

Health Equity Audit Made Simple:

A briefing for Primary Care Trusts and Local Strategic Partnerships

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The London Health Observatory and Eastern Public Health Observatory are part of the APHO network and work towards monitoring health and the impacts of policies on health in the London and Eastern regions (www.lho.org.uk and www.erpho.org.uk)

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1. Introduction

Health equity audit is now a requirement set out in the new NHS Planning and Priorities Framework 2003-2006 (1) and will inform the implementation of local delivery plans, community strategies and local neighbourhood renewal strategies. This briefing is intended to provide practical support to Primary Care Trusts (PCT) working with partners in the NHS and local strategic partnerships (LSPs) to undertake health equity audits.

It will be of particular interest to Directors of Public Health, who have a key role in supporting action to measure and reduce health inequalities. However, an effective health equity audit depends on cross agency agreement and commitment to action. It needs to be integrated into the planning systems of the LSP, and to support the new local government function of overview and scrutiny of health.

Health equity audit is not new. NHS organisations, local authorities and other agencies have been working for many years to identify and reduce inequalities in the health and wellbeing of different groups in their communities.

The difference now, is that tackling health inequalities is integrated into mainstream planning and service delivery within the NHS and partner agencies. Health equity audit provides a framework for systematic action. It provides a golden opportunity for PCTs and LSPs to develop a common understanding of the key local health inequalities in their area – and most importantly, to ensure resources are allocated to tackle them.

This briefing is the first stage in developing a toolkit and practical resources for local practitioners and is available through all the Public Health Observatory websites (www.apho.org.uk) and the Health Development Agency site (www.hda-online.org.uk).

It has been produced by the Association of Public Health Observatories and the Health Development Agency, in collaboration with a number of individuals listed overleaf. It has also been informed by feedback from a review of local practitioners' views and experiences of undertaking health equity audit (2). Key themes emerging were:

- Enthusiasm for finding ways of sharing good practice
- Lack of clarity about what is meant by health equity audit and how it relates to other review/assessment tools
- A number of examples of health equity audit have been identified, although often not called 'equity audits'
- Most examples cover equitable access to health care, and have focused on equity profiles as a first step
- There is learning to be shared from Health Action Zones, some regeneration partnerships, equity profiles for coronary heart disease and the development of neighbourhood renewal strategies.
- There are concerns about the capacity of new PCTs and partnerships to undertake health equity audit
- The lack of appropriate local level data for measuring health inequalities remains a barrier.

Next steps

This briefing forms part of a wider programme of work for the Department of Health to support the development of a local basket of health inequalities indicators. This will be included in the All Government Delivery Plan on tackling health inequalities to be published in early 2003.

Further work is needed to identify examples of equity audits and to help local planners and practitioners share experiences of using their own audits. An initial list of some health equity profiles and audits is included in the Appendix.

This briefing will be used in wider discussions and consultation within each Government Office Region, led by the Public Health Observatories. Further tools will then be developed for PCTs and LSPs on the principles and practice of health equity audit.

2. Why do health equity audit?

The Government's Spending Review 2002 has recommended a comprehensive approach to tackling inequality in health outcomes through an improved focus of programmes and resources – in particular in education, health and housing – as well as increased efforts on smoking cessation, better nutrition and exercise, and other preventive health care services (3)

Many NHS organisations and local partnerships are already developing equity profiles, identifying local priorities to tackle health inequalities and planning to follow up actions and track progress. Health equity audits provide a framework for doing this in a systematic way and the basis for developing a programme of work across the LSP.

Health equity audit is now a requirement for all NHS service planning (1). This was first set out as a recommendation in the *Independent Inquiry into Inequalities in Health* (4).

Local strategic partnerships are expected to play a key role in overseeing local action to tackle health inequalities through the community strategy and local neighbourhood renewal strategies (5)(3).

Definition of health equity audit (see section 4).

Health equity audit is a process by which local partners:

- Systematically review inequities in the causes of ill health, and in access to effective services and their outcomes, for a defined population,
- Ensure that action required is agreed and incorporated into local plans, services and practice
- Evaluate the impact of the actions on reducing inequity .

(derived from (6))

Equity audits can:

- ***Inform the commissioning of services:***
 - Provide information to enable PCTs to commission services to better meet the needs of groups currently under-served by the NHS and social care services
 - Identify where new forms of integrated services are needed across health, housing, transport, leisure, education as well as social care – to provide more accessible and appropriate services for people with the poorest health or access to services and facilities.

- ***Contribute to local performance management of public services:***
 - Provide regular, robust and consistent evidence to illustrate whether the health needs of people are being met – according to their socio-economic group, geographical area, age, sex, disability or minority ethnic group.
 - Inform the development of local health inequalities targets in local public service agreements, LSP performance frameworks, the community strategy, local neighbourhood renewal strategy and local delivery plan targets in the NHS
 - Inform local government overview and scrutiny of health issues and NHS services
 - Support Best Value reviews in local government which impact on health inequalities and ensure Best Value performance plans reflect action to tackle health inequalities.

- ***Support partnership working and the allocation of resources:***

- Provide a common framework for all LSP partners to undertake audits of the contribution of their services to tackling health inequalities
 - Help LSPs allocate resources across the priorities agreed in the community strategy, the local neighbourhood renewal strategy and their main themed strategies.
- ***Encourage community involvement in the NHS and across LSP planning:***
 - Provide information to the public about the current inequities that exist in service provision, access and in health outcomes
 - Provide evidence for community and voluntary sector groups to lobby effectively for improved resource allocation and the development of new services for under-served groups.

At its best, equity audit will enable PCTs and their LSPs to ensure that resources, both people and money are directed towards tackling inequities. This is an important step in moving the health inequalities agenda from the margins to centre stage.

3. Defining health inequalities and health equity?

The starting point for health equity audit is a shared understanding of the differences between health inequality and inequity. For the purpose of this briefing we have set out the definitions below:

Health inequality describes ***differences in health experience and health outcomes*** between different population groups – according to socio-economic status, geographical area, age, disability, gender or ethnic group.

In contrast, health inequity describes ***differences in opportunity*** for different population groups which result in unequal life chances, access to health services, nutritious food, adequate housing and so on (7). These can lead to health inequalities.

Health equity audits focus on ***how fairly resources are distributed in relation to the health needs of different groups***. (This may include resources such as services, facilities, and the determinants of health like employment and education).

The overall aim is not to distribute resources equally, but rather in relation to need. Changes in investment and services as a result of health equity audits will aim to reduce avoidable health inequalities and promote equal opportunity to the determinants of good health, access to health and other services (8).

Health equity not health equality

For example, if all PCTs provide 750 coronary revascularisations (surgical and other techniques used to treat people with heart disease) per million population, this would provide equal access across the NHS but not equal access for equal need. To provide equitable access, there would need to be higher rates of coronary revascularisations provided in areas with higher numbers of people with heart problems - such as in areas with large South Asian populations.

Types of health inequalities

There are different types of health inequality that could be used as the starting point for a health equity audit (9)(10). The familiar multi-layered model of health and influencing factors proposed by Dahlgren & Whitehead provides a useful framework to identify different types of inequality (11).

