • Recorded crime data, Merseyside Police
Housing	<ul style="list-style-type: none"> • Void rates 	<ul style="list-style-type: none"> • Housing data, City Council
Transport	<ul style="list-style-type: none"> • <i>Travel modal split (public:private transport)</i> 	<ul style="list-style-type: none"> • Transport data, Merseytravel
Leisure Activities	<ul style="list-style-type: none"> • <i>Uptake of leisure services</i> 	<ul style="list-style-type: none"> • Attendance data at libraries, arts events, City Council data
Public Health Policies & Services	<ul style="list-style-type: none"> • Use of primary care services • <i>Use of psychological/psychiatric services</i> 	<ul style="list-style-type: none"> • GP consultation rates, Primary care data • Referral rates for PTSD/crime-related PTSD, depression

The utility of these data for HIA will vary. They can, in some cases, provide a broad context for the HIA by being used to compare local characteristics and trends (e.g. in mortality, morbidity, age groups, unemployment, deprivation) with the national picture. However, these data become far more useful in an HIA where sub-groups of the population, most likely to be influenced by a policy, can be defined socially and geographically and monitored over time. This is when background data potentially becomes part of the evidence base. However, this requires appropriate data that can be broken down into sub-sets and skill in dis-aggregating them to more precisely fit the spatial and social limits of a policy's influence.

2. Data on policy activity:

- Aims and objectives
- Main strategies/ interventions
- Resources
- Target areas
- Intended beneficiaries

A detailed review of the final draft of the policy proposal is an important starting point. This should detail aims, objectives, implementation process, resources, target population and area, monitoring, review and evaluation processes. The HIA commissioners should provide access to this documentation, which should be elaborated on by the policy co-ordinator, and other policy officers, as key informants.

3. Evidence on policy achievements

- the performance of policy in achieving aims, objectives and strategies;
- the degree of success in targeting intended beneficiaries;
- interactions with other policies

Evidence on a policy's performance or likely performance is directly relevant to HIA. A prospective HIA, through its recommendations, may be in a position to influence the policy blueprint or its implementation in the early stages. Prospective HIA will utilise evidence on the likelihood of policy performance to estimate health impacts. It is recognised, however, that this is only part of the story as health impacts might also emerge, albeit of an unexpected nature, where there is implementation failure (i.e. the policy is only partially implemented) or mis-specification of the problem (i.e. where the aims and objectives are inappropriate). It needs to be noted

however, that unless HIA becomes an integral part of the continuous monitoring and development of a policy (i.e. where it can shape a policy's progress through time), its predictions will be dependent upon the policy being implemented as planned.

By contrast, in concurrent and retrospective HIA, there is an opportunity to gather evidence of actual performance by tapping into the results of existing monitoring and evaluation exercises.

4. Evidence on achievements of comparable policies

A (retrospective) review of related national and international policies may also provide useful contextual and comparative information. Access to these may be through a range of data sources, e.g. the policy departments themselves, official (Government) publications or from the data services. The main ones appear in Appendix 3.1. In some cases, key public policies may have been subject to an independent evaluation at a national or local level, e.g. Safer Cities Programmes, which may provide useful, reliable data.

5. Evidence on social reactions to policy

- Views, opinions and attitudes of stakeholders and key informants and changes therein;
- Changes in social networks/ social cohesion
- Experiences (e.g. lifestyle changes and behavioural responses to policy and events);
- Social and demographic change (e.g. selective out-migration, social polarisation that results from the partial or full implementation of a policy);

This is a broad category that includes the perceptions and attitudes of stakeholders and key informants 'delivering' and at the 'receiving end' of policy alongside more quantitative evidence of the impacts of policy on the social and demographic composition of communities. The former is gathered through surveys, interviews and focus groups whilst the latter is more likely to involve secondary analysis of data sets on employment, housing, migration and demographic change.

Key informants and stakeholders should be individuals with a direct involvement in / or with expertise knowledge of the relevant policy, although, the criteria used to select them should stipulate that they fall into one or more of the following categories, namely:

- Representatives from the communities affected by the policy, including vulnerable groups;
- Policy commissioners;
- Policy providers;
- Relevant health professionals;
- Representatives from relevant voluntary sector organisations involved in/with knowledge of the policy;
- Technical experts with a detailed knowledge of the policy discipline (general or specific elements) and, where possible, the policy discipline and health impacts;
- Key decision-makers

Key informants will often provide more detailed data about the nature and extent of the health impacts that a policy may generate in specific conditions. They may also provide an insight into how the policy contributes to these changes in health determinants and health status.

6. Evidence on changes to the physical environment as a result of policy

Housing data on, for example the quality, standards and suitability of local housing, is available from housing departments and housing associations; the national survey on housing conditions is also a useful source of data. Data on the physical environment, such as air and water quality is available from, local environmental health departments, water authorities, the Environment Agency, and National Rivers Authority. Some information on transport systems, for example transport modes and access to transport, may be available from local authorities or passenger transport authorities.

7. Evidence on the health outcome impacts (direct and indirect) of the key health determinants influenced/likely to be influenced by the policy

Much of this evidence will need to be drawn from existing research relating the key health determinants to health. This is certainly the case for prospective HIA where the opportunity to collect primary data on links between health determinants and health does not exist. However, in concurrent HIA and, to a greater extent, in

retrospective HIA, there is likely to be more scope for exploring these links through the collection of primary data from stakeholders and project users, although, tapping into the existing evidence base will still be very important, particularly where the volume of primary data collected is insufficient to draw any firm conclusions.

The latter involves, firstly, identifying the key health determinants influenced by the policy (e.g. employment, housing, crime) and secondly, conducting reviews of the published literature on the direct and indirect health impacts of the determinants in question. It is useful to start with a general, non-specific search in order to define:

- the different aspects, or sub-components, of a key health determinant that impacts on health status and on other health determinants;
- the mechanisms through which the determinant impacts upon health;
- the degree of certainty associated with the relationship between the determinant and health outcome (meta analyses and systematic reviews give greater certainty);
- the extent to which particular groups within the population are more susceptible to health impacts than others (i.e. ‘vulnerable’ groups’).

There is a wide range of health determinants that could be included in the search; these relate to the main categories of influence on health – personal/family circumstances, social environment, physical environment, public services and public policy. For example, health-related behaviour, employment, income, education and training, crime and violence, family and community life, air and water quality, open space, housing conditions, transport systems, leisure services, health and social care. Many of these health determinants are influenced through regeneration initiatives.

Triangulation

The impact of policy on health determinants is the result of a complex web of inter-relationships between individual characteristics (e.g. age, gender, education, socio-economic status, lifestyle, behaviour), community-level variables (community facilities, levels of deprivation, social cohesion, demography, culture) and policy activities. The evidence for each of these factors will inevitably come from different sources. Triangulation involves bringing the different strands of evidence together so that the likely health impacts of the policy can be identified and prioritised. This is not any easy task. In attempting to do so, the following need to be resolved:

- How to decide what is or is not important in terms of health determinants;
- How to weigh the contributions of the various stakeholders;
- How to translate background data (the community profile) into ‘evidence’ and incorporate them into the analysis;
- How to balance the qualitative and quantitative data;
- How to include evidence from the literature and other research and reconcile this with the other evidence.

To assess any potential health *inequalities* that may arise as a result of the policy, the differential impacts on the population as a whole and on groups identified in the documentary/policy analysis as being potentially vulnerable, also needs to be assessed. Thus, the evidence-base also needs to include information with respect to each of these vulnerable groups as well as the population as a whole to establish the disparities between them and to assess the extent to which these will change as a result of the policy.

Various methods, based broadly on the Merseyside Guidelines approach, have been tested through the case studies. These are assessed in each of the case study reports and discussed, in more general terms, below.

4. Regeneration Case Studies

4.1 Project Selection Methods

One of the principal aims of the research has been to develop a greater understanding of the impact on health of non-health focused regeneration initiatives that do not have improving health as a prime (or even a subsidiary) aim. Thus in selecting candidates for case studies it was decided to exclude projects with a specific focus on improving health and/or health care services. Furthermore, the deadline for the research and resource constraints meant that the fieldwork had to be restricted to a manageable number of regeneration case studies. It was proposed to limit the case studies to a maximum of five to keep the research within the bounds of feasibility.

In order to explore the impact of regeneration policy interventions on health determinants and to minimise the confounding effects of multi-objective programmes, the project-level was chosen as the scale of analysis for the case studies. Thus the case studies were individual regeneration projects within regeneration partnerships rather than entire programmes or policies. All but one were Single Regeneration Budget funded initiatives based on Merseyside.

A set of criteria was drawn up and the case studies were selected on the basis of the following:

- the aims, objectives and strategies of the project;
- the relevance of the project to specific health determinants;
- the stage of the project's implementation (i.e. is it at the beginning, the middle, or at/beyond the end of its life?);
- the feasibility of selecting a particular project (for example availability of key contacts, access to data, etc);
- the availability and ease of collection of baseline data;
- the ease of identifying client groups/ people affected by the project (by geography or shared interest);

- timeliness (i.e. the need to select projects which fit in with the research study's timescale and which allow for some degree of flexibility);
- helpfulness and accessibility of the partnership;
- willingness and ability to provide the research team with requested information for the duration of the project.

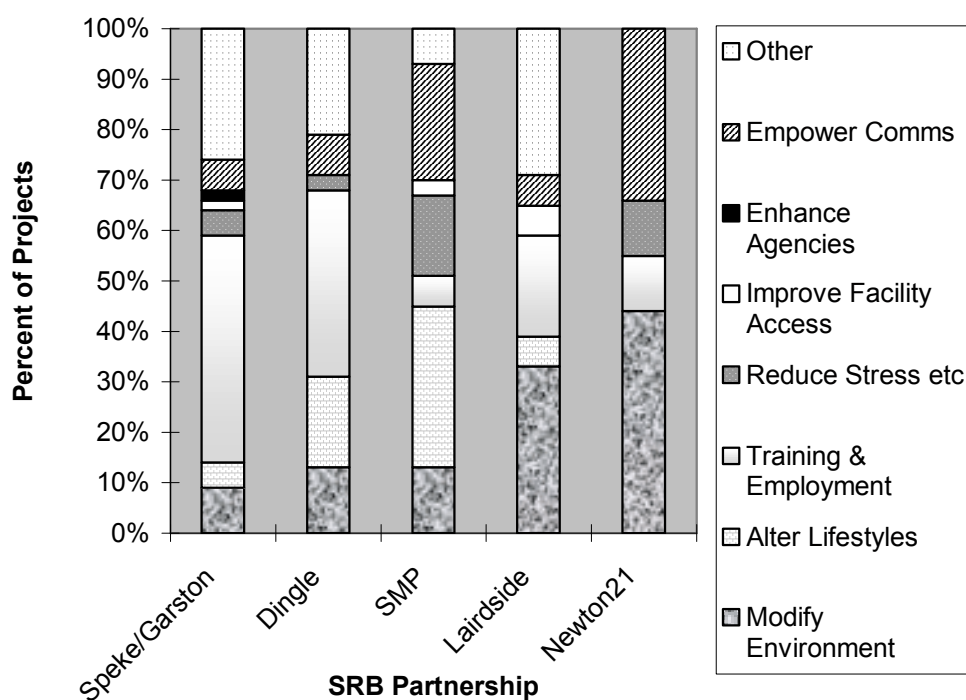
It is important to emphasise that while these criteria were deemed appropriate for the purposes of this research and development project, they do differ from other criteria (e.g. the Merseyside Guidelines) that are used by decision makers and resource managers to screen projects for HIA. The reason why this is the case is that the current piece of research is an academic study where the primary objective is to develop HIA methodologies for investigating the likely health determinant impacts of different forms of regeneration activity. The research team were not constrained by factors that would normally affect practitioners such as the demands on the evaluation/HIA budget and the opportunity costs of undertaking HIAs, political priorities or the need to restrict HIAs to high cost projects in order to justify the cost in carrying them out. There was no attempt in the study to vary the research time expended on a case study according to the size or the cost of the project in question. Each case study was allocated an equal share of the research time, although, the prospective HIAs took less time to complete because they were intended to be rapid assessments. Some of the criteria used to select projects, especially those relating to the compliance and helpfulness of the partnerships reflected the need to gain access to people and information without undue delay. This was seen as a priority by the research team. It should not be construed as biasing the selection of projects because the latter was not intended to be a representative selection of projects based on a probability sample. The need to choose projects on the basis of their relevance to health determinants outweighed any arguments in favour of drawing upon a random sample of projects

The first stage in the selection process was to identify the diversity of Single Regeneration Budget-funded partnerships on Merseyside in terms of the range of projects contained within their programmes. In general, partnerships which were more heterogeneous in terms of their project mix (e.g. those implementing a wide range of social and physical regeneration measures) were more likely to impact upon a greater

number of health determinants than those with a narrower focus. (e.g. initiatives concerned solely with housing improvements or specialised training).

Figure 4.1 compares selected SRB partnerships on Merseyside in terms of the likely number and type to health determinants upon which the constituent projects are likely to impact. Variations in the budget, scope, emphasises and duration of SRB partnerships will inevitably lead to differences in the number of projects contained within a partnership's programme and their overall diversity.

Figure 4.1 SRB Partnerships by project mix



The separate projects or interventions within each partnership's programme were identified. Altogether, 158 separate interventions were examined for the partnerships that appear in Figure 4.1 and their relevance to specific health determinants was determined by identifying where the main thrust of activity was headed. For the majority of interventions, this was relatively straightforward as many projects had either a predominantly social, economic, educational/skills, capacity building or environmental emphasis. Up to one quarter of the interventions could not be easily classified because they adopted two or more approaches and potentially would influence several health determinants.

Of the partnerships featured in Figure 4.1, the Speke-Garston Partnership had the greatest number of separate, easily distinguishable projects (65) and the Newton21 Partnership the least (9 separate projects). The largest single category of projects in Speke-Garston was concerned with skills enhancement and training schemes in order to improve the competitiveness and employability of the local labour force. By contrast, the emphasis of projects implemented by Newton 21 was on housing improvements (modifying the physical environment) and on capacity building within the local community (empowerment). Other schemes, such as the Safer Merseyside Partnership, contained projects concerned with altering life styles and behavioural change (for example, youth diversion schemes) and reducing the fear of crime (e.g. town centre safety and anti burglary initiatives).

All SRB partnerships on Merseyside funded under Rounds 1 through 5 (some 45 in all) were profiled in this way to establish their project mix and the likely health determinants affected by them. The selection criteria were then applied to identify SRB projects that met the requirements of the study, namely, to undertake 5 Health Impact Assessments, 2 prospectively and 3 concurrently targeted at schemes likely to influence different health determinants. A shortlist of 6 projects was drawn up and appears in Table 4.1.

For practical reasons it was necessary to make some changes to the original selection as the research got underway. After careful consideration, a decision was taken to drop Tranmere Urban Village from the study because of the size and complexity of the proposed programme. This was a £37 million mixed land use development involving a large number of policy interventions including the conversion of vacant properties into a mixture of workspace and housing units, the improvement of retail premises, shops and housing, and the development of new housing for rental and owner occupation. As such, it would have required a considerable amount of data and evidence gathering to assess. The demands on the study, in terms of the research input that would have been required, could not be justified given that this was intended to be a rapid and prospective health impact assessment of a 'project' seeking to modify the physical environment. Eliminating Tranmere Urban Village would still leave a physical environmental regeneration project on Merseyside to assess, namely, the Southport scheme to improve private rented dwellings.

In place of Tranmere Urban Village, a decision was taken to introduce, into the study, results from a rapid and prospective health impact assessment carried out by one of the research collaborators on the Aylesbury Estate New Deal for Communities initiative in north London. This contained a strong physical regeneration component centred around the upgrading and refurbishment of the housing stock. The advantage of including it in the study was that it was a testing ground for the development and application of rapid HIA techniques directed at a non-health regeneration scheme.

The second and final change to the case study shortlist was the dropping of the proposed 'concurrent HIA' on the Dingle SRB employment service (the so-called 'Dingle Opportunities' project). This decision was influenced by the difficulties experienced in gaining access to project managers in Dingle.

The final list of case study projects (which included 4 of the 6 on the original list) appears in Table 4.2.

Table 4.1 Initial list of Merseyside regeneration projects selected for HIA

<i>PRIMARY HEALTH DETERMINANT</i>	SRB PROJECTS Awaiting Implementation (PROSPECTIVE)	SRB PROJECTS Underway or Completed (CONCURRENT / RETROSPECTIVE)	TOTAL NUMBER OF PROJECTS SELECTED
MODIFY PHYSICAL ENVIRONMENT	TRANMERE URBAN VILLAGE <i>(LAIRDSIDE REGENERATION INITIATIVE)</i>	IMPROVING PRIVATE RENTED DWELLINGS <i>(CENTRAL SOUTHPORT SRB)</i>	2
REDUCE STRESS, ANXIETY, FEAR	None Selected	BURGLARY REDUCTION <i>(SAFER MERSEYSIDE PARTNERSHIP)</i>	1
ALTER LIFESTYLES, BEHAVIOURAL CHANGE	None Selected	DETACHED YOUTH WORK TARGETING YOUNG WOMEN <i>(STEPPING OUT PARTNERSHIP)</i>	1
ENHANCE EMPLOYMENT PROSPECTS (SKILLING/ TRAINING)	None Selected	OPPORTUNITIES SHOP FOR EMPLOYMENT ADVICE <i>(DINGLE SRB PARTNERSHIP LIVERPOOL)</i>	1
EMPOWER COMMUNITIES	PARENTS' ADVICE CENTRE <i>(CENTRAL SOUTHPORT SRB PARTNERSHIP)</i>	None Selected	1
TOTAL	2	4	6

Table 4.2 Final list of regeneration projects selected for HIA

<i>PRIMARY HEALTH DETERMINANT</i>	SRB PROJECTS Awaiting Implementation (PROSPECTIVE HIA)	SRB PROJECTS Underway or Completed (CONCURRENT / RETROSPECTIVE)	TOTAL NUMBER OF PROJECTS SELECTED
MODIFY PHYSICAL ENVIRONMENT	AYLESBURY ESTATE <i>(NEW DEAL FOR COMMUNITIES)</i>	IMPROVING PRIVATE RENTED DWELLINGS Concurrent <i>(CENTRAL SOUTHPORT SRB)</i>	2
REDUCE STRESS, ANXIETY, FEAR	None Selected	BURGLARY REDUCTION Retrospective <i>(SAFER MERSEYSIDE PARTNERSHIP)</i>	1
ALTER LIFESTYLES, BEHAVIOURAL CHANGE	None Selected	DETACHED YOUTH WORK TARGETING YOUNG WOMEN Concurrent <i>(STEPPING OUT PARTNERSHIP)</i>	1
ENHANCE EMPLOYMENT PROSPECTS (SKILLING/ TRAINING)	None Selected	None Selected	0
EMPOWER COMMUNITIES	PARENTS' ADVICE CENTRE <i>(CENTRAL SOUTHPORT SRB PARTNERSHIP)</i>	None Selected	1
TOTAL	2	3	5

4.2 Summary of Regeneration Project Profiles

The characteristics of the five regeneration projects selected as HIA case studies are summarised in Table 4.3. A brief description of each is given below.

Stepping Out was a two year funded youth development project, which aimed to empower vulnerable young women, developing their confidence and self-esteem through opportunities in education and training, arts and other cultural pursuits, and by providing advocacy, one-to-one/group support and guidance. It received £161,122, including £9,000 capital funding over the two years from the Bootle Maritime SRB Partnership. Although the project was targeting young women from the Derby and Linacre wards in Bootle, some young women from other areas were also involved in *Stepping Out*.

Parenting 2000 aims to promote positive parenting by providing information, advice and support to parents and children who live within the central Southport area. Based in a central, purpose-converted building, the Parenting 2000 one-stop-family shop also provides training opportunities for parents, creche facilities with a soft toy play area, a confidential ‘listening ear’ and a family mediation service. SRB funding of £325,000 has been provided for three years from the Central Southport Partnership as part of the Parents’ Project; in addition, bids to various charities and public funding bodies have successfully raised further income.

Target Hardening is a Merseyside-wide project focusing on those neighbourhoods given priority status under European Objective One criteria. Co-ordinated by Safer Merseyside Partnership, the project aimed to reduce the incidence of repeat burglary to domestic properties. It targeted both vulnerable properties – burglary ‘hot spots’ areas - and householders, for example older people, people on benefits, women, repeat burglary victims, and involved installing security measures such as new door and window locks. The case study looked at *Target Hardening* in the Parks area of Liverpool. *Target Hardening* was initially a five-year SRB-funded project with a budget of £1 million to secure 6000 domestic dwellings.

The *Private Rented Dwellings* project is part of the Central Southport SRB Partnership and is involved in working with private landlords to make risk

assessments of houses in multiple occupation and providing partial grants for housing improvements. The project was allocated £257,000 of SRB monies which must be matched with private finance and each year aimed to improve approximately 120 units of the estimated 2,000 houses in multiple occupation in the central Southport area. The criteria for risk assessment and for decisions on whether a grant is allocated are based on housing fitness standards and, although redecoration and other costs are not covered, some private finance may be levered in for other improvements such as, for example, redecoration and provision of carpets and furnishings.

The *Aylesbury Plus* case study draws on a rapid, prospective HIA of the Aylesbury Plus New Deal for Communities (NDC) Delivery Plan which formed the basis of a bid for social and economic regeneration programmes over a ten year period. The aim of the programmes is to achieve, by 2010, a comprehensive regeneration of the Aylesbury estate in Southwark, south London, which is home to around 10,000 people and is one of the most disadvantaged parts of London in terms of a range of social and economic indicators. It was decided to include this case study as it offered an opportunity to explore the extent to which methodologies being developed in Merseyside were transferable to other areas of the country and to programmes rather than projects. The case study was also carried out entirely prospectively as a “desk based” exercise relying on documentary evidence rather than fieldwork and it was done within “real” timescales so that the findings of the HIA could be incorporated into the delivery plan before it was submitted to the DETR for funding.

The table below summarises key information from the regeneration projects as described in each of their delivery plans:

Table 4.3 Summary of Regeneration Project Profiles

Project name and start/end date	Aim	Interventions	Target Population	Budget	Outcomes
<i>Stepping Out, 1997-1999</i>	Empower vulnerable young women by developing their confidence and self esteem.	<ul style="list-style-type: none"> • Training, skills development • Advocacy and one-to-one support • Project work • Residentials 	Young women, 11-25 years old, resident in Linacre/ Derby area, socially excluded, involved in/at risk of becoming involved in criminal behaviour	£161,122	<ul style="list-style-type: none"> • Reduction in crime in area • Increased opportunities/ uptake of education, training • Increased uptake of employment • Enhanced quality of life of beneficiaries
<i>Parenting 2000, 1999-2002</i>	Promote positive parenting	<ul style="list-style-type: none"> • One-stop-shop with information for families • Parenting skills and generic training • Family support/media tion service • Creche • Toy library • Volunteer recruitment/ training 	Parents, children resident in Dukes and Cambridge wards of central Southport	£325,000	<ul style="list-style-type: none"> • Increased opportunities/ uptake of training • Increased opportunities for work experience, volunteering • Facilitate personal and family development
<i>Target Hardening, 1995-2000</i>	Reduce incidence of repeat burglary to domestic properties	Install security measures - new door/window locks, alarms	Vulnerable properties and householders in 'Pathways' areas of Merseyside, for example Parks, Liverpool	£1 million	<ul style="list-style-type: none"> • Reduction in incidence of repeat burglaries • Reduction in fear of crime • Increase in local employment opportunities

<i>Private Rented Dwellings, 1999 - 2002</i>	Improvement of privately rented dwellings in multiple occupation	Risk assessment of properties and provision of partial grants for housing improvements	Privately rented properties in multiple occupation which do not meet housing fitness standards	£257,000	Improved housing quality
<i>Aylesbury Plus, 1999 - 2010</i>	Comprehensive regeneration of a housing estate over ten years	A range of programmes within five themes: <ul style="list-style-type: none"> • Community and neighbourhood renewal • Economic activity • Education • Health • Crime 	Residents of the Aylesbury estate (10,000 residents in 2,800 dwellings)	£234 million	<ul style="list-style-type: none"> • Reduction in long term unemployment • Improved level of skills and educational attainment • Reduction of barriers to unemployment for lone parents • Improved community based activities and networks and participation in leisure activities • Reduced crime rates • Improved stability of the population and perceptions of the estate • Increased participation by residents in decision making by local service providers

4.3 Fieldwork: overview of methods used in the case studies

The methodology of the case studies reflected a 'broad perspective' to HIA, and although there was some adaptation of the approach, the 'Merseyside Guidelines for HIA' were generally followed. The variations in the approach took account of the individual project needs, as well as the depth and timing of the HIA. A brief description of the fieldwork adopted in each case study appears in Table 4.4, below.

As a comprehensive, concurrent HIA, *Stepping Out* collected both primary and secondary data using various qualitative and quantitative methods. The overall process emphasised an inductive rather than a deductive approach. The qualitative data collection methods included undertaking a review of documents associated with the project, official records and reports, as well as unofficial reports, about the area, community profiling, observation of stakeholders, unstructured and semi-structured interviews and semi-structured focus groups with key informants and stakeholders. A comprehensive review of the published literature was also completed searching IBSS and other social science electronic databases; this was undertaken after the data collection from stakeholders.

Data collection methods included a questionnaire survey with existing *Stepping Out* clients. Content analysis and SPSS version 10 were used to analyse the qualitative and quantitative data, respectively. The Super Profiles geodemographic classification was used to identify the types of residential neighbourhood from which clients of the project were drawn. Finally, the key informants and stakeholders were involved in prioritising the health impacts emerging from the analysis. The development of recommendations was not, in this case, done in collaboration with stakeholders.