Figure One illustrates how the three main types of health inequality are related to:

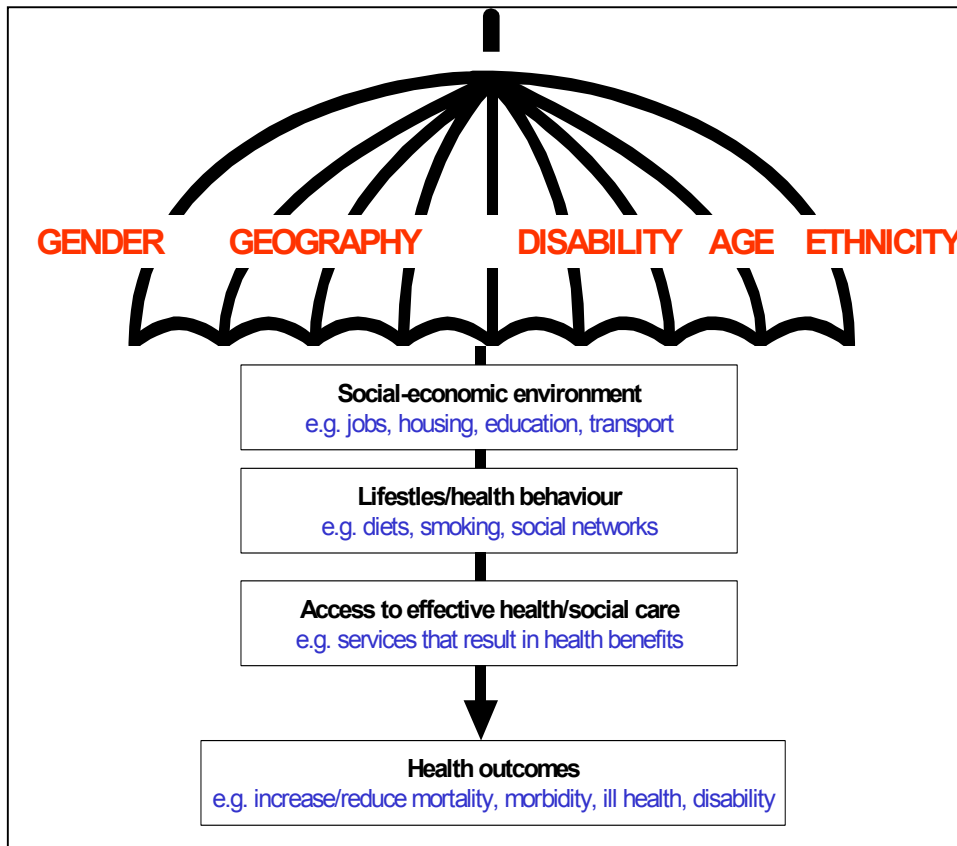
- socio-economic/ environmental circumstances (such as jobs, housing, education, transport),
- lifestyle (such as diet, smoking, social networks), and health behaviour,
- access to effective health or social care.

Each of these types can be further described in terms of a number of dimensions (age, gender, disability, geography and ethnicity). Together, these result in inequalities in health experience and outcomes.

A health equity audit will consider the health needs of particular groups taking into account at least one inequality dimension, (age, gender, disability,

geography and ethnicity) against the provision of services and resources for good health.

Figure One: Types of health inequalities



4. What is health equity audit?

Health equity audit is a process by which partners systematically review inequities in the causes of ill health, and access to effective services and their outcomes, for a defined population and ensure that further action is agreed and incorporated into policy, plans and practice. Finally, actions taken are reviewed to assess whether inequities have been reduced. (6)

Health equity audit is not new. Most health practitioners have been doing it for many years! What is new is its systematic integration into mainstream planning, delivery and performance monitoring.

The process involves more than merely defining an inequitable pattern of health or health care. It is dynamic, involving a review of the current local position and securing resources to tackle the inequities identified.

There is an important distinction between health equity audit concerned with health issues and those focused on health care. An audit could for example investigate inequities in health as a result of differences in access, use and quality of leisure services or transport services, for different areas or groups.

Like clinical audit and Best Value review, the challenge is to find ways of using local planning, partnerships and resources to make the necessary changes in service provision and delivery. If resources are not invested in the most inequitable areas or groups, inequities can increase. In clinical audit circles this is known as “closing the loop”.

There are a number of ways in which a health equity audit can assess equity in service delivery in the NHS, local government or elsewhere. This can include a review of:

- *equal access for equal need* : such as greater availability of free fruit in schools in the most deprived areas

- *equal use for equal need* : such as greater use of smoking cessation services among low-income smokers
- *equal quality of care for all* : such as culturally appropriate and relevant maternity services for black and minority ethnic communities.
- *equal outcomes for equal need* : such as greater reductions in coronary heart disease mortality among lower socio-economic groups.

Asking the right questions?

Health equity audit is designed to answer the following questions in a local area:

- What are the known health inequalities for a particular population group or area?
- What are the significant equity issues in relation to provision/access to services, facilities and the determinants of good health?
- Which of these are priorities for action?
- What programmes already exist which might help reduce the inequities?
- Are there any relevant national targets?
- Should a local target be set?
- What further action can be taken by existing public services or through more targeted action with key groups and areas?
- Have resources been reallocated to take the most effective action?
- Has there been any impact on the inequities targeted?

5. How could health equity audit link to other forms of local performance review?

Health equity audit is everyone's business

Local level action on health inequalities will be reflected in the NHS performance management framework and the National Public Service Agreement for Local Government, and will be co-ordinated principally through Local Strategic Partnerships (3).

Health equity audit can be incorporated into the mainstream performance reviews across the NHS, local authorities and the LSP. It can also be included as part of the review of key LSP strategies. For example, whether the neighbourhood renewal strategy has led to:

- a more equitable resource allocation for services in the area compared to elsewhere,
- new services and facilities provided and used according to the needs of key population groups within the deprived area
- an improvement in the determinants of health (such as housing and employment) relative to need.

Health equity audit is a similar process to clinical audit in the NHS (see table below). It can be linked to NHS clinical audit programmes to review the extent to which service provision, access, use and outcomes of services are equitable for key groups and inform action to change services or treatments accordingly. While health equity audit is primarily focused on resident populations, it may focus on service users following a particular pathway of care for example, do those with diabetes have equal access to treatments for equal need?

Table One Similarities and differences between health equity audit and clinical audit

Health equity audit is similar to clinical audit because it:	Health equity audit is different from clinical audit because it:
Involves a cyclical process for improving health-related services	Is a tool primarily for resident populations, not just service users
Includes setting targets or standards for particular groups or services	Focuses on defined local populations (by socio-economic group, age, gender or geography)
Is undertaken by partners who deliver the services	Has the primary aim of improving health outcomes for disadvantaged communities
Aims to facilitate positive learning about evidence-based practice	Is concerned with the wider determinants of health, as well as health and social care issues and services

The process can also be readily incorporated within a local authority Best Value performance review. There is strong encouragement for local authorities to select cross-cutting issues for Best Value reviews, such as inequalities in health and social care or other social exclusion issues.

Best Value review involves a four step process of challenging why, how and by whom particular services are provided; comparing performance with others; consulting partners, the public and service providers about change and using competition to develop better services as a result. Part of the review can include comparing the equitable provision, use and outcomes of services in relation to major health issues.

The new local authority health overview and scrutiny committees can also use health equity audit as part of their scrutiny exercises. The scrutiny committee can request information from the NHS and other partners on the health inequalities and equity issues for the group or service chosen for the scrutiny exercise. Recommendations from the scrutiny committee would then specifically include actions to tackle any inequity identified.

6. What are the stages of health equity audit?

There are six main stages in health equity audit, which are described in more detail below:

Stage 1: Agree priorities and partners

Stage 2: Do an equity profile: baseline data collection and analysis

Stage 3: Use evidence to identify effective local action

Stage 4: Agree local targets with partners

Stage 5: Influence changes in investment/service delivery

Stage 6: Review progress/impact against local targets.

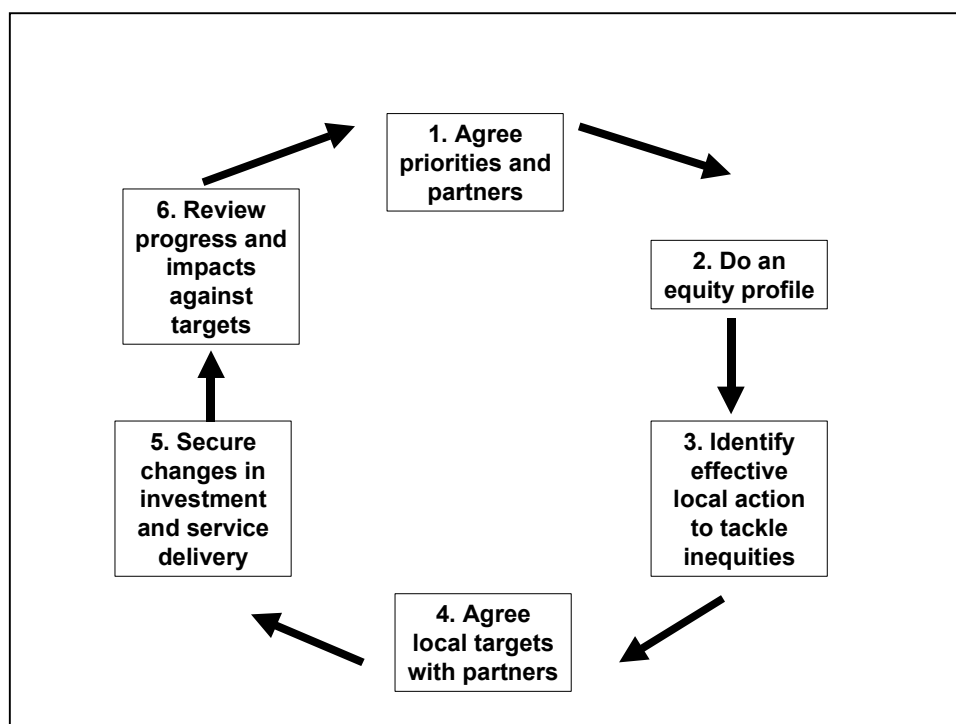
The process requires a combination of:

- technical skills (to analyse a range of public health data sets) and
- negotiating and influencing skills (for partnership working and to ensure changes in resource allocation and local services).

In practice, some of the stages can be combined. For example, if the health equity audit is focusing on local neighbourhood renewal activity, then the resources and interventions may already have been agreed within the neighbourhood renewal strategy. The health equity audit would focus on assessing whether those resources and interventions were being directed to the areas and population groups in the greatest need.

The timescale for an individual audit process will depend on the available data to conduct the profile, partnership decisions on the most effective response to tackling inequities identified, and the time required to take action and review progress. The full audit cycle may take up to three years or more, but initial profiles and changes to services can be fitted into annual NHS and local government planning cycles. Three year NHS planning from April 2003 should make it easier to plan equity audit programmes.

Figure Two: The cycle of health equity audit



Stage 1: Agreeing priorities and partners

The priorities for health equity audits may be drawn from the national government priorities, other local priorities identified in the various plans and partnerships of the LSP, specific health partnerships or from community consultation exercises. The LSP may be best placed to take an overview of these priorities and avoid overlap or duplication of equity audits agreed.

The Director of Public Health and their team in the PCT have an important role in advising on the priority issues and areas. It is important that this is discussed and agreed in partnership – to ensure that the findings are fed back into the planning process. This may be decided across several PCT areas, in which case advice can be provided from across the local public health network.

Ideally all the themed partnerships of the LSP will identify priority issues for health equity audits to be included in their strategic plans.

Some information on health equity issues may have been identified through other reviews. It is useful to bring together existing information available as a first step, to inform future audits.

The team undertaking a particular audit should be drawn from across the NHS, local government and other key partners involved in the services being audited or working with the population groups concerned.

Stage 2: Doing an equity profile: baseline data collation and analysis

Many NHS organisations have documented the inequalities in health in their area, in the Directors of Public Health annual reports. Some have gone further and assessed both the range and extent of health inequalities and the relative use of services by different groups, according to need. Neighbourhood renewal and regeneration projects and HAZs have also undertaken a range of similar profiles in deprived areas to inform their work. This mapping of health status, service provision and use against need is an equity profile. More information on data sources and measurement issues for equity profiling is referenced in the resources section and appendix.

In conducting a health equity profile, it is important to consider the following:

- Are the resources and expertise available to undertake the audit? If not, where will they come from?
- When should the profile be completed? The results of the profile will need to inform local planning, resource allocation or service developments.
- How should inequality be measured (see resources section)? In general it is easier to use indices that are routinely measured at the geographical level of the audit (for example, PCT, local authority, ward or GP practice level). However, for some measures of inequality, primary data will have to

be collected specially for the audit, both at the initial profiling stage and to review progress. Additional resources will need to be identified for gathering 'new' measures.

- Which group/areas are being compared and with which measures? This needs to be agreed by partners at the beginning, so that realistic "levelling up" targets can be set at the next stage.
- Has some of the work already been done as part of other strategies or reviews across the local strategic partnership or within the NHS?

Stage 3: Using evidence to identify effective local action

This stage can be built into the equity profile, but is fundamental to the success of the equity audit process. It involves a review of local interventions, services and initiatives likely to make the most difference in reducing the health inequity identified by the profile.

If the health equity audit is focused on a particular intervention/service already known to be effective (such as the use of aspirin among patient with coronary heart disease or the introduction of energy efficiency measures to reduce fuel poverty), then it can assess whether the intervention/service is being delivered equitably. In these cases, the profiling itself will provide the additional evidence needed.

The partners involved in the audit will need to decide how far current approaches to tackling a particular inequity issue are effective. This will involve bringing together the evidence available regionally and nationally about effective interventions, together with information from local reviews and evaluations (see appendix for a list of resources on evidence of effective interventions to reduce health inequalities). For some issues, there is still limited evidence about the best combination of interventions to tackle particular health inequalities. In other cases, there needs to be national and regional change to support local action.

Recommendations can then be made on future initiatives and services – depending on what is most feasible to change in the local circumstances. This will in turn depend on the funding and resources available and the acceptability and relevance of the proposed services for the local population concerned. These recommendations should be reflected in the LSP plans, especially the community strategy, local delivery plan and neighbourhood renewal strategies to ensure action.

The importance of this stage is that recommendations are made on the basis of identified need, and according to the evidence of ‘what works’.

Stage 4: Agreeing local targets with partners

Setting local targets to reduce health inequalities is a partnership decision between commissioners, providers and users of services. Targets are best seen as a tool to ensure that resources and effort are directed at tackling health inequalities in an explicit and measurable way (13).

Targets can be set for any dimension of health inequalities, but they must clearly state the improvement to be achieved for a particular socio-economic group or area as identified by the equity profile. Inequalities targets are distinguishable from general targets in that they should do at least one of the following:

- Specify a change to be achieved, such as increased access to/uptake of a service by an under-served group
- Measure an activity or process aiming to contribute to a reduction in inequity, such as increasing resources allocated to areas in greatest need
- Disaggregate outcomes to be achieved by socio-economic groups, often with a greater improvement specified for some groups or areas compared to others (differential targets)
- Focus on social determinants of health such as reducing poverty, unemployment or poor housing among key groups or areas.

The main types of targets that might be useful locally are:

- **Process targets** which measure intermediate steps in the development of a service or initiative aiming to reduce inequity in the longer term. For example, to establish a joint information system across NHS, local government and police to share information on child road accidents in deprived areas by 2004
- **Activity targets** which measure the volume/targeting of work of a service towards achieving a reduction in health equity. For example, to increase uptake of welfare rights sessions in primary care in deprived areas by x% by 2004
- **Outcome targets** which specify a desired improvement in specific health outcomes or risk factors. These may be split into targets for particular population groups or areas. For example, to reduce the proportion of low birth weight babies in targeted areas by x% by 2004.
- **Exposure targets** which specify changes in socio-economic and environmental conditions rather than lifestyle or health services. For example to reduce the number of food deserts (areas of poor access to affordable, healthy food) in the city; to increase the number of disabled people in employment or to reduce the number of people sleeping rough by x% by 2004 (12).

Health inequalities targets will be included in the local delivery plan, and linked to the community strategy. Other LSP strategies, such as the community safety strategy and education and lifelong learning strategy will also include health inequalities targets – for example, on issues such as drugs, alcohol, youth offending, teenage pregnancy.