Parenting 2000, a predominantly prospective, comprehensive HIA, involved an in-depth review of the research literature on parenting techniques searching psycINFO and social sciences databases at BIDS and Web of Science, respectively. This was undertaken at the end of the fieldwork with stakeholders and was used to identify additional anticipated health determinant and health impacts of this

Southport-based project. Fieldwork also included area profiling (using relatively up-to-date information from a local survey), semi-structured interviews with key informants and stakeholders (project staff, 'experts' in this particular field and potential clients) and a semi-structured focus group with clients and non-clients. Quantitative methods included a structured, self-administered questionnaire survey with *Parenting 2000* clients. The same analysis methods and programmes were used as above. From this range of data, evidence of potential and actual impacts were identified by the assessor, followed by their prioritisation.

Once again, Super Profiles was used in the inequality analysis to identify the residential characteristics of project clients and what these revealed about the nature of the project's targeting of resources (i.e. how far it served mainly disadvantaged communities or other groups).

Finally, the assessor developed recommendations for discussion with stakeholders.

Target Hardening was a comprehensive, largely retrospective HIA. Once again, the methodology included a documentary review, profiling, semi-structured interviews (face to face and telephone) with stakeholders (project workers and other workers associated with the project). A literature review was also undertaken simultaneously with the fieldwork, searching IBSS, Medline, CAB Health databases. The timing of the HIA and nature of the project lent itself to undertaking a structured, questionnaire survey with *Target Hardening* clients (i.e. victims of crime whose homes had been made secure).

Once all the data were collated, the assessor identified the evidence on likely impacts. Recommendations were developed by the assessor for discussion with the stakeholders.

The remaining two case studies (*Central Southport Private-Rented Dwellings* and the *Aylesbury Plus New Deal for Communities*) were undertaken as rapid HIAs. The assessment of likely health impacts for private-rented dwellings was carried out by the assessor taking into account baseline information about the target area and evidence on the health impacts of housing from the literature. The project manager and members of the SRB Partnership Board facilitated this process by providing

insights into the operation of the scheme and contextual information through face-to-face interviews.

Because this was a rapid HIA, no attempt was made to identify or to interview potential users/ beneficiaries of the initiative. The fieldwork primarily entailed documentary analysis supported by interviews with those overseeing the implementation of the project

A similar procedure was adopted in the Aylesbury Plus New Deal for Communities case study (Annex 5) but as this was a purely prospective HIA, most of the research involved an analysis of policy documentation. A qualitative assessment, was carried out based largely the evidence presented in the overall Plan and for each of its strategic themes and gaps were identified in the coverage of health issues within the Plan. The analysis did not include a profile of the likely affected community.

Table 4.4 Comparative methodology of Case Studies

	Stepping Out	Parenting 2000	Target Hardening	Private Rented Dwellings	New Deal for Communities
<u>Qualitative methods</u>	Review of Documents (Delivery Plan; Monitoring Reports Evaluation Study) Observation, Semi-struc. interviews, Focus groups, Literature review.	Review of Documents (Delivery Plan; Monitoring Reports) Semi-structured interviews, Focus groups, review.	Review of Documents (Delivery Plan; Monitoring Reports, Evaluation Study) Semi-structured interviews, Focus groups, Literature review.	Review of Documents (Delivery Plan; Monitoring Reports) Community Profile Interview with project manager	Review of Documents (NDC Proposal) Qualitative assessment of Each of the strategic themes within the NDC Plan
<u>Quantitative methods</u>	Facilitated semi-structured questionnaire survey with SO clients.	Self-administered, structured questionnaire survey with P2K clients.	Facilitated, structured questionnaire survey with TH clients.	Limited to analysis of demographics for community profile	None used
<u>Data sources</u>	SO workers, clients, other local professionals literature, documents.	P2K workers, clients, potential/clients, other local professionals, literature, documents.	TH workers, clients, other local professionals, literature, documents.	Project manager Literature, documents	NDC Plan only
<u>Evidence of impacts</u>	Mainly qualitative and some quantitative	Mainly qualitative and some quantitative	Qualitative and quantitative	Qualitative	Qualitative
<u>Inequality analysis</u>	Limited Geo-demographic profiling of project users to identify targeting	Limited Geo-demographic profiling of project users to identify targeting	Qualitative	Qualitative	Qualitative
<u>Prioritisation of impacts</u>	Stakeholders (workers and clients)	Assessor using information from literature and the initiative	Assessor using information from literature and the initiative	Assessor in Conjunction with SRB Project Manager	Assessor drawing upon information in the NDC plan

4.4 Key Findings from the Case Studies: summary of health determinant/health outcome impacts

Detailed accounts of the findings of each case study are contained in Annexes 1 to 5.

The following account summarises the findings from the case studies using the 'Merseyside Guidelines' approach to categorising the impacts on health determinants as impacts on:

- Biological factors
- Personal, family circumstances or lifestyle
- The socio-economic environment
- The physical environment
- Public services
- Public policies

Each case study identified a range of actual or potential health determinant impacts. These are set out in Table 4.5, below.

In general, these impacts reflected the main objectives of the regeneration project or programme. However, in addition to these expected primary health determinant impacts, a number of secondary or even tertiary health determinant impacts were identified. The secondary and tertiary health determinants are, in effect, 'determinants of determinants'; they provide a more detailed understanding of the *nature* of the relationship between the project or programme, primary health determinants and their subsequent affect on health outcomes. It was also apparent that the case studies were impacting, both positively and negatively, on other health determinants *not* identified in the projects' proposals.

Table 4.5 Grid showing potential/observed health impacts by case study

Category of health determinant*	Case study				
	Stepping Out	Parenting 2000	Target hardening	Private rented dwellings	New Deal for Communities
<i>Personal or family circumstances and lifestyle</i>	<p>Increase in self esteem and positive mental health leading to:</p> <ul style="list-style-type: none"> • ↓in anxiety, depression • ↓eating disorders • ↓self harm • ↑coping strategies <p>Better employment prospects / employability</p> <p>Reduction in risk taking behaviour</p> <p>Improvements in family relationships/ functioning</p>	<p>Enhance positive parenting, improve family relationships leading to:</p> <ul style="list-style-type: none"> • ↑ mental health/well being • ↓ mental illness, self harm, abuse • ↓ risk-taking behaviour by children • ↑ in clinical outcomes <p>Better employment prospects / employability through uptake of volunteering opportunities</p> <p>Improve parental confidence and self-esteem leading to:</p> <ul style="list-style-type: none"> • ↑ enhanced decision-making • coping strategies 	<p>Improvements in confidence and self-esteem of victims</p> <p>Reduction in risk-taking and avoidance behaviour as a result of reduced psychological distress/fear of crime</p> <p>[Increase in distress of family members]</p>	<ul style="list-style-type: none"> • Lower levels of disposable income because of higher rents • Improved self esteem & knock on effects re. training, education and employment 	<ul style="list-style-type: none"> • Change in the population structure • [Change in the population structure] • Lower levels of stress • Improved self esteem • Increased uptake of education and training opportunities with knock on effects for employment • Reduction in risk taking behaviour and teenage pregnancy

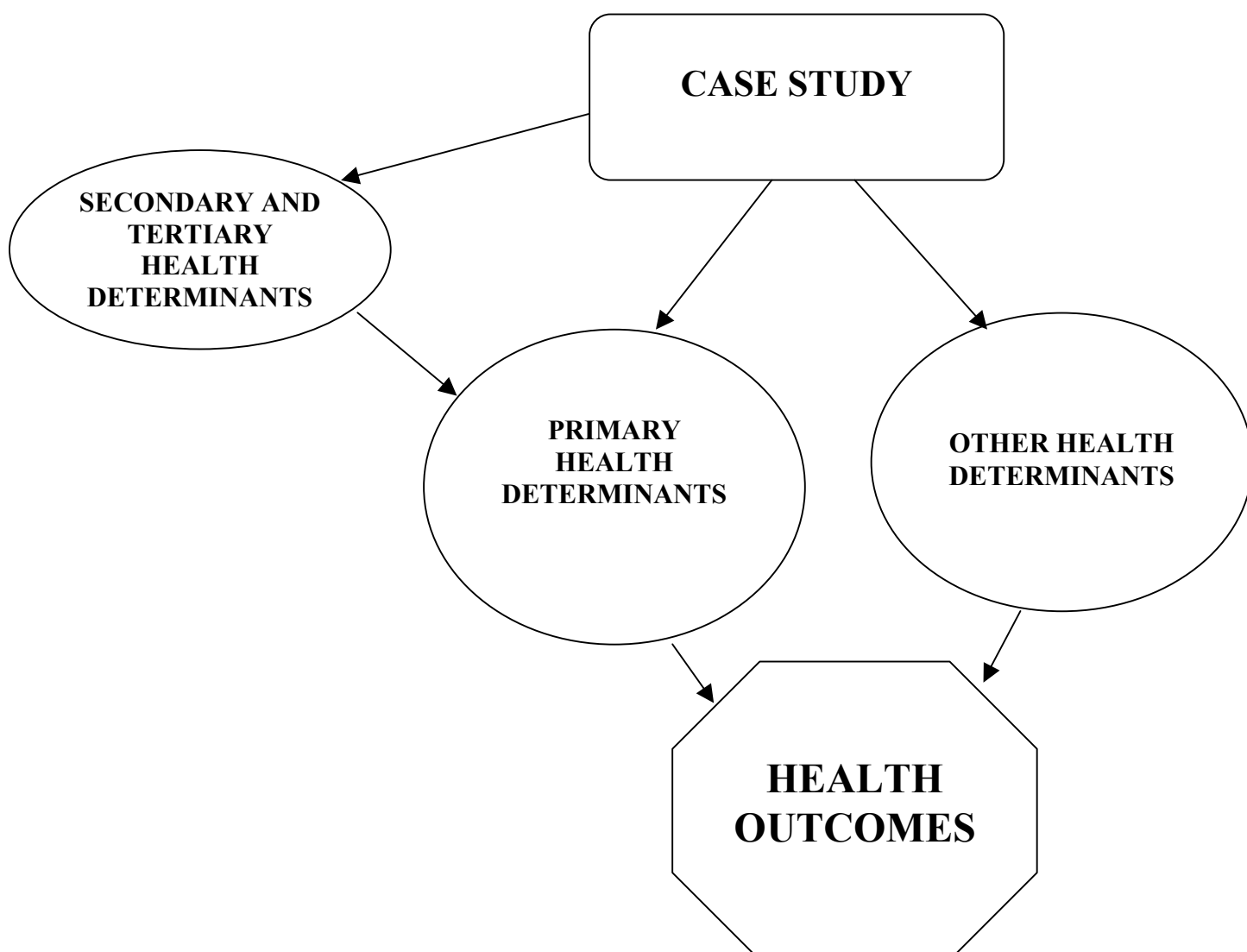
Category of health determinant*	Case study				
	Stepping Out	Parenting 2000	Target hardening	Private rented dwellings	New Deal for Communities
<i>Social environment</i>	<p>Enhanced support networks</p> <p>Better management of peer pressure</p> <p>Access to education/training opportunities</p> <p>Some ↑ in community involvement/empowerment</p> <p>Some ↓ in fear of crime</p>	<p>Increased social networks/support</p> <p>Access to education/training opportunities</p> <p>↓ anti-social and offending behaviour (from positive family relationships)</p> <p>↓ in adolescent homelessness</p>	<p>Reduction in burglary and repeat burglary rates leading to:</p> <ul style="list-style-type: none"> • ↓ in psychological distress of majority burglary victims • ↓ in fear of home-based crime • [↑ in fear of crime outside the home] <p>[Significant minority of victims remain socially excluded]</p> <p>Improved community support</p> <p>[Displacement of crime to other areas] [Change in the type of crime]</p>	<ul style="list-style-type: none"> • [Displacement of current tenants] 	<ul style="list-style-type: none"> • Improved social cohesion • Increase in uptake of leisure activities • [wider gap between different sectors of the population]
<i>Physical environment</i>			Improved appearance of properties and physical condition of	Lower risk factors for accidents in the home	Improved housing quality Reduction in crime and

			<p>properties leading to:</p> <ul style="list-style-type: none"> • ↓ in home-related accidents • ↓ in CVD risk • ↓ in respiratory disease risk 	Improved housing quality [increased stress and higher risk of accidental injury during the period of building works]	<p>the fear of crime</p> <p>Reduction in levels of stress</p> <p>Reduction in risk factors for RTAs</p> <p>[Increase in stress and risk of accidents during the period of building works]</p> <p>improved air quality</p>
<i>Public services</i>	Access to services	Gateway to other services	<p>Improved partnership working between services</p> <p>Better public relations between the police, other agencies and the public</p>		<ul style="list-style-type: none"> • Community based programmes for elderly and disabled people • Improved health and social care facilities • Better integrated planning and service provision • [increased pressure on existing resources]
<i>Public policy</i>			<p>Influence on Burglary Reduction across Merseyside, Merseyside HAZ, Drug Action Plan.</p>		

NOTES for Table 4.5 : Taken from the Lalonde / Labonté models as adapted in the Merseyside Guidelines. **Red = high priority impact; Blue = medium priority impact; Green = low priority impact.** Positive and negative health impacts: Negative health impacts are shown in brackets. Example: [self esteem] All other potential health impacts are positive. Example: self-esteem

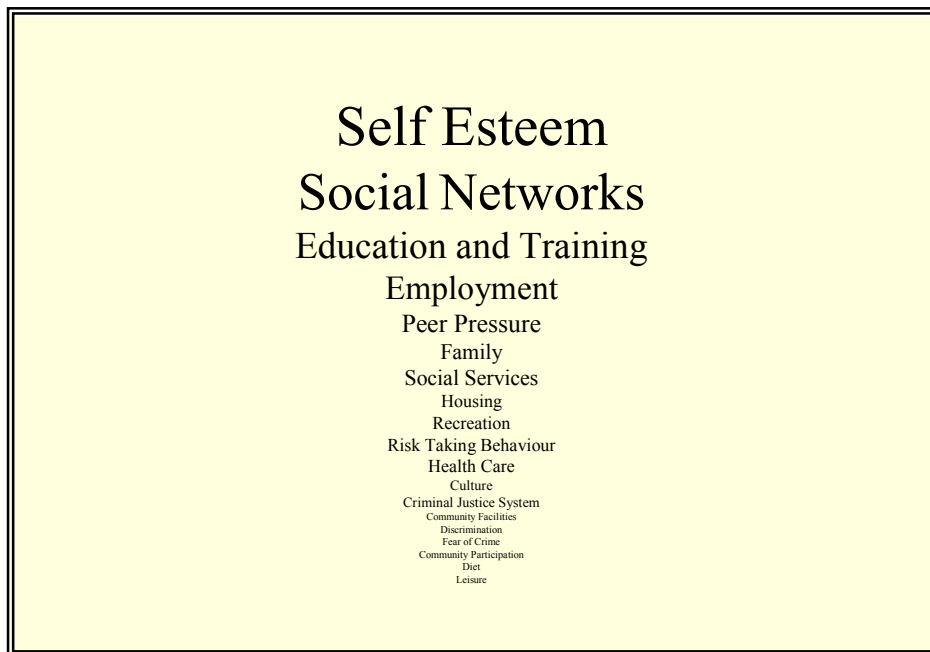
These relationships are depicted in Figure 4.2 below. It should be noted that there were no impacts on biological factors - some impacts relating to the migration of population sub-groups were identified as impacts on 'biological factors', although this category in the Merseyside Guidelines might be more appropriately labelled 'socio-demographic structure'. Similarly, there were very few impacts on public policy, which in itself is interesting and may indicate an unconnected, top-down approach in regeneration project development and implementation.

Figure 4.2 The relationship between a case study, health determinants and health outcomes



Stepping Out revealed that, although key informants, stakeholders and project users varied in their perceptions of the health determinants most impacted upon through one to one support and group activities for young people, there was also a lot of common ground. The table below, derived from the information in the Case Study Report lists those factors impacted upon by the project in descending order of importance. The larger the font size, the stronger the consensus.

Figure 4.3 Key Health Determinant Influences of Stepping Out



Stepping Out's main impact was **increasing the self-esteem** of some of the young women involved in the project. **Self esteem was regarded not only as** an important health determinant in its own right, but also as a factor that has a significant effect on other health determinants. Thus it was regarded as closely linked to immediate positive impacts on mental health and well being, including the **development of positive self-concepts and identity, reductions in self-harm, eating disorders, anxiety and depression.** A young woman who has low self esteem and low feelings of self efficacy will be less likely to take action that would protect her health and well being. Longer-term benefits might include reducing the susceptibility of degenerative diseases such as heart disease and various cancers.

Other important mechanisms through which detached youth work impacts upon the health of vulnerable young women were perceived to be through the development and enhancement of social networks, education and training and the securing of employment. There was some evidence for the increase in employability of some young women involved in the project. Once again a longer term health impact of this would be a reduction in heart disease and other health risks associated with unemployment. **The development of positive coping strategies** relating to peer pressure was also seen as a high priority impact with benefits to the mental well being of participants. The literature review in particular identified **potential prevention or reduction in risk-taking behaviour**, such as smoking, alcohol and drug misuse, and unsafe sex, through the improvements in self-esteem and negative peer influences. *It was felt that this could be further enhanced by the project.* There was also some evidence for **improvements in family relationships/functioning**. *It was felt that this could be further enhanced by the project.*

Stepping Out also promoted the psychosocial well being of some participants by **enhancing and building new social networks and support systems**. Enabling young women to build up social networks was regarded as being very important because many of them do not have adequate social support.

The project facilitated **access to education and training opportunities** for participants, increasing the opportunity for improving their educational attainment levels, which is associated with better health outcomes. There was some evidence of **increased community involvement by and empowerment** of Stepping Out young women. *It was felt that this could be further enhanced by the project.* There was also some evidence of **reductions in the fear of crime** from both participants and residents. *It was felt that this could be further enhanced by the project.*

With respect to local services Stepping Out was seen to impact on these by **increasing access to and use of a range of public services**, such as housing, health and social care as well as the criminal justice system.

The inequality analysis revealed that although Stepping Out had been successful in targeting the project to vulnerable young women, it was not possible to compare the relative health impacts of the project on different population sub-groups.

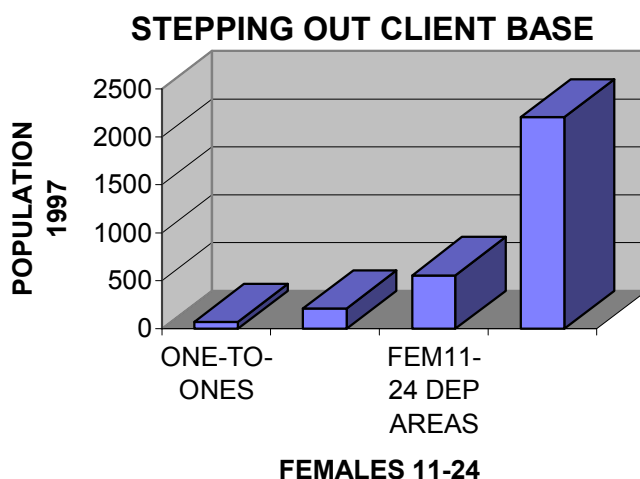
The Stepping Out Case Study also explored how far the project was likely to have assisted all vulnerable young women resident in its area of operation. This was approached by calculating the number of females aged 11-24 within the project's

target area and then applying two sets of criteria to estimate the number of vulnerable young females within this population. Identifying 'females 11-24 at risk' as simply those living in the most deprived enumeration districts (the 'loose' definition) generated 1,756 vulnerable young women. Tightening this up so that only females aged 11-24 living in wholly unemployed households located in the most deprived enumeration districts were vulnerable reduced the number to 559. In the former scenario of 1,756 vulnerable females, Stepping Out through helping 280 young women had in theory reached 16% of the population in need. In the latter, where the number in need was put at 559, the proportion helped by Stepping Out rose to 50%. These two scenarios are shown in Figure 4.4 below which has been reproduced from the Stepping Out Case Study.

The actual numbers in need are likely to be in between these two estimates at around 1,150. This would place Stepping Out as helping around one third of those in need. Whichever scenario is accepted a small scale project such as Stepping Out would be missing a substantial number of those at risk. The implications for Health Impact Assessment is that where positive impacts on health determinants are likely as a result of a spatially targeted social regeneration project (e.g. detached youth work), their coverage will be limited to a rather small group of beneficiaries. Even if all of these beneficiaries are disadvantaged people living in disadvantaged areas, the effect on health inequality is likely to be negligible because of the small numbers involved. This raises some fundamental questions about the feasibility of carrying out Health Inequalities Impact Assessments of small-scale regeneration projects.

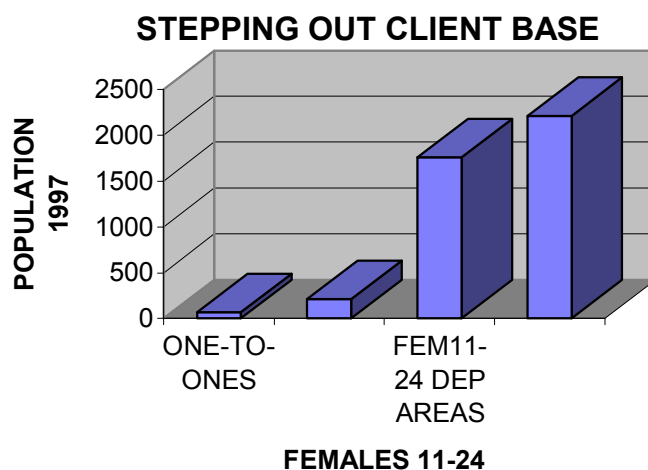
Figure 4.4 Proportion of all vulnerable young women helped by the Stepping Out Project

The Stepping Out Client Base and Females aged 11-24 living in Linacre/ Derby wards: Narrow definition of vulnerability



Notes: FEM11-24 DEP AREAS = Females aged 11-24 in households without an employed adult living in deprived areas within the two Stepping Out Wards (Super Profile Lifestyles 9 and 10); TOT FEM 11-24 = Females aged 11-24 living within the two Stepping Out Wards.

The Stepping Out Client Base and Females aged 11-24 living in Linacre/ Derby wards: Broad definition of vulnerability



Notes: FEM11-24 DEP AREAS = Females aged 11-24 living in deprived areas (Super Profile Lifestyles 9 and 10) within the two Stepping Out Wards; TOT FEM 11-24 = Females aged 11-24 living within the two Stepping Out Wards.

Parenting 2000's main impact was the potential to **enhance positive parenting** and to **improve family relationships** as a whole. The project was

observed to **improve the confidence and self-esteem** of parents, including **enhancing decision-making skills**, as well as **developing coping strategies** to deal with stressful events at home. Evidence especially from the literature supports these case study impacts. It suggests the impacts on mental health outcomes range from **enhancing the psychosocial health and well being of parents and children to preventing severe mental illness and abuse**, including:

- anxiety and depression,
- child abuse,
- the risk of on-set of mental illnesses such as schizophrenia, and suicidal tendencies.

Other mental health outcomes attributable to the quality of family relationships include the **impact on risk-taking behaviour** by children and adolescents - the better the quality of the relationship between parents and children, the less likely they are to indulge in risk-taking behaviour such as smoking, alcohol misuse and unsafe sex - and the impact of future/intergenerational relationships. There is also some evidence that the quality of family relationships can affect the **incidence of clinical conditions** such as asthma, treatment compliance and clinical outcomes. Through volunteering and work experience opportunities, Parenting 2000 was predicted to help **increase the employability** of volunteers as well as providing pathways to continuing education and training. Other potential impacts included **increasing the educational attainment levels and expectations of children, enhancing family adaptability, reducing work stress/dissatisfaction for parents and enhancing marital relationships**.

Parenting 2000's drop-in, creche and listening ear services were shown to **increase social networks and support** with the associated benefits to mental well being. The predicted impacts from the planned training courses were that this would **develop awareness and skills, facilitate opportunities to further education and training** as well as **enhance the confidence and self-esteem** of participants. There is also evidence that positive parenting programmes such as Parenting 2000 have the potential to **reduce anti-social and offending behaviour** of young people by developing positive family relationships. The project may also have an impact on **numbers of homeless adolescents**, by reducing some of the family relationship 'triggers' that can lead to young people leaving home prematurely.

A key impact of Parenting 2000 was to **provide a gateway to other services and resources**, including health, welfare rights and advisory services, through the provision of a 'one stop shop' information service.

The inequality analysis suggested that the targeting of the project needs to be more focussed on the most vulnerable families, for example young parents, single parents, families on low income, families under stress, culturally isolated families. Without this there may be a tendency for parents already motivated towards 'family improvement' to take up services and to widen the gap between groups of different socio-economic circumstances.

The differences in targeting between Stepping Out , where targeting had been reasonably effective, and Parenting 2000, where it had not reached those most in need, can be seen by comparing the two bar graphs in Figure 4.5., below.