At the more local level, neighbourhood renewal strategies aimed more at resource reallocation and service redevelopment in the priority neighbourhoods, will also include health inequalities targets.

Local public service agreements and health inequalities targets

The local public service agreements provide an important mechanism to agree local health inequalities targets across the LSP – with the opportunity for additional resources if the targets can be met. The following areas could be considered as topics for local targets, as recommended by the Department of Health:

- Improving life expectancy in areas with low life expectancy compared to the average
- Reducing infant mortality in deprived areas or groups
- Reducing teenage pregnancy
- Increasing the proportion of teenage mothers continuing their education and employment
- Reduce smoking, particularly amongst disadvantaged groups
- Reducing the higher incidence of childhood accidents in deprived wards
- Increasing the number of vulnerable households helped out of fuel poverty
- Narrowing the gap in educational attainment across social groups, including attainment in schools serving deprived areas, compared to local authority averages (14).

Stage 5: Influencing changes in investment and service delivery

Reducing health inequalities is a key criterion in the new formula for distributing NHS resources from April 2003. PCTs will be held to account through the NHS performance management framework for using their devolved resources to tackle health inequalities, as one of the Department of Health's Public Service Agreement priorities (3).

Investing resources to reduce health inequity are now central to the PCT and LSP planning processes. The recommendations from equity profiles and reviews of effective interventions can be used to inform funding proposals and resource allocation. These may be considered as part of the bidding

for/allocation of mainstream public sector funding, targeted grants like Neighbourhood Renewal Fund or performance award grants.

Influencing investment in service delivery may take several years – with audit data being actively provided to change the traditional funding patterns.

Stage 6: Reviewing progress/impact against local targets

This stage can provide the most important information for local partnerships. It can 'close the loop' between identifying inequity and showing progress in reducing it. Conducting another profile of the data gathered in the equity profile will indicate whether there is any change in the equity of the group or area concerned. It also adds to the local evidence base of 'what works' to tackle health inequalities. Often this evaluation data is required to justify turning a pilot project into a mainstream activity.

One of the major barriers to developing targets and measuring progress has been the lack of appropriate local indicators. However, there is considerable national work underway to identify both local health inequalities indicators and other wider quality of life indicators that can be used locally with an inequalities dimension (9) (15).

A list of the main sources of available indicators is included in the appendix.

Example 1: A health equity audit of maternity services in The City and Hackney, Tower Hamlets and Newham, London (16)

Stage 1: Agreeing a topic to audit

The population of this inner city area is diverse and highly deprived with high fertility rates. The health authority of the time, asked its public health team to conduct a review of maternity services in 1999. The topics for review were agreed in partnership with the relevant clinical groups from three local trusts serving the whole population along with service users. This involved obstetricians, midwives, GPs, maternity managers, the maternity services liaison committees (user led groups), public health and health authority staff. Maternity services had long been seen as a much-neglected priority in a highly fertile growing population.

The three east London PCTs were chosen as comparators for assessing inequities and setting targets subsequently.

Stages 2 and 3: Equity profiling and identifying effective interventions

The types of interventions and services that may be provided within maternity care are complex. A local profile of inequities in maternity outcomes and access to services was conducted. This showed that inequities in routinely monitorable outcomes such as infant and perinatal mortality did not significantly differ in the three PCT areas and were generally regarded as too insensitive an indicator of outcomes. Inequalities however, were found in antenatal practices, access to obstetrics and midwifery input and bilingual advocacy services – vital in a multi-lingual community. In the case of midwifery services, midwifery access was poorest in Newham.

This was followed by a review of the interventions most likely to be effective. The economic assessment tool known as marginal analysis was used to identify the top two priorities for further investment – according to what was effective in addressing the inequities found. The same group of maternity stakeholders were involved in agreeing the priorities. These were identified as:

- Reducing inequality in access to midwifery
- Reducing inequity in access to bilingual advocacy services

Stage 4: Setting targets

Stakeholders also agreed that maternity care was to be midwifery-led, and that tackling the inequity in access to midwifery services was the top priority.

A number of examples of targets across the spectrum of the evidence base were agreed as part of the strategy, including modernising antenatal protocols and targeting midwifery in relation to need. This required the use of a further tool to help define what level of midwifery input was appropriate for the patterns of risk in each of the PCT populations.

Stage 5: Influencing change and resource investment

Detailed negotiation and renegotiation on an annual basis was required to make the necessary service changes. The main process for influencing the redistribution of resources at the time was the NHS Service and Financial Framework, the subsequent Modernisation Plan and the PCT development and delivery plans.

Stage 6: Evaluating progress

Additional investment in midwifery services to level up the most disadvantaged PCT has occurred, although the pace of change has been slower than was hoped.

There has been demonstrable progress towards one of the midwifery targets set, although changes in maternity outcomes or quality of maternity care have proved difficult to measure as mortality indices are not statistically sensitive enough to detect change. A maternity users follow-up survey has been conducted.

**Example 2: A health equity audit of a regeneration programme in
Liverpool (11)(17)**

Stage 1: Agreeing a topic to audit

Liverpool is one of the most deprived cities in England. It is part of a Health Action Zone, receives European Objective 1 funding, regeneration funding and is the focus for many other national interventions designed to address health inequalities. The challenge has been in assessing the impact of these interventions and how resources are being targets at narrowing the inequalities gap for local people.

Stage 2: Equity profiling

An equity profile was developed to provide a picture of the inequalities that exist and the relative need compared with current provision, and to enable targets to be set in the future, which could be measured to show progress.

The profile was carried out by members of the Department of Public Health at the former Liverpool Health Authority to test the ability of a framework to measure different dimensions of equity. It was shared at a World Health Organisation conference and locally across the NHS and local authority in 2000.

The framework was developed to measure different dimensions of inequalities:

- Human, social, physical/environmental and economic/financial (four types of capital)
- Age, gender, geography, socio-economic status, ethnicity and impairment

Information was reviewed using these dimensions to set a baseline for action at a local level. For example, socio-economic status was used a starting point and data gathered in two electoral wards – with known differences in socio-economic status.

The differences are shown in Table Three

Table Three: An example of a framework for measuring health equity

Type of capital	Socio-economic status	
	Deprived ward	Affluent ward
Human capital:		
Educational attainment (achievement of state tests at 14 yrs)		
English		
Maths	54.5%	85.8%
Science	58.2%	80.7%
	68.3%	85.4%
Social capital:		
Domestic burglary rate (per 1000 population 1997/8)	14.1	8.2
Physical/environmental capital:		
Street cleanliness (% unsatisfactory)	16.0%	4%
Bus stop within 250 metres	100.0%	89.3%
Economic/financial capital:		
Unemployment:	11.1%	3.8%
long term	29.7%	29.4%
youth	28.3%	29.1%
Housing benefit	49.6%	11.3%
Free school meals	49.05	13.3%
Public spending per head (1995/6)	£4,532	£3,328
Health outcome indicators:		
Emergency admissions per 10,000 population (1998/99)	1,182	706
All cause standardised mortality ration under 75 years (1996/98)	160	101
Proportion of children aged 5 years with dental decay (1997/98)	56.0%	39.0%

Stage 3, 4 and 5: Identifying effective interventions, setting targets and influencing resource allocation

The framework was also tested in relation to geographical areas, social capital and crime rates. Analysis of domestic burglary by electoral ward showed a wide range across the city (1.46 per 1000 properties – 11.32 per 1000 properties in 1995/96). Initiatives designed to tackle the level of domestic burglary included the introduction of gates across alleys between terraced housing – to deter burglaries while maintaining residents access. There was a reduction in burglaries from 23 to 5 between 1995/6–1999/2000 in the 210 properties involved (at a cost of less than £50 per property). This initiative is being rolled out across the city using information on crime and deprivation to target resources.

As this was a pilot, targets were not set explicitly. However, the results will be used to inform future target setting.