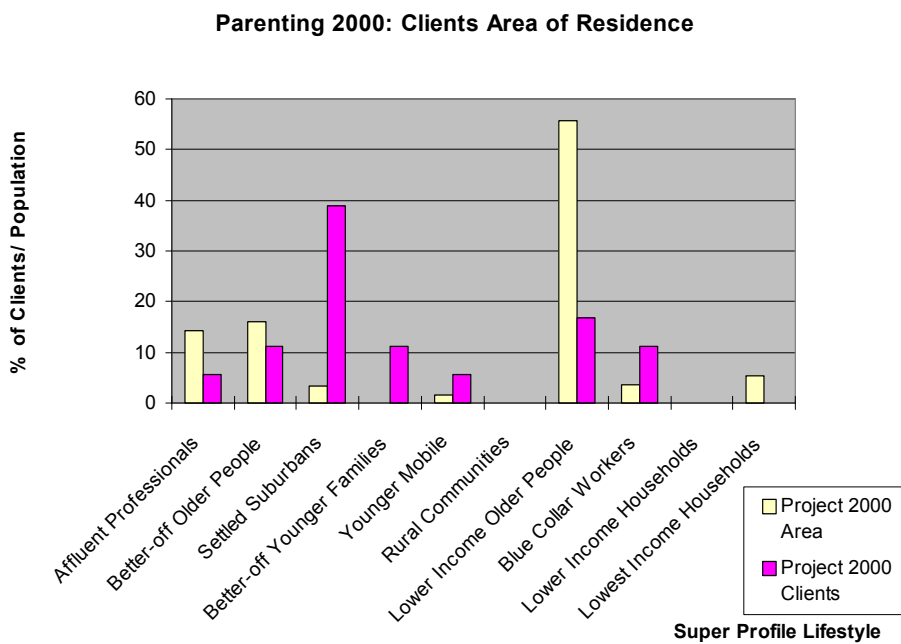
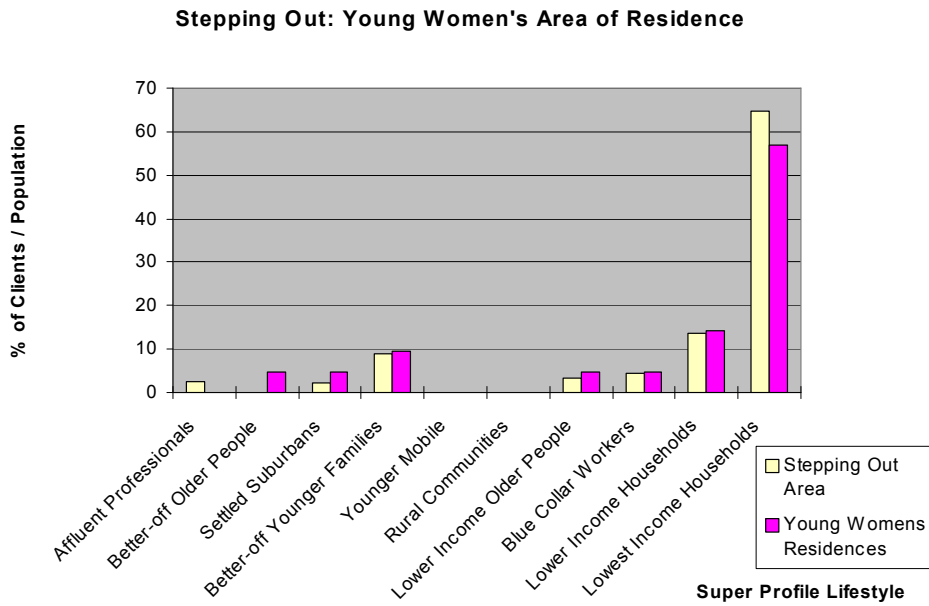
Using the residential postcodes of project beneficiaries, it is possible to show the types of neighbourhood from which the clients of Stepping Out and those of Parenting 2000 came and to contrast this to the social profile of the projects' target areas.

Of the 27 young people who filled out Self-Assessment Questionnaires for Stepping Out, 21 gave their full unit postcode of their home address. Fifteen of these young people (72%) lived in the two most deprived Super Profile Lifestyles, 'Lowest Income Households' (57%) and 'Lower Income Households' (14%). A further four lived in the next most deprived areas. Only 2 of the 21 lived in relatively affluent areas.

The neighbourhood profile of the Stepping Out clients was very similar to that of the Project's catchment area. This suggests that Stepping Out had been targeting young people living in the most deprived areas as well as those displaying vulnerability at the individual level. Thus it is not unreasonable to assume that any positive health impacts among this group arising as a result of exposure to the project would be a step in the right direction as far as reducing health inequalities is concerned.

By contrast in the case of Parenting 2000, the majority of clients came from non-deprived neighbourhoods and bore very little relationship to the socio-demographic profile of the Central Southport Regeneration Partnership area.

Figure 4.5 Regeneration Project Beneficiaries: Areas of Residence
a) Stepping Out Clients and b) Parenting 2000 Clients



The take up of regeneration project benefits by relatively advantaged ‘users’ was also raised as an issue on the Private Rented Dwellings Case Study. The nature of this particular regeneration scheme meant that landlords had to come forward to apply for improvement grants. It is likely, therefore, that these are the “better” landlords

and, although grants are not made unless they are warranted, some of the landlords renting out the properties that are in the worst condition may not apply to become part of the scheme. This would have the effect of improving living conditions for some vulnerable people but not for others, thereby increasing inequalities between them.

Target Hardening's main impacts were the **reduction of domestic burglary rates and repeat burglaries** on homes that had been made more secure. There was also strong evidence that there had been a **reduction in burglary rates for the Parks area as a whole**. There is a growing literature on the psychological distress of burglary on its victims; some victims are both more likely to be victimised and/or adversely affected by the victimisation. Burglary reduction schemes such as Target Hardening **reduces the 'fear of home-based crime'** for the majority of householders once their properties are secured, but may slightly **increase the 'fear of crime outside the home'** with an increased awareness of crime as a whole. A minority of victims may still feel distressed even after being made more secure. The project generally **reduced the levels of psychological distress** resulting from the burglary, **improving confidence and self-esteem**. The effects on behaviour were to generally **reduce risk-taking and avoidance behaviour**.

Of those interviewees with a pre-existing condition, nearly half felt their condition was a little or much worse following the burglary. When asked how far they felt any changes in their health, either the onset of the new health problems described or changes in an on-going condition, were attributable to the burglary itself, there was a range of responses from interviewees. The conditions that were most likely to be perceived by victims as being the result of the burglary were feelings of depression (61% stating that this was likely or very likely to be due to the burglary), sleeping difficulties (60%), feelings of stress (58%), panic attacks (58%) and lack of confidence (55%).

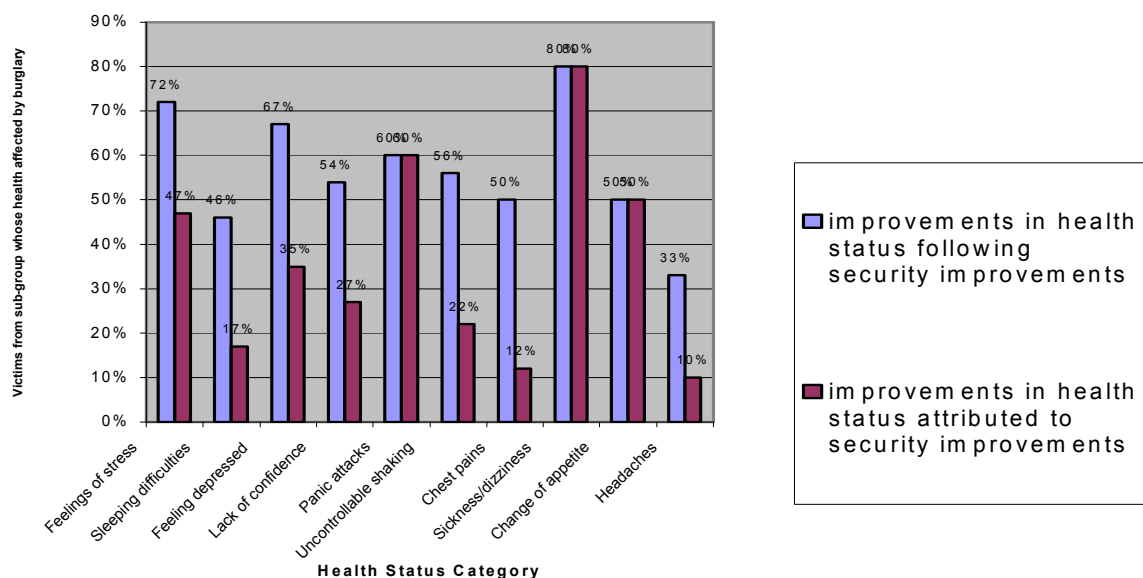
A sizeable majority of those suffering sickness/dizziness, feelings of stress, depression and panic attacks claimed that the condition improved following the installation of security measures in their homes. The results of this analysis appear in Figure 4.6, below, reproduced from the Target Hardening Case Study.

However, not all of those perceiving an improvement in their health attributed this to the security measures. For example, only 5 of the 14 whose sleeping had improved thought that this was due to the extra security and only half of those (i.e. 6 of the 12) registering an improvement in their feelings of confidence did so. However, all of those noticing an improvement in sickness/ dizziness, panic attacks and appetite felt that this was as a result of having security measures placed in their homes.

Other socio-economic impacts included a **reduction in insurance premiums for secured properties** and an **increase in employment opportunities** for local people through the project. There was also **an increase, albeit temporary, in social support/community spirit**, as well as a **re-integration of a majority of victims into the community**; however, a **significant minority of victims remained social excluded**.

There were some positive impacts concerning **improvements in the physical appearance of the properties**, some householders benefiting further from

Figure 4.6 Impacts of Burglary Reduction Measures on Health



improvement work on their homes following survey inspections. The physical improvements on housing yield apparent health benefits, including **reductions in home-related accidents, allergic and inflammatory lung diseases and risk of cardiovascular disease**.

There was strong evidence that, from the victims' perspective, **the quality of public services as delivered by Target Hardening improved significantly**. There was evidence of an **increased 'joined-up' service approach** that was timely, efficient and effective. However this was not universal and there is the potential to improve this still further, for example there is evidence from the literature that burglary reduction schemes can help to maintain older people in their home. Greater links need to be made with health and social care providers who have an important role to play here.

There was evidence to suggest that Target Hardening's success had influenced the extended delivery of this programme in Liverpool and across Merseyside. A critical factor in this was the independent evaluation of the programme. There was also evidence of the project's **impact on other programmes such as the Merseyside Health Actin Zone and the Drug Action Plan**, creating synergy and added value to these programmes.

The inequality analysis indicated that although there was a targeting of the project towards certain vulnerable victims, there were other equally vulnerable victims that had been overlooked. This means that these groups are significantly disadvantaged compared to the targeted groups, **potentially creating new health inequalities** within an already deprived community. A qualitative analysis on the effects of Target Hardening on the wider community suggests that there are also negative impacts in terms of a heightened awareness and anxiety about crime experienced by the victims' families, neighbours and the wider community which are not being addressed by the project.

The Private Rented Dwellings HIA was carried out as a rapid exercise. It threw up some valuable insights into how a focused regeneration project, such as the targeting the privately- rented housing stock in a small area might affect the population's demographic and social structure. This could be either a positive or a negative impact on that community's health. An example of these impacts appears in Table 4.6 reproduced from the Case Study.

Table 4.6 Potential health impacts on biological factors: Private-rented Dwellings Case Study

Health determinant	Predicted health impacts		Indicators / data sources	Risk of impact
	Positive	Negative		
Age	Possible changes to the demographic make up of the population resulting in changes in health status indicators for the “new” population.	Possible changes to the demographic make up of the population resulting in changes in health status indicators for the “new” population.	Changes in the demographic structure of whole area could be calculated using routinely available data sources (e.g. Census data). Additional data on tenancies are not currently available.	S
Gender				
Ethnicity				
Disability	Amelioration of problems through the provision of aids and adaptations			S

Risk of impact: d = definite; p = probable; s = speculative

One of the potential problems in the Private Rented dwellings Initiative was that there was no provision within the Project to ensure that rents are not raised after the improvements to the housing have been made. For those tenants who are in receipt of housing benefit this may not be an issue but, if rents levels are raised after the improvements have been made, others may be forced to find alternative, cheaper accommodation that is likely to be in a poorer state of repair. This could change the demographic structure of the population, resulting in an apparent improvement in indicators of health status overall but a shifting of some of the most vulnerable groups into other areas.

This raises the issue of how far HIAs should look more at the impact of policy on population dynamics and whether the focus should be on the health of those who remain in the area post project or that of those who have moved on(especially in

regeneration initiatives where the aim is to make residents more competitive in the market place). In other words, how far should HIA track people to new areas and or circumstance when projecting future health impact ?.

Possible impacts on population dynamics were also identified in the Aylesbury Plus New Deal for Communities (NDC) rapid HIA (Annex 5). In this case study, it was the negative health impacts that arise from the partial implementation of policy that were highlighted.

The potential health impacts of the NDC programme, a multi-faceted and resource intensive regeneration approach, are shown in Table 4.7 below that is reproduced from the Case Study Report.