Stage 6: Evaluating progress

Liverpool City Council made a clear commitment to tackling equity issues in partnership with health and other local stakeholders. The Local Strategic Partnership will take responsibility for evaluating progress with the new PCTs and other partners.

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- (1) Department of Health. *Improvement, Expansion and Reform: the next three years Priorities and Planning Framework 2003-2006* (Department of Health 2002)
- (2) Matrix mha research and consultancy. *Unpublished draft report on the use of health equity audit* (December 2002)
- (3) HM Treasury. *Spending Review 2002* (HM Treasury 2002)
- (4) *Independent Inquiry into Inequalities in Health Report*. Chaired by Sir Donald Acheson. (London: The Stationery Office, 1998.)
- (5) Department of Health. *Tackling health inequalities; consultation on a plan for delivery* (Department of Health 2001)
- (6) Jacobson, B. *Delaying tactics*. Health Service Journal 2002: 112:5793;22
- (7) Harris, Sainsbury and Nutbeam. *Perspectives in Health Inequity* (Sydney 2000) in (9) below
- (8) Whitehead M. The Concepts and Principles of Equity in Health. *Int. J. Health Serv.*, 1992; 22(3): 429-445.
- (9) Matrix mha research and consultancy. *Health inequality indicators: Basket of local indicators, Working Draft* (Matrix January 2003)
- (10) Flowers J, Pencheon D. *Introduction to health equity audit*, InphoRM, Issue 1, December 2002. (Eastern Region Public Health Observatory 2002)
- (11) Dahlgren G, Whitehead M. *Policies and strategies to promote social equity in health* (Stockholm: Institute of Futures Studies, 1991)
- (12) Hussey R, Johnstone, F. *Equity audit – a tool for monitoring community regeneration*. (Liverpool Health Authority 2001 (available at <http://www.liverpool-ha.org.uk/pdfdocs/copenhagenpaper.pdf>)

- (13) Bull J. and Hamer L *Closing the Gap: Setting local targets to reduce health inequalities* (Health Development Agency 2001)
- (14) Department of Health *Guidance on tackling health inequalities through local Public Service Agreements* (Department of Health 2002)
- (15) Audit Commission *Quality of Life; Using quality of life indicators* (Audit Commission 2002)
- (16) Jacobson, B (personal communication January 2003)
- (17) *Merseyside Public Health Annual Report 2000*. (Liverpool Health Authority, 2000).

Appendix 1: Resources And Further Reading

Tools for measuring health equity

Carr-Hill, R and Chalmers-Dixon, P. *A review of methods for monitoring and measuring social inequality, deprivation and health inequality*, Centre for Health Economics at the University of York (available on www.sepho.org.uk)

Majeed, FA. et al. *Equity in the NHS Monitoring and promoting equity in primary and secondary care*. British Medical Journal. 308: pp 1426-29 1994

Department of Health. *User guide for age discrimination benchmarking tool* (Department of Health 2002) (available at <http://www.doh.gov.uk/nsf/agediscuserg.rtf>)

Health impact assessment

Taylor L and Blair-Stevens, C (2002). *Introducing health impact assessment (HIA): informing the decision making process*. London: Health Development Agency

Health impact assessment gateway website provides links to key policy documents, guidance and examples of health impact assessment <http://www.hiagateway.org.uk/>

Evidence of effectiveness of action to tackle health inequalities

Health Development Agency Evidence Base at <http://www.hda-online.org.uk/evidence>

Gepkens A, Gunnung-Schepers LJ. (1996). Interventions to reduce socio-economic health differences: a review of the international literature. *European Journal of Public Health* 1996;6(3):218-226

Use of targets and indicators

Kendal L (1999). *Local inequalities targets*. London: Kings Fund available at <http://194.66.253.160/ePublicHealth/assets/applets/PHInequalities.pdf>

Bull J. and Hamer, L. *Closing the Gap: Setting local targets to reduce health inequalities* Health Development Agency 2001

Audit Commission *Quality of Life: Using quality of life indicators* (Audit Commission 2002) (www.audit-commission.gov.uk)

HM Treasury, Cabinet Office, National Audit Office, Audit Commission, Office for National Statistics. *Choosing the right fabric: A framework for performance information* (HM Treasury 2001)

The above list provides a starting point for further sources of information. It will be developed during the national and regional consultation on the use of health equity audit.

Appendix 2: Examples of health equity profiles and audits

This section includes some examples of health equity profiles and audits identified from the literature. Some include examples of equity profiles, others have gone further and made recommendations for action. Further work is needed to identify the ways in which these profiles are now informing PCT and LSP planning. This information will be gathered for the final toolkit.

List of examples

- North Staffordshire health inequalities profiles
- East of England profile of teenage conception rates and child poverty
- Peterborough and Cambridge profile of the rates of coronary revascularisation and the use of aspirin in primary care for patients with coronary heart disease
- Liverpool Health Authority Coronary Heart Disease Equity Audit
- East London and the City – equity audit of NHS resource allocation
- East Kent equity audit of hospital services
- Dorset equity profiles and audits of health services
- North Cheshire – equity audit of health services

North Staffordshire health inequalities profiles

Scope of the HAZ profile

The Health Action Zone for North Staffordshire produced their health inequalities profile in 2002. The first report (Part 1: Demography) focuses on population statistics for the HAZ area including the City of Stoke-on-Trent, urban Newcastle-under-Lyme and a small area of the Staffordshire Moorlands. The report covers local population and changes, unemployment, and measures of deprivation (Income / Employment / Health deprivation and disability / Education and skills training / Housing / Access to services / Child poverty). It includes population denominators, census data from ONS, national deprivation indices and data from Neighbourhood Statistics. The second and third reports focus on health and the environment profiles respectively.

PCT health profiles

Health profiles are also being conducted for the four new PCTs in the area, Staffordshire Moorlands, Newcastle-under-Lyme, North and South Stoke. Two profiles have been completed to date including:

- resident ward based population data,

- demographic and deprivation data from the national deprivation indices,
- health status focused on the prevalence of the main national priority issues, hospital admissions, life expectancy and some key conditions such as lung and breast cancer, stroke
- socio-economic groups and lifestyle data will be collected using the new Census and the new West Midlands lifestyle survey
- all electoral wards national ranking of health status .

Using the data

The HAZ profile has informed funding bids in Stoke City Council and has been used in highlighting priorities for neighbourhood renewal areas at ward level, such as high teenage pregnancy levels. It is hoped it will influence neighbourhood renewal spending in future years.

The new PCT profiles will be reviewed by the Directors of Public Health and used to feed into annual public health reports, local delivery plans and other funding plans across the area. The Health Promotion Directorate has appointed a person to lead on health impact assessment and equity audit, and they have drafted a screening tool and an outline work programme.

East of England profile of teenage conception rates and child poverty

Choosing the topic for the profile

This profile was undertaken by the Eastern Region Public Health Observatory, working with teenage pregnancy co-ordinators in the East of England, to inform the local implementation of the national teenage pregnancy strategy.

Results of the profile

The relative rates of teenage conception for under 16 year olds were compared across the groups of wards ranked by fifths of the child poverty index. The results, illustrated in the table A2.1, showed a gradient in the teenage conception rates, with the rate in the most deprived areas being more than 6 times that on the least deprived. This information, showing the health inequality in teenage conception rates, has been subsequently combined with information on service provision to assess whether the distribution of sexual health services for young people fairly mirrors the teenage conception rates.

Table A2.1. Inequality in Teenage Conception Rates

Fifth of wards for child poverty index	Conception rates for under 16s (per 1000 females under 16*)	Relative conception rates for under 16s
Lowest	1.6	1
Second lowest	2.2	1.4
Middle	2.9	1.8
Second highest	4.9	3.1
Highest	10.3	6.4

*Note: This measure of teenage conception rates was the Oxford ward population estimates for under 16 year olds used in the Index of Multiple Deprivation 2000.