Table 4.7 potential health impacts on biological factors: New Deal for Communities Case Study

	Potential health impact	<i>Risk of impact</i>	<i>Quantification</i>
○	Continuation of current trends in terms of the age, gender and ethnic mix within the neighbourhood.	probable	estimable
○	There are potentially positive impacts in terms of quality of life for some groups within the population - for example through greater integration and participation in the community amongst people from minority ethnic groups or through more appropriate housing provision for people with physical disabilities or other special needs.	probable	qualitative
○	Improved quality of life, including mental health and wellbeing for elderly people and those with disabilities as a result of community based support programmes.	probable	qualitative
	There is some risk that there may be a movement out of the area of employable young people if, for example, the outcomes relating to worklessness, education and training are met but those relating to, say, aspects of the physical environment and crime are not. This would result in higher concentrations of people with more severe disadvantage living in increased social isolation.	speculative	estimable

In this case study it became apparent that if the NDC Delivery Plan is only partially implemented or if only some of the outcomes are achieved, there is a strong possibility that health inequalities will be increased, both within the estate and between residents of the estate and those in other parts of the borough. This would certainly result from an uneven distribution of the positive health impacts and could

be expected to encourage movement out of the area for the beneficiaries of the projects, with those who remain being relatively more disadvantaged than at present and in a continuing downward spiral of deprivation and “ghettoisation”.

On the opposite side of the coin, there is some risk that there may be a movement out of the area of employable young people if, for example, the outcomes relating to worklessness, education and training are met but those relating to, say, aspects of the physical environment and crime are not. This would result in higher concentrations of people with more severe disadvantage living in increased social isolation.

5. Synthesis: Lessons Learned and Recommendations

5.1 Introduction

This section describes the lessons learned from the case studies with respect to HIA methodology, including the implications for the assessment of health inequalities in regeneration and policy planning.

Ultimately the effectiveness of HIA methodology will be judged on whether having undergone an HIA, a policy, programme or project enhances health gain, reduces health risk and reduces health inequalities. Similarly, another key criterion of effectiveness may be the accuracy with which HIA methodologies predict health outcomes.

Evaluating the utility of HIA in terms of the extent to which its predictions are accurate and the difference that it makes to policy implementation and effectiveness, although much needed, was beyond the scope of this study. However, there are other aspects of HIA analysis that have been the focus of our investigation. These include the extent to which:

- It is possible and desirable to explore the health impacts of regeneration by focusing on individual projects;
- Concurrent and retrospective HIAs are feasible and valid approaches;
- Rapid HIA can produce results that can be acted upon;
- There is a sufficient evidence base with which to inform HIAs of regeneration activity;
- The methods, tools and procedures used in the Merseyside Guidelines are sufficient in their existing form to be used as a basis for the HIA of regeneration;
- Additional data sets and forms of analysis are required when assessing health inequalities;
- HIA should become an integral part of the policy development cycle;
- HIA might form part of a systematic approach to appraisal, monitoring, evaluation and reappraisal and where it would fit in.

5.2 Evaluation of Methodology

5.2.1 Methods for selecting policies, programmes or projects for HIA

In theory, HIA can be applied to a wide range of policies, programmes and projects. In practice, however, as resources for HIA are limited there will always be a need to prioritise and to be selective. Only a minority of policies that are screened are ever likely to undergo detailed health impact assessments. Much has been written about screening procedures for assessing the suitability of policies for HIA (Milner et al, 2000). Apart from its use as a form of rationing, the value of screening also lies in alerting policy planners to when a policy is likely to produce health impacts of some significance.

When confronted with decisions about which projects to select for HIA, practitioners will need to consider:

- what depth or level of detail is appropriate for the HIA? (i.e. should it be a rapid appraisal, a rapid HIA or a more detailed study?); and
- when should the HIA be applied? (i.e. should the HIA be done prospectively, concurrently or retrospectively?).

In assessing what depth of HIA is appropriate and how the HIA should be timed it may be helpful to consider the level of resources available in terms of:

- staff time;
- skills and experience;
- the existing evidence base;
- the stage which has already been reached by the policy, programme or project

At the very beginning of the policy development cycle, it may be too early to undertake a detailed HIA, for example, as part of an option appraisal process. It may be more useful, at this stage, to do a rapid HIA in order to:

- gain a strategic overview of the policy, programme or project;
- start to raise awareness of potential health issues and gain support; and
- identify how a more detailed piece of work might be done at a later stage.

If the policy, programme or project has already started to be implemented and the HIA is to be concurrent, there may be opportunities for more detailed work if, for example, a data base has already started to be developed for monitoring and evaluation purposes. There may also be a need to examine a policy in greater depth if on implementation it becomes apparent that there are imminent health risks and a clear need is identified for appropriate action to be identified and to be taken more quickly.

This study has not been concerned with screening per se, although, procedures were adopted to select projects as case studies. These involved close scrutiny of policy documentation on regeneration programmes in order to identify the mix of regeneration projects and approaches under the management of separate SRB-funded partnerships. The case study selection process was also informed by the views of the Local Steering Group whose members' knowledge and intelligence on local conditions and partnerships proved invaluable.

The project selection methods can be criticised on a number of grounds. Firstly, choosing individual projects as the units of analysis rather than entire partnership programmes precluded close consideration of the health impacts that may arise through the combined effect and added value of several projects running simultaneously. An alternative and perhaps equally valid approach, would have been to have selected the 'regeneration partnership' as the unit of analysis and to have undertaken an HIA of its entire programme. However, given the time and resources available for the research it is unlikely that more than one partnership could have been studied in any depth. This would have restricted the study locationally to one target area and may also have limited the scope for carrying out both prospective and concurrent/retrospective HIAs. The desire to emphasise different health determinants in each case study also led both the research team and the advisory groups towards choosing projects rather than partnerships.

The second ground for criticism was the decision to choose accessible and co-operative partnerships where availability of data was known to be good. This excluded less amenable 'difficult partnerships' where access to information and people was known to be problematic. Intelligence from the local steering group played an important part in this choice. The drawback of this is that it may well be the less accessible and/or efficiently managed regeneration schemes that pose the more important challenges as far as health is concerned. These may well be the schemes (or at least the communities impacted by them) that could benefit most from an HIA. Once again, for practical reasons, decisions were taken to select projects that were open, had reasonable data on their activities and were capable of being researched. However, this will not always be possible or even desirable and there will be a need to provide guidance and advice on how to conduct HIA in uncooperative or even 'hostile' policy environments, but this was not an objective of this study.

5.2.2 HIA Steering Groups

None of the case studies in this project followed the Merseyside Guidelines in establishing a steering group specific to each HIA, although, there were terms of reference describing the aims and objectives of the HIA, including the level of HIA to be undertaken, and to some extent the

scope of the investigation. There was also general support from the local steering group although meetings were not sufficiently frequent to influence the fieldwork on a daily basis.

The experience from the case studies identified some difficulties in accessing technical data and other evidence, which in turn influenced the reliability and sensitivity of the health impacts identified, as well as the time taken to complete the HIA. These problems may have been resolved, in part, by involvement of key informants and stakeholders in a co-ordinating or steering group for the more in-depth, comprehensive HIAs (a steering group would be less feasible for a rapid exercise). This would have created a wider ownership of the HIA process. However, this was primarily a research project and as such was perceived both by the research team and the regeneration partnerships as being somewhat detached and independent from the stakeholders. An HIA carried out by or on behalf of a service delivery agency might well have been perceived differently.

The role of the HIA project-specific steering group was debated at length within the research team and a consensus was reached on its functions within the HIA process. One set of functions would include setting the parameters of the HIA by identifying:

- aims and objectives
- the methods, values and model of health being adopted
- the organisations and individuals collaborating on the HIA
- the key informants and stakeholders
- the geographical location under investigation
- the resources and timetable

The other roles of the steering group would be in overseeing and facilitating the HIA, in particular:

- monitoring development and progress with the HIA;
- providing an input of local knowledge and information;
- acting as a bridge between partners;
- facilitating the implementation of the HIA's recommendations; and
- assimilating and disseminating the emerging lessons.

The experience from all of the case studies revealed that HIA is very much an iterative process with certain stages of the process needing to be revisited. This makes the active involvement of the steering group throughout the exercise all the more important.

The notion of the 'virtual' steering group, whereby using existing forums are used, was also discussed. The advantages of this were identified as:

- avoiding the creation of extra layers of bureaucracy;
- avoiding the need to fit additional meetings into the already busy schedules of the key stakeholders; and
- putting HIA on the agenda of existing groups' meetings, thereby, ensuring that it is "embedded" into their work and offering opportunities to integrate it with other work.

In view of the benefits and added value that such an arrangement brings:

It is recommended that the scope of all except the most rapid, desk-based HIAs should be defined by a Steering Group representing the full range of stakeholders and key informants.

(Recommendation 1)

5.2.3 Lessons on depth and timing of HIA

The experience of the fieldwork together with follow-up discussions within the research team has drawn attention to a number of important issues concerning the depth and timing of HIA. These include:

- The role, expectations and limitations of rapid HIA;
- The role, scope and resource implications of comprehensive HIA;
- The justification for concurrent and retrospective HIA.

The limitations of rapid HIA clearly emerged in the Private Rented Dwellings case study. As this case study was undertaken at a stage when the Private Rented Dwellings Project was already well underway it was effectively a concurrent rapid HIA.

Undertaking a rapid HIA was useful in terms of identifying the issues that would need to be taken into account for a more in-depth study. It did however, run into some difficulties in terms of identifying health impacts and clearly demonstrated the considerable limitations of rapid HIA when applied concurrently to a regeneration project concerned with housing.

The difficulties attributed to the rapid nature of this HIA were as follows:

- An inability to define the ‘affected population’;
- Difficulties in identifying health impacts;
- Inability to estimate the certainty of health impacts;
- Limited scope for consultation.

Although routine demographic and other data are readily available to provide a denominator population for the whole area it was not possible to ascertain basic information such as how many people live in privately rented dwellings which are eligible for the project or the characteristics of those people living in properties which are being improved. In the absence of a residents association or register of tenants these data could only be obtained by mounting purpose built surveys which were clearly beyond the remit of a rapid HIA. Consequently, identifying the health and health inequalities impacts of the project was based largely on speculation about the size and nature of the population and quantification was impossible.

The lack of a comprehensive evidence base also hampered the identification of health impacts. For example, although there is a body of evidence on the links between poor housing and conditions such as asthma or other respiratory disease, less is known about the ways in which poor housing affects psychological health and well being, social cohesion or community participation. Whereas a more comprehensive, in-depth HIA might be able to contribute to the evidence base through survey work or allow more time for exploration of the published and “grey” literature, a rapid HIA can only highlight the problem.

The lack of data on the affected population also had a knock-on effect in terms of the extent to which potential health impacts could be quantified. If the population had been identified, it would have been possible to use some routine data sources, such as those kept in primary care, to obtain measure of, for example, health service uptake and reported incidence of disease. However, this is extremely resource-intensive and usually costly and a better way of obtaining data may have been to mount purpose built surveys of the population being addressed. This would have the advantage of being able to incorporate both quantitative and qualitative information.

The absence of any firm information on likely health impacts weakens one’s position when negotiating for the recommendations of the HIA to be implemented

In a rapid HIA there is very little time for consultation with “key stakeholders”. Although very useful meetings were held with the project manager and the chair of the SRB Partnership sub-group, there was insufficient time to meet landlords and tenants who would have been able to provide a fuller picture of the project’s impact.

Had the HIA been undertaken at an earlier stage, ideally before the project started its implementation phase, there would have been more scope to influence the ways in which it was developed. For example, a prospective HIA could have been used to raise awareness of health related issues amongst those responsible for implementation and to bring together a range of “key stakeholders” in order to ensure that the project does not operate in isolation. Steps could also have been taken to investigate further the potential health impacts which have been identified in the HIA and to eliminate some of the possible health risks such as those associated with the management of the building works and with housing allocation policies.

The case study has provided some useful pointers as to when, where and at what level a rapid HIA is appropriate and how a rapid HIA can be undertaken in order to have maximum benefit. The following lessons have emerged, namely, that rapid HIA:

- should be regarded as a tool for raising awareness of health issues and for identifying important health effects which were previously hidden;
- is predominantly a qualitative exercise for generating hypotheses about the how policy, health determinants and health outcomes might be linked;

- can be applied concurrently, although, it is probably more appropriate at an earlier stage in order to make the most of opportunities;
- is more appropriate at a strategic (policy or programme) level than for specific projects;
- can be used to identify where more detailed work may be required.

Finally, in a rapid HIA, resources might best be spent on consultation and discussion with key stakeholders and on making a qualitative assessment of the likely health impacts based on the existing knowledge and expertise of those involved. A detailed examination of quantitative data is probably less appropriate, except as background information, unless it is readily available and can be related specifically to the population being addressed by the policy, programme or project.

5.2.4 Developing a Systems Approach to HIA

There is no doubt that the opportunity to conduct a comprehensive HIA (e.g. on a programme such as the target hardening initiative), produces some valuable findings that play a useful role in informing the decision-making of policy-makers or evaluators. This has to be balanced against the resources (people, time and money) that are needed to undertake this type of HIA. For this reason, it is unlikely that comprehensive HIAs will be routinely conducted. However, there needs to be greater clarity in the specific circumstances under which different levels of HIA are applicable, as well as how these relate to each other.