Peterborough and Cambridge - profiles of coronary revascularisation and the uptake of aspirin in primary care by patients with coronary heart disease

Choosing the topic for the profile

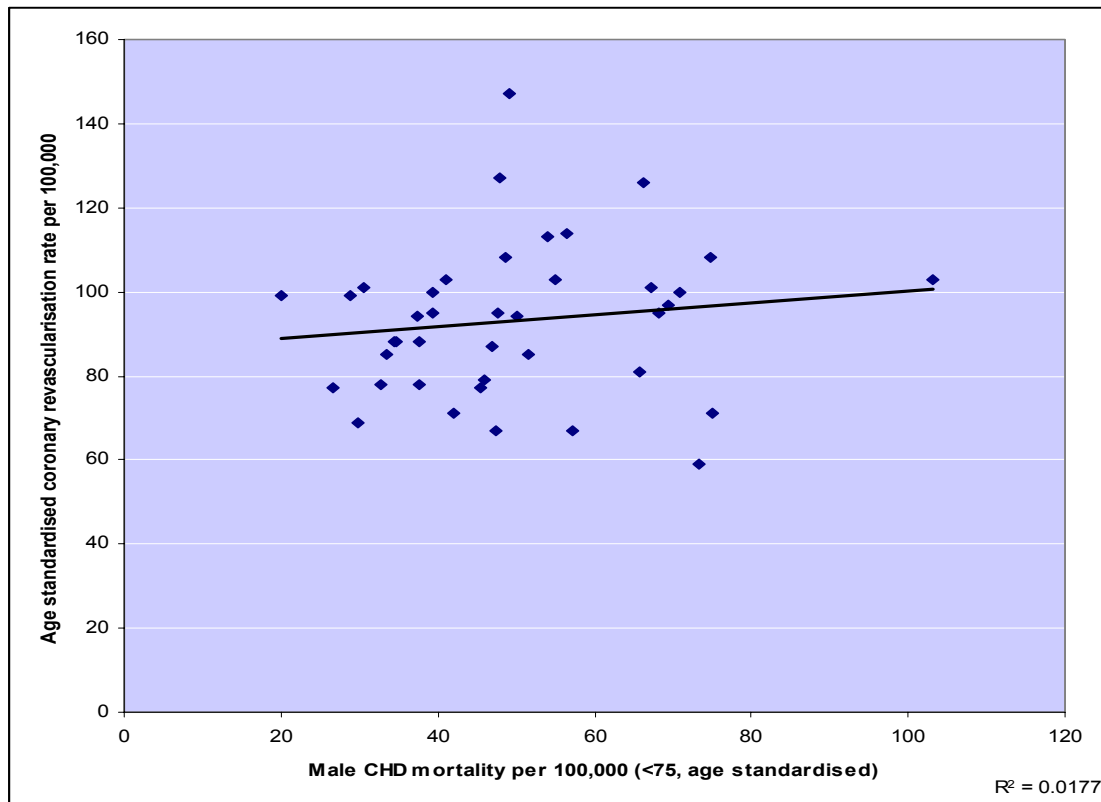
These two profiles will form part of a wider equity profile as part of work on the coronary heart disease National Service Framework. They will also contribute to an audit process to determine the site for tertiary cardiac services in the region.

Results of the profile

The East of England (population 5.2 million) as a whole and Cambridge in particular, have amongst the lowest rates of coronary heart disease mortality in the whole of the UK (Standard Mortality Ratios of 64 and 51 respectively). Nevertheless, as the following profiles show, there is inequitable provision of two effective treatments – coronary revascularisation and aspirin for secondary prevention.

The figure A2.1 below shows the distribution of coronary revascularisation at PCT level across the East of England against a proxy measure of need – coronary heart disease mortality in men under 75 years. In this example, there is no relationship between revascularisation and the proxy need measure. If there was equitable provision, there should be a positive correlation between coronary heart disease mortality (as a measure of the prevalence of coronary heart disease) and revascularisation rates.

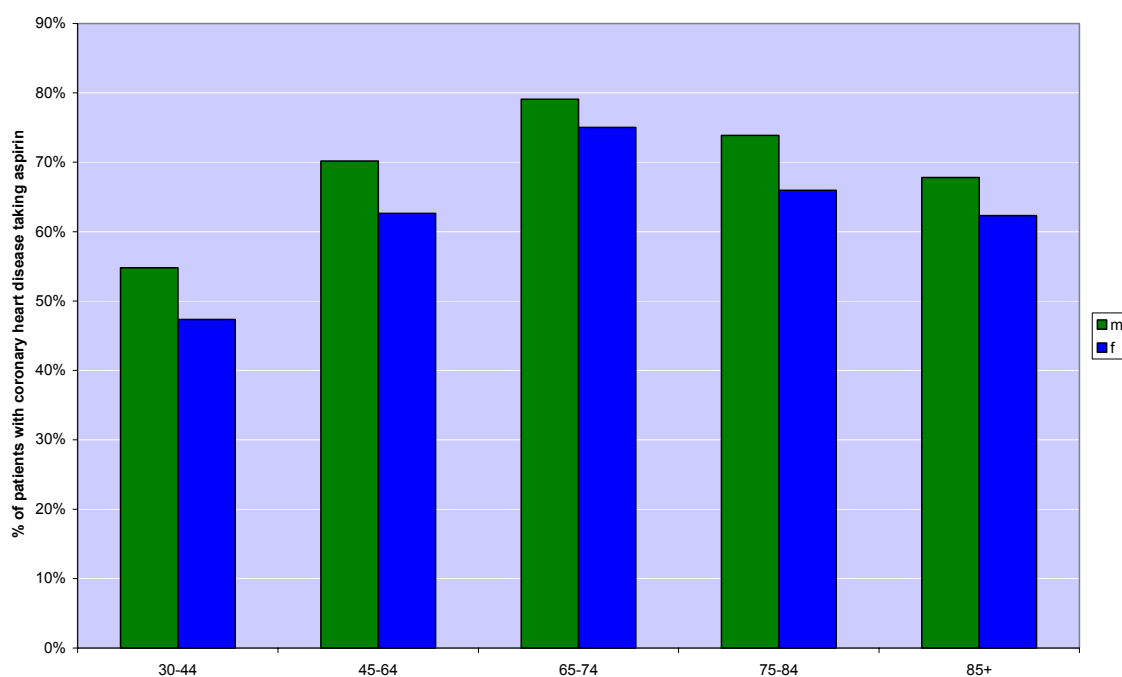
Figure A2.1 The relationship between male mortality and revascularisation rates, by PCT, East of England, 2000-2001



All rates are directly age-standardised to the East of England population. Sources: Ref. 21; Hospital Episode Statistics.

Figure A2.2. shows uptake of aspirin by age and sex in general practices within the Cambridgeshire and Peterborough Public Health Network. There are differences in uptake between ages and sexes, for example, on average 10% more men than women receive aspirin.

Figure A2.2 Uptake of aspirin in patients recorded in primary care as having CHD, by age band and sex, in Cambridgeshire and Peterborough Public Health Network area



Source: Heath A, King P, Lea D, Whyman H. PRIMIS Data Briefing 1. Cambridge: Cambridgeshire and Peterborough Public Health Network; 2002.

Liverpool Health Authority Coronary Heart Disease Equity Audit

Choosing the topic for the audit

The coronary heart disease (CHD) equity audit was completed as part of the local delivery of the National Service Framework for CHD, by the health authority public health team. Liverpool has extremely high levels of deprivation as measured on multiple indices. 24 of the 33 electoral wards covered by the former Liverpool Health Authority (now 3 PCTs) are in the 5% worst ranked wards in England. The level of heart disease reflects this pattern and people in Liverpool are 56% more likely to die from heart disease than the average person living in England.

Audit framework

The audit was divided into the following areas linked to the standards in the National Service Framework:

- Reducing heart disease in the population – smoking, physical activity, obesity and diet and nutrition
- Preventing CHD among those at high risk
- Heart attacks and other acute coronary syndromes
- Stable angina
- Revascularisation
- Heart failure
- Cardiac rehabilitation

For each area, the audit included information on the following aspects:

- What are the known inequalities?
- What is the situation in Liverpool?
- What is the target?
- What might contribute to reaching the targets?
- What programmes already exist in Liverpool?

Results of the profile

- Limited local data on smoking, diet and nutrition, obesity and physical inactivity
- The use of aspirin and treatment of raised cholesterol and high blood pressure is not high or equitable across the PCGs
- Inequities of access exist in cardiac catheterisation, CABG and PTCA between men and women and between different primary care and deprivation groups in Liverpool
- For example, the number of cardiac catheter procedures carried out increased across all PCGs between 1997/98 and 1999/2000, but they have not reduced the inequality between PCGs, nor is the increase in line with need as represented by CHD mortality. The gap between the best off in terms of utilisation of cardiac catheter procedures and the worst off has increased by 162 procedures per million population
- For example, the rate ratio of males to females diagnosed with angina and aged over 65 years is 1.2 to 1 (1995 local study). However, the rate ratio for the same age group for males to females receiving coronary artery bypass grafts was 3.6 to 1. Clearly men are receiving far more CABG relative to need than women. The same trend can be found for PTCAs
- While nitrate prescribing follows the pattern of deprivation as expected, but there is an inverse relationship in access to revascularisation procedures.

Priorities identified

- 24% reduction in the levels of smoking in deprived areas required to meet national targets. More work needed to target lone parents on benefits and young people

- Partnership work with City Council and schools to increase physical activity levels in deprived areas, with people from ethnic communities and people with disabilities
- Work with hard to reach groups to take forward the local food strategy. Particular focus on people in manual social groups, children of obese adults and people with poor mobility
- Extra capacity for revascularisation targeted at narrowing the inequity gap between different groups in the city, as well as increasing for the city as a whole. Women in deprived areas are a key target group
- Community based prevention and rehabilitation services to focus on identifying people from under-served groups with suspected or confirmed heart failure
- Develop a systematic approach to inviting all those suffering from CHD to participate in CHD rehabilitation – with greatest effort on economically deprived, women, older people, minority ethnic communities and people with disabilities.

Future audit plans

Plans include reviewing the management of people with angina in deprived areas and in more affluent areas to identify the characteristics that influence the variations found in the CHD audit. Since the establishment of the PCTs it has been agreed that the targets will remain and should be built into the planning and performance management processes.

East London and the City – equity audit of NHS resource allocation

Choosing the topic for the audit

In May 2001, the former East London and the City Health Authority, and local NHS partners initiated a project to investigate equity issues within the health economy, focused on the distributional effects of resource allocation decisions within ELCHA. Equity was defined as 'equal access for equal need'. The objectives were to inform the national resource allocation debate in the NHS and to give direction to the local health community within East London on the allocation of scarce resources. The audit compared equality of access to services in relation to the needs of the population.

Context for the audit

Reasons for undertaking the equity audit on resource allocation were identified as:

- Mapping resources for national service frameworks
- Determining financial baselines for joint investment
- Adding detail to HIMPs
- Assisting decision making for the SAFF
- Helping to focus on national and local resource distribution issues

- Linking in with NHS Plan modernisation reviews
- Contributing to the debate around inequalities and health inequalities.

Framework for equity audit

The audit concentrated mainly on geographical equity ie. disparity between PCT localities and on equity across age and sex groupings. Future work has been identified to consider equity of access between different ethnic groups, but the quality of ethnic coding is not sufficiently robust to include data at present.

Access to services was measured by looking at both spending on services and the way they are used. For example, the number of hospital episodes and home nursing visits. Need is based on the size of the population, adjusted for age, sex, and deprivation, using a national formula.

A model was adopted based on the resource allocation model used to calculate each locality's distance from its fair share target. Equity of access is measured in terms of outputs from the NHS (eg. face to face contacts, FCEs,) although input (eg. people, capital, supplies) and outcome measures (eg. health improvement) are also identified.

Key findings across ELCHA

- This is a complex piece of work and difficult to interpret for two reasons. First the measures of access and need, although systematic, are relatively crude. Secondly, the quality and completeness of the data used are unreliable in some areas. However the initial results are striking
- In national terms, ELCHA has the fourth worst shortfall in access to hospital inpatient and day care in the country, at least 23% less than the national average, combined with 19% less resource available for prescribing. The 2002/2003 allocation of resources has recognised this shortfall to some extent, but ELCHA remains £25 million short of what might be expected; worse than all but one other health authority
- In terms of spending per capita, ELCHA spends disproportionately more on primary care, mental health and maternity services than the average health authority. London as a whole has higher funding per capita than any other region in the country – almost 6% higher
- In terms of the casemix-weighted value of hospital services accessed by the local population, ELCHA ranks 7th worst in the country. The shortfalls in some specialties, such as urology and general medicine, exceed any variation that may be due the population's demographic profile
- Inpatient services per capita within ELCHA are unequally distributed – Tower Hamlets has almost 8% more access to services, while City and Hackney has 7% less than

average. A clear bias towards older people across the Health Authority, with 9% more inpatient services being accessed by the age group over 65 than expected.

Key findings for City and Hackney PCT

- Within ELCHA, City and Hackney does poorly. City and Hackney’s residents fare worse overall with 6% less access to hospital services, 4% less access to primary care and 12% less access to prescribing than the East London average. Tower Hamlets and Newham also need more investment.
- Key areas of apparent lack of access in City and Hackney, compared with Tower Hamlets and Newham are in cardiology, thoracic surgery, urology, diabetes and tuberculosis, which are all priority areas.
- City and Hackney spend significantly less than other East London localities on GP services, occupational and physical therapies; although they spend more on some health visiting and district nursing services.

Examples for older people and mental health

The equity audit has looked at access to inpatient, day case and outpatient care for older people. Compared with the national average, spend per head of population, weighted for deprivation factors is low. The table below looks at spending per head of population for inpatients in five services which are principally used by older people, and shows the position for ELCHA and City and Hackney

Table A2.2 Spending Per Head Of Population

	City and Hackney	ELCHA
General and elderly medicine	-36.3%	-37.6%
Trauma and orthopaedics	-50.5%	-42%
Cardiology	-37.1%	-26%
Cardio-thoracic surgery	-41.7%	-27.6%
Thoracic medicine	-27.5%	-10.0%

There is little national comparative data on spending on community services. City and Hackney does appear to spend at only just below the ELCHA average overall and above average for district nursing and health visiting. This is in part due to difficulty in recruitment and retention, which results in reliance on more expensive agency staff to maintain the service.

Mental health services

City and Hackney spends 5% more than the ELCHA average on mental health services in total. The bulk of this is a 34% above average spend on forensic services (which are provided

in Hackney). Spend on general adult mental health services is 2% above the ELCHA average. By contrast, the PCT spends 64% less than the ELCHA average on child and adolescent psychiatry and 26% less on psychiatry for older people.

Next steps

A series of recommendations were made to ensure the information from the audit is used to inform future commissioning. These included:

- Production and dissemination of staff briefings
- PCT commissioners to develop action plans with providers to address the inequities identified –with support from the project manager
- Steps to improve local data quality and availability as part of local planning
- An updated equity audit be undertaken to reflect the new data available – 2001 reference costs, 2000-2001 HES data, 2000-2001 personal social services expenditure, 2001 CIPFA database etc
- Joint work across neighbouring NHS organisations be developed in future audits.

City and Hackney PCT are taking forward the results of the audit in their area. The HIMP 2002 includes an analysis of need identified from the audit to highlight priority areas and the action planned to tackle these. There are also a series of recommendations for building on the audit and the profiling for the HIMP, including:

- Lobby for a fair share of NHS resources for the PCT
- Understand the reasons for the low rates of infant mortality, stillbirth and life expectancy and act to improve them
- Targeting help to those most in need and focusing on big issues in the area such as tuberculosis, sickle cell disorder and thalassaemia, teenage pregnancy (in Hackney), drug and alcohol misuse and disability
- Using Neighbourhood Renewal Fund to tackle health inequalities.