It is recommended that a systems approach to HIA is developed consisting of:

- **clearly defined levels of HIA which are progressive,**
- **the skills, knowledge and experience required at each level,**
- **‘core’ components for all HIAs,**
- **defined threshold criteria for each level of HIA,**
- **examples of the policies, programmes or projects that meet these criteria,**
- **examples of the methods used and types of evidence that would be generated,**
- **the resources needed,**
- **an approximate duration of an HIA at each level based on one researchers involvement.**

(Recommendation 2)

An example of such an approach is shown in Table 5.1, below which is taken from the Target Hardening Case Study (Annex 2).

Table 5.1 A model HIA System

HIA SYSTEM	THRESHOLD CRITERIA	METHODS	DATA TYPE	POLICY/ PROG./PROJ. EXAMPLES
Pre-HIA/HIA screening	All public policies, programmes, projects	Documentary analysis and basic profiling (quantitative)	<p>‘HIA’ statement identifying</p> <ul style="list-style-type: none"> • broad health impacts of key health determinants of the policy • size and cost of the policy • geographical area and population affected, including risks of health inequalities between population groups 	Statement on public sector service plans.
Rapid/ ‘Core’ HIA	<ul style="list-style-type: none"> • Policies over £120k, • Affecting approx. 100,000 population. 	Scoping. Documentary analysis. More detailed community profiling (quantitative, qualitative). Workshop or equivalent methods with stakeholders/ Key informants.	Mixture of qualitative and quantitative data providing a local context to help inform development of policy frameworks	Community safety plans at sub-district level. SRB or other regeneration project.
Comprehensive HIA	<ul style="list-style-type: none"> • Significant, definite health impacts, • Major national, district-wide policies, • Significant financial investment. 	As ‘Core’ HIA. Pilot policy in small area. Health profiling of area, routinely collated or special survey to track changes over time.	Specific quantitative data to help inform the development of policy targets and outputs	National domestic energy efficiency programme, district Housing Investment Plans, regeneration strategies.

5.2.5 Documentary analysis

Some of the evidence used to inform HIA will come from documents. Three types of documentation can be defined:

- Documentation on the specific policy (e.g. proposals, appraisals, delivery plans, monitoring reports);
- Documentation on the achievements, impacts and outcomes of the policy (e.g. ex ante evaluation reports);
- Documentation on research of relevance to the policy and its anticipated/actual impacts (e.g. research literature linking policy to health determinants and that linking determinants to health impacts).

Having a clear understanding of what the policy or project is trying to achieve, and how, is an important start of the data collection process for any level or stage of HIA.

There were a number of relevant documents for each of the case studies emanating from a variety of sources. Project proformas were designed in order to draw this information together. The proformas were used to record aims and objectives, the particular interventions being delivered, the target population and intended beneficiaries, the costs/ resource inputs and the anticipated outputs and outcomes. The project co-ordinator was the usual source of these data. A copy of the proforma appears in Appendix 5.1.

Without project content and implementation data, the full range of vulnerable groups and anticipated health impacts could not be identified. For comprehensive HIAs documentation helped in pinpointing population groups from which stakeholder samples (i.e. likely/actual project beneficiaries) could be selected and key informants in different specialist areas identified. In some of the case studies, policy documentation also contained background information that was useful in compiling profiles of areas and communities.

However, the amounts of information available for each of the case studies varied and there were shortfalls. In most of the case studies contextual information was felt to be incomplete and data on project beneficiaries (who they were, where they lived and how they were assisted) was patchy. This was partly due to a lack of availability of data (e.g. in the Parenting 2000 project reliable client data did not exist) or access to it (it existed, but was not made available from the 'gatekeeper' of the data). Complying with data protection rules was also a limitation.

The difficulties in accessing technical data and other evidence undoubtedly influenced the reliability and sensitivity of the health impacts identified, as well as the time taken to complete the HIA. It also highlighted the potential value of having a project-specific steering group of key informants and stakeholders (see Recommendation No.1). This would help to facilitate a

wider ownership of the HIA process and also would be an effective way of prioritising and lobbying for the supply/release of relevant data for the HIA where it was possible to do so.

The analysis of official public documents from, for example, government departments or the Office of National Statistics, as well as unofficial documents, for example, minutes from local community forums, were also important. They enabled conditions in the project areas to be placed into a regional and national context and helped to identify the extent to which local circumstances may have had a modifying or enhancing effect on the impacts of the project. Thus, the effect of local context on the potential health impacts that could have been achieved could be explored.

In prospective HIAs the impact of a project on health determinants was inferred from what the policy was seeking to achieve (i.e. the policy's interventions). For projects that were already underway, the regular progress and formative evaluation reports provided a useful insight to obstacles and opportunities that the project was facing. Thus, in concurrent HIA, information about progress and the efficiency of implementation formed part of the evidence base on health determinant impacts to date and potentially, likely impacts in the future based on projected project performance.

Project evaluation data plays a far more significant role in retrospective HIA because of the need to examine what has been achieved by the policy and to determine how confirmed policy outcomes influence health determinants. A policy or project that fails to spend its budget and experiences significant implementation failure may not register any detectable impacts or any influence on key health determinants.

Another important source of evidence of impacts comes from the review of literature of related studies, published and unpublished. A number of issues were identified from the case studies in relation to this. Firstly, health impacts identified solely from the literature and documentary analysis (as described in the rapid HIAs) are unlikely to reflect a detailed understanding of the local context in which they occur as they do not contain any personal accounts from stakeholders to give depth and meaning. Also some of the impacts may be missed. For example, in the Stepping Out case study, a desk-top analysis alone would not have identified the mechanisms through which youth work was successful in raising the self esteem of socially excluded young women (see Stepping Out Case Study, Annex 1).

This needs to be considered by those assessors undertaking rapid HIAs without stakeholder involvement as it potentially produces only a partial and possibly highly skewed picture of the potential impacts.

Secondly, the extensiveness of the literature search and the critical analysis of the studies' design and methodology are potential sources of publication and study bias, respectively. Searches

of published and unpublished literature need to be made and the use of a critical appraisal checklist is recommended to assess the quality of the study and, therefore, the strength of the study's findings.

Thirdly, the timing of a literature review can have significant implications on the range of impacts identified in a comprehensive HIA. In Target Hardening, an earlier literature review may have influenced the sampling of stakeholders, for example a wider range of vulnerable sub-groups were identified as key stakeholders, but timing prohibited their involvement. Conversely, too early a literature review could potentially make it more difficult for an assessor to take a more inductive approach once an initial range of impacts have been identified through the literature review and impacts identified by stakeholders may be missed.

If there is sufficient time it is probably best to undertake a literature search after initial interviews or discussions with stakeholders, and then to extend the sample group based on evidence from the interviews and the literature. Finally, the speed and efficiency with which one is able to identify and access relevant studies is very dependent on the information and appraisal skills of the assessor, access to published and unpublished studies from computerised and other databases, and the availability of relevant studies with strong evidence.

Once again these are predominantly issues with data collection and analysis, good research practice and shortfalls in the access and availability of relevant studies providing a strong evidence-base to support HIA. The considerations with respect to HIA methodology relate to the timing of the literature review in comprehensive HIAs and how to compensate for bias in rapid HIAs.

In view of these points:

It is recommended that all HIAs undertake a comprehensive documentary analysis that:

- **fully identifies the intentions and strategies of the policy**
- **distils from policy documentation the health determinants affected**
- **assesses the scientific evidence that links policy to health determinants**
- **assesses the evidence that links health determinants to health**
- **examines relevant local and national policy evaluations**
- **involves both the HIA team and steering group members**

(Recommendation 3)

This should be done in order:

- to identify the expected or potential health impacts of the policy,
- to identify vulnerable groups most likely to be adversely affected by the policy
- to help construct questions for key informants and stakeholders.

The amount of time spent on these tasks would vary. In a Rapid HIA this should be achieved ideally within a two-week period. In addition the stage to undertake, for example a literature review,

in a more detailed HIA needs to be carefully considered so as to make this as inductive a process as possible.

It is recommended that a database of Government regeneration strategies should be made available on the DETR website and should include monitoring and evaluation data, and linked to the appropriate websites, for example the HDA's evidence base 2000 database.

(Recommendation 4)

It is recommended that databases of systematic reviews of evidence on the effects of non-health care policies, programmes and projects on key health determinants, and their consequences for health outcomes should be promoted and extended.

(Recommendation 5)

5.2.6 Community Profiling

Producing a profile of the affected community is one of the main elements of the Merseyside Guidelines approach to HIA. An area or community profile can provide general background information about the area within which a regeneration project operates. These data can then be compared with information for one or more comparison areas such as the rest of a local authority district, the county, region or nation. The point in doing this is to enable the target area to be put into context; to determine how far it is more or less deprived than elsewhere or contains a significantly higher or lower proportion of client and social groups (e.g. lone parents, black people, pensioners) or particular types of housing. It involves using existing, quantitative data to develop this 'picture' of the area. Thus:

It is recommended that all HIAs develop a community profile providing background and contextual information to the thematic or geographical area under investigation, by accessing existing quantitative and qualitative data from the responsible agency, via appropriate Steering Group members

(Recommendation 6)

This should be done in order to:

- provide core data, for example on specific health determinants, about the targeted geographical area;
- provide core data on the population in the targeted area as a whole, the sub-group targeted by the policy, other sub-groups directly or indirectly affected by the policy and a wider population, for comparison;

- enable the target area and population to be put into context, comparisons to be made and expected/potential inequalities identified.

Separate ‘health profiles’ can be constructed using vital statistics, morbidity and other health data. These may be useful in generating a baseline, which can be revisited at a later stage. Thus:

It is recommended that for prospective, comprehensive HIAs where reliable predictions are needed, for example to assist in target setting, a health profile with quantitative data is developed by building on the community profile. This will involve:

- **identifying baselines for validated measures/indicators;**
- **setting baselines for new indicators (which may involve a special survey);**
- **projecting the changes in health indicators/measures over a given time period, enabling the quantification of expected health impacts;**
- **using expert assistance from epidemiologists (where available).**

(Recommendation 7)

The community and the health profiles will vary in how far they depict the characteristics of affected communities (i.e. those actually influenced by the policy, programme or project that is the subject of the HIA). Demographic and social data are not readily available for target areas that do not conform to existing administrative boundaries such as enumeration districts or wards. As a result the profiles that are generated will be describing the characteristics of a different, usually much larger, area. If this larger area has a high degree of social heterogeneity, then it is possible that the truly affected population (i.e. in the target area) may bear little or no resemblance to that appearing in the community profile. These problems are further compounded when the data used to construct the profile is out of date – a problem that affects profiles based on the 1991 Population Census.

Even when it has been possible to generate a community profile that conforms to the boundaries of a target area used for a regeneration project, the profile still may not reflect the social characteristics of the ‘affected’ community. This can occur for a number of reasons. Firstly, those targeted and assisted by a regeneration project (i.e. those whose health might be influenced) may live outside of the target area and therefore will not be included in the profile. Secondly, those affected by the policy who do live within the target area may constitute a relatively small proportion of the target area population. Their social / demographic characteristics may also vary markedly from the target area mean.

Ideally, data would be available on the characteristics of the ‘truly affected’ population and on those of the ‘rest of the community’ in project target areas. This would enable the HIA analyst to quantify what proportion of all residents had been assisted and how they compared with those who were not helped. The extent to which inequalities in health, say between policy beneficiaries and non-beneficiaries have changed as a result of the policy could also be established.

In practice data such as these are unlikely to be available unless arrangements had been made to collect them –for example, as part of an information systems and data capture strategy linked to continuous monitoring. An attempt was made in the Stepping Out Case Study to demonstrate the value of identifying what a regeneration project was able to achieve in relation to the potential need that existed within the target area. Although heavily reliant on 1991 Census data, this was an attempt to demonstrate the gap that might exist between the extent of a policy’s influence and the (much larger) scale used to detect health impacts implied by adopting the target area as the unit of analysis for the HIA (see Stepping Out Case Study, Annex 1).

The following steps can be taken to make community profiles more relevant to HIA, thus:

It is recommended that, for concurrent and retrospective HIAs, steps be taken:

- **to obtain anonymised disaggregate postcoded client data on project beneficiaries;**
- **to undertake analyses that enable the size, social characteristics and geographical distribution of the the affected community to be identified and for this to be expressed as a proportion of the target area population.**

(Recommendation 8)

The role of data and evidence in HIA, and by implication that of profiling, is discussed at length in Section 3.2 above.

5.2.7 Evidence from Stakeholders and Key Informants

Stakeholders (population groups affected by the policy) are an important source of evidence of potential (prospective) or observed (concurrent, retrospective) health impacts. In the case studies undertaken, rapid HIAs did not involve collecting primary data from stakeholders because they were both prospective studies. However, it is recognised that some practitioners do involve stakeholders in rapid HIAs, including prospective investigations, reflecting, for example, the Gothenburg Consensus paper definition of rapid HIA.

By comparing the impacts identified at the documentary/literature review stage of the concurrent, comprehensive HIA case studies with the impacts identified by stakeholders, it is clear that in addition to a wider range of impacts being identified, evidence from stakeholders provides a much more detailed picture of the nature of the particular health determinants that were affected by

the policy and the impacts on health. This was particularly felt to be the case for regeneration programmes with a social emphasis.

The Stepping Out project saw the design and piloting of several useful questionnaires that could be used by HIA assessors to explore the health impacts of youth work on vulnerable young people. They worked with a moderate degree of success.

In common with the project beneficiary interviews for the Target Hardening Case Study, heavy reliance was placed on the respondents perceptions of changing health as a result of their exposure to the projects. These perceptions depended upon respondents' memory of their lifestyle, behaviour and general health prior to their involvement in the project. The health impacts were assessed by comparing the previous period with current experiences and asking the respondent to attribute any changes in their health (positive or negative) to the contact they had had with the initiative in question. This is open to error in a number of ways. Firstly, the perceptions of prior circumstances will inevitably be affected by memory; in many cases respondents (especially elderly people) will be unable to recall accurately their health and well being one year or more before their exposure to the project. Secondly, the exercise is prone to bias because where the respondents' experience of the policy is positive they are likely to exaggerate any adversity prior to being assisted and over-emphasise the contribution of the policy to their current state of well being.

In order to isolate more accurately the impacts of social regeneration projects on beneficiaries' health in comprehensive concurrent and retrospective HIA:

It is recommended that project users be interviewed prior to implementation, at stages during implementation and, where appropriate, post project to assess and to attribute any observed changes in their health to project interventions. This will require identifying a group of beneficiaries who can be tracked longitudinally as a regeneration project unfolds and post project.

(Recommendation 9)

However although there are added benefits to stakeholder involvement, there are cost implications including time and funding, that need to be considered. The benefits of involving stakeholders compared with the additional costs of doing so will be lower for prospective HIAs because the impacts identified are more likely to be speculative. In spite of this wherever time and funding allow, stakeholder evidence for all forms of HIA does add depth and validity to the impacts identified.

Qualitative approaches were favoured for collecting evidence from stakeholders, in rapid HIAs. This enabled context setting as well as data on the perceptions, experiences, opinions and feelings of stakeholders about how the policy affects them to be gathered.

In the Target Hardening case study, which was comprehensive and retrospective, the evidence from stakeholders contributed to the development of a model describing the interaction between burglary and its impact on health determinants/outcomes and the effect of the target hardening intervention on reducing the negative impacts on these and other health determinants.

It is recommended that all HIAs (rapid, comprehensive, prospective, concurrent, retrospective) collect qualitative data on the perceived health impacts of the policy from key informants and stakeholders, complementing the quantitative data and documentary evidence. This may involve holding workshops linked to the community profiling process in order to 'brainstorm' perceived health impacts.

(Recommendation 10)

Similarly, their inexperience in HIA and public health without guidance from an HIA researcher may also have influenced the findings.

5.2.8 Likelihood of Health Impacts

The process of assessing the likelihood of impacts was felt to be too arbitrary and subjective. Defining and making explicit the criteria for assessing the likelihood/probability of an impact will help but if other HIAs are using other criteria it will be difficult to make direct comparisons *between* them.

It is recommended that development work on classifying the 'strength of evidence', qualitative and quantitative and criteria for assessing the 'likelihood of impacts' is undertaken. The use of data triangulation needs to be built into the process.

(Recommendation 11)

5.2.9 Prioritising Health Impacts

A more systematic approach to prioritising impacts needs to be used. The prioritisation process undertaken for example with Stepping Out involved stakeholder/key informants ranking the impacts identified, and then the assessor totalling up the scores for each impact to give an overall ranking. Where possible a more iterative process needs to be planned, for example:

- Identifying the criteria on which prioritisation will be based, eg the likelihood of the impact, the number of people affected, the type of health outcome (death, illness),
- Undertaking an initial ranking of impacts with stakeholders,
- Collating and ranking other evidence,

- Discussing the other evidence with stakeholders and undertaking a final ranking of impacts, where appropriate.

Issues such as whether or not to rank numerically or use ranking bands such as high, medium, low, need to be further considered.

It is recommended that development work on models to facilitate the health impact prioritisation process is undertaken.

(Recommendation 12)

5.3 Health Inequalities and HIA

HIAs need to assess the distribution of the impacts of the policy across the population under investigation and the effects that this will have on health inequalities.

The methodology used in the Target Hardening case study identified different levels of vulnerability within the population in the targeted geographical area, and tried to compare the impacts of the policy on these vulnerable groups and the wider population. However, experience from this case study revealed that not all of the most vulnerable groups, known from scientific evidence to be adversely affected by burglary, were targeted by this policy. In addition, some potentially negative impacts arising from the policy were identified that affected the wider population. For example, there was evidence of both burglary ‘displacement’ and crime ‘switching’ (i.e. where offenders find new, softer targets, often elsewhere) as a result of the Liverpool ‘target hardening’ scheme. Crime displacement also displaces the negative health impacts associated with being a victim of crime to new (previously) unaffected communities.

In measuring health inequalities, there are choices to be made in defining who is the base group (i.e. the population for whom the policy’s effects on reducing inequalities in health is to be measured) and the comparison group (see, Section 3 above)

There is potential for HIAs to contribute significantly to reducing health inequalities, but there is a need for clearer guidance as to how to do this. Therefore:

It is recommended that guidelines strengthening HIA practice in reducing health inequalities are developed, and that these guidelines include advice on:

- **defining the vulnerable groups within the targeted population, that is, who is most likely to be adversely affected by the policy or by the health determinants it is trying to address;**
- **how to compare these groups with the groups that are being targeted by the policy,**
- **Identifying a wider population for comparison,**
- **Identifying the impacts of the policy on each population sub-group,**
- **Defining how this affects any health inequalities.**

(Recommendation 13)

5.4 Policy and Planning (Implications for HIA practitioners and policy managers)

The implementation of HIA is still quite an ad hoc process (Griffiths et al, 2000) in spite of the clear intentions from Government that it is to be integrated into national and local planning processes (DoH, 1998). Related to this lack of integration into formal planning arrangements is the lack of public scrutiny of the HIAs that are selected and conducted. Who is involved? How does it relate to the Community Strategies or Health Improvement Programmes? Who is responsible for implementing recommendations from the HIAs?

It is recommended that guidelines are developed describing mechanisms for integrating HIA practice into the strategic planning processes of public sector organisations at a local level, and that these guidelines clearly describe:

- **who is politically accountable for HIA being integrated into the strategic planning process;**
- **how accountability is managed by local people;**
- **who is responsible for the strategic co-ordination of HIA;**
- **who is responsible for co-ordinating HIA delivery;**
- **who is responsible for implementing recommendations from each HIA.**

(Recommendation 14)

5.4.1 Capacity Building.

It is clear from the experience of the Case Studies and more widely, that the competence of the assessor will affect the outcomes of any HIA. Integration of HIA within the planning processes of public sector organisations (PSOs) also depends on these organisations having the necessary skills to be able to screen for and undertake HIAs. However, the range of skills required for different levels of HIA within an HIA system, will vary. This will need to be clearly defined as the system is developed.

It is recommended that capacity for HIA is developed at a local level within public sector organisations(PSOs) and academic institutions by:

- **Undertaking different types of training, for example awareness raising, on-the-job and off-the-job (courses), of key personnel within PSOs,**
- **Defining skills and competency levels needed at each level of the HIA system,**
- **Developing HIA course modules aimed at diploma, degree and Masters levels,**
- **Developing an accreditation and registration scheme.**
- **Facilitating the integration of effective HIA into the HIA planning processes,**
- **Ensuring that the HIA conducted meets quality standards.**

(Recommendation 15)

5.4.2 Evaluating HIA Effectiveness.

One of the obstacles preventing HIA being taken up more quickly may be the lack of evidence about the effectiveness of prospective HIAs in predicting health impacts. Experience from the target hardening case study indicated a lack of willingness of some stakeholders to be involved. This may also be because of the lack of information about HIA effectiveness.

It is recommended that the effectiveness of the different HIA types (or levels in the ‘HIA system’) in predicting health impacts are evaluated by:

- **undertaking a series of prospective HIAs on non health-care policies and projects,**
- **taking a non-interventionist and dynamic policy analysis approach,**
- **undertaking retrospective HIAs on the same policies and projects over appropriate periods of time,**
- **comparing the predicted health impacts (from the prospective HIAs) with the observed health impacts (from the retrospective HIAs).**

(Recommendation 16)

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Appendix 3.1

Data Sources for HIA: A Brief Guide to Bibliographic Databases

APPENDIX 3.1

Data Sources For HIA: A Brief Guide To Bibliographic Databases

Currently there is a large selection of electronically accessible data hosts from around the world that provide extensive information useful in a *general* search. Some are commercial and allow access to registered users only, e.g. BIDS, BIOMED, NISS EBSCO, First Search, ISI Web of Science. These data services provide access to Medline, ERIC, CAB HEALTH, IBSS, Cancerlit, and other social sciences, medical and science databases. Other unrestricted data services include BUBL, Portico and DEVLIN which provide access to the UK Library and Information Science Community, and databases on Sustainable Development and from the British Library. The Health Development Agency and Regional Public Health Observatories are also key data providers.

Library catalogues are also extensive information sources; COPAC provides unified access to some of the largest university libraries in the UK and Ireland, and Gabriel is the gateway to Europe's national libraries.

Electronic access to some of these is available through BOPCAS (British Official Publications Current Awareness Service), CCTA Home Base (a guide to UK Government department websites) and the Stationery Office Home Page. European official information is available through EUROPA (EU policies and key documents), CORDIS (Community Research and Development Information Services website), ECHO (information on EC programmes), EU Internet Resources, EUROPARL (information on the European Parliament). United States Official Publications can be accessed through Yahoo Hot Gov and US Whitehouse.

Plans are in progress for developing a national database with information on HIA activity. This will help to increase the accessibility of data on the predicted/observed health impacts of completed HIAs, which, in turn, will help increase the reliability of the predicted health impacts of related policies. A European database of HIA activity is also being developed, and is anticipated to be available within a year.

Finally, The World Health Organisation (www.who.int) also has extensive information, at an international level, on health-related policies and has electronic links to national health-related websites.

Appendix 5.1

Regeneration Project Proforma

Health Impact Assessment Regeneration Project Profile

Date:

Project Title:

Start Date:

End Date:

Duration:

Geographical coverage:

Mark operational boundary on A-Z map indicating which sides of each street are in or out

Criteria used to Select Area (if appropriate):

Identify any enquiries /research prior to selecting the area, in particular, population data analysis, interviews with local residents or any other form of site appraisal.

Summary of Main Aims of the Project

The overall goals of the project e.g. to improve the standard of accommodation in residential dwellings; to reduce the fear of crime amongst local residents

Objectives:

These are more specific outcomes which the project intends to achieve, e.g. to identify vulnerable young people; to identify the main types of crime and disorder problem within the community as perceived by local residents

The achievement of these objectives should lead directly to fulfillment of the aims of the project

Intended Beneficiaries:

These are the 'client groups' who are expected to benefit from the project e.g. vulnerable elderly residents, victims of repeat burglary, small businesses in residential areas. Identify the criteria upon which the beneficiaries were selected and any enquiries/research undertaken prior to their selection, in particular, data analysis, interviews with project officers, local residents and the business community.

Contact with Intended Beneficiaries by the Project

Specify how the intended beneficiaries were approached by the project (e.g. through publicity campaigns, through meetings with community groups, by other means).

Means of Implementation

These are the strategies by which the project will meet its stated aims and objectives. Record should be kept of the use of different strategies throughout the project period as this will be an important source of data for monitoring progress of the project.

Strategies Originally Intended***Current Strategies*****Project Resources:*****Budget and Funding Regime******Staffing (Ft Pt)******Equipment***

Other

Project Management:

Identify the arrangements for managing the project, in particular, staff structure and line management. Describe the relationship (if any) between the staff working on the project and local authority main programmes.

Other Agency Involvement:

*List any other agencies with which you have collaborated on this project and describe **the nature** of such collaboration*

Name of Agency	Type of Agency	Nature of Collaboration
<i>Other Comments on Inter Agency Links</i>		

Monitoring Arrangements:

This is a statement of arrangements for collecting information which can be used to assess the progress of the project over time. Distinctions should be made between existing and proposed documentation! materials and between information assembled in-house and by external agencies.

(A) Monitoring Information Already Available

Identify how information can be accessed/supplied to research team

--

(B) Monitoring Information To be Generated

Identify arrangements for supply /access of information to research team

--

Continuation/Succession Strategy

Identify arrangements / plans for continuing the project into the future.

--

Other Comments:

Record other relevant comments volunteered by project managers/workers.