East Kent equity audit of hospital services

The former East Kent Health Authority Public Health Directorate commissioned the University of Kent to undertake an equity audit of hospital services.

Key findings:

- Mortality for CHD and stroke appear to be related to deprivation with the highest and lowest SMRs varying by 20-30% across East Kent

- There is a clear association between deprivation and rates of emergency admission with CHD
- There is a greater access to angiography in more deprived areas, but wider and less easily explained differences between local authority areas in access to angiography. The greater access to angiography, which also led to greater use of revascularisation may be insufficient to compensate for the greater need in most deprived populations
- Variations in cancer care are not so marked, but are still associated with deprivation. The more deprived populations had more hospital admissions for all cancers and this was most marked for cancer of the oesophagus, lung, breast and bladder.
- Mental health, as measured by hospital episodes, is strongly associated with deprivation. The number of episodes in mental health specialties appears to be rising
- For a number of other conditions, such as accidents and other emergency admissions, rates increased with deprivation.
- Better access for deprived areas is only seen for a small number of surgical procedures including cataracts.

Next steps:

The East Kent Health Improvement and Modernisation Plan 2002/3-2005/6 sets out the requirement that PCTs should address any issues identified by the equity audit and ensure that there are no artificial barriers to accessing services.

Saunders, J. *Health inequalities, deprivation and access to primary health care. Parts I and II.* Reports submitted to East Kent Health Authority. CHSS, University of Kent: 1998

Dorset equity audits across a range of services

Work has been underway since 1997 to identify the number and distribution of people in the new County of Dorset (districts only) who are dependent on benefits using data on housing benefit and council tax benefit records. The former health authority has also worked with individual district councils to map relative deprivation and to assess whether the deployment of health care and social care resources matched health and social needs, linked to deprivation.

Public health action areas have provided the geographical focus for identifying variations in health and developing local action plans. Equity of access to health services has also been audited

Key findings:

Variations in referral rates and service provision between general practices in Dorset were identified for the 1999 Public Health Report which focused on reducing health inequalities. These variations included:

Table A2.3 Variations In Referral Rates And Service Provision

Service provision	Variations across practices
Reducing heart disease and stroke:	
Elective angina admissions	20 fold
Emergency angina admissions	90 fold
Myocardial infarction admissions	60 fold
Angioplasty or CABG	15 fold
Prescribing for heart disease	2 fold
Reducing cancers:	
Breast screening	2 fold
Cervical screening – 3 yearly programme	2 fold
Improving maternal and child health:	
Admission rates for gastro-intestinal infection in children under 15 years	7 fold
Managing chronic disease:	
Asthma:	
Prevalence of asthma	5 fold
Admission to hospital	10-12 fold
Prescribing for asthma patients	3 fold
Diabetes:	
Prevalence of diabetes	3.5 fold
Prescribing for diabetes patients	2.5 fold
Health of older people:	
Influenza immunisation: percentage of 65+ population	4 fold

Equity audits have been conducted in the following areas for 1998-1999:

- Coronary heart disease – including analysis of mortality rates, admission rates and prescribing rates by primary care group;
- Chronic disease management – including analysis of prevalence and admission rates for asthma and prevalence and prescribing rates for diabetes by primary care group;
- Mental health – including analysis of prevalence and admission rates for neurosis, psychosis and schizophrenia linked to Jarman scores by primary care group;
- Health in old age – including analysis of age-specific primary care and Public Health Common data set indicators by primary care group

- Women's health – including analysis of primary care and Public Health Common Data Set indicators for breast and cervical screening and teenage pregnancy by primary care group:
- Children's health – including analysis of primary care indicators and audit data on asthma, gastro-intestinal infections, childhood vaccinations, rates of children on the At Risk Register, breast feeding rates, grommet insertion by primary care group.

Much of the data relates to 12 month periods which is recognised as being only the start of ongoing data collection.

Next steps:

This work is now being fed into the PCTs in the area to consider the implications for service planning within and across the area.

North Cheshire – equity audit of health services

The former North Cheshire Health Authority commissioned Equity in Health Research and Development Unit at the University of Liverpool to carry out an equity audit of the health care provided to its residents in 1996. This involved examining deprivation, health and health service provision across the authority at three geographical levels:

- Across the 42 local authority wards in the district
- Across the 6 commissioning localities
- Across the 47 general practices within the Health Authority.

Key findings:

Some of the key findings are set out below in relation to:

Deprivation

All 42 electoral wards were classified and ranked according to their Townsend Deprivation Index Score. Large differentials between the affluent and deprived wards were found in their social and economic characteristics. For example, unemployment rates range from 25% in the most deprived ward to less than 4% in the most affluent ward.

Health

Three health indicators were used: limiting long term illness (age standardised); low birth weight and mortality (age standardised). The deprived areas consistently come off worse. For example, the proportion of the population with limiting long term illness in the most deprived ward is double that in the most affluent. Low birth weight ranges from 5-9% of all live births

across the wards. All cause premature mortality ranges from over 50% higher than the North Cheshire average to 25% lower than the average.

Service inputs and uptake in relation to need

The most deprived areas are relatively poorly served in terms of the quantity and quality of some of the primary care services. District nursing services were used as a proxy for community health services as a whole. Large differences (7 fold) existed in the distribution of district nurses between practice populations. At locality level, the distribution of district nurses followed an 'inverse care law' with the more deprived areas having fewer nurses per head of population than more affluent areas. The same patterns were found in relation to health visiting services and in relation to the number of group GP practices.

Preventive care

At the locality level, immunisation rates decrease as deprivation increases in most areas. However, these differences are not apparent at general practice level. A similar pattern emerges for cervical cytology at the local level, which is also found at the general practice level.

Use of secondary care services by deprivation

Use of secondary care services was investigated according to deprivation levels of the patient's ward and locality of residence and of their general practice. At ward level, elective general medicine, gynaecology, and mental illness show a steady increase in both illness ratios and elective episodes with increasing deprivation. However, cardiology and cardiothoracic surgery and hip and knee joint replacement show an inverse relationship between deprivation and elective episodes. There are less distinct patterns for other specialties.

At the locality and general practice levels, the picture is generally repeated, though the patterns are less consistent and there are questions about interpretation.

Next steps

A series of detailed recommendations were compiled to take action to tackle the inequities identified. These were provided to the North Cheshire Health Authority, and include, for example:

- Urgently addressing the mismatch of district nurse distribution with potential need – using the numbers of older people over 65 within a general practice areas as a starting point

- A review of the basis for distributing other community health services to ensure that provision reflects expected demand, taking into account population structure, morbidity (limiting long term illness) and deprivation (Townsend Deprivation Index).
- Introduce pilot projects to develop approaches to managing the higher primary care workload in deprived areas
- Increase uptake of cervical screening in the practices identified as under-served. A first step would be a review of the barriers to attendance as perceived by women in deprived areas.
- Address the uniformly high levels of emergency episodes among patients registered with GPs in deprived areas
- Partnerships between primary care services and other agencies to influence the factors contributing to levels of deprivation need to be established – and take forward programmes of effective action, as identified elsewhere.

London Health Observatory audit of haemoglobinopathies

The London Health Observatory is leading an audit of access to haemoglobinopathies services for the national screening committee – to address any identified inequity for minority ethnic groups across the city. The audit has compared service access in different parts of London. It is part quantitative data and part qualitative data – including in-depth interviews with NHS Trusts, professional groups and service users themselves.

Feedback will be given on the audit findings to the PCTs across London, commissioners of services, public health staff and clinicians to enable them to identify changes needed across the city.

Appendix 3: Examples of data sources to support equity profiles

There are a number of routine sources for data to assess health inequalities and health equity, to help describe the local baseline position. Some of these sources are shown in the table below. Other sources not listed, include the PRIMIS data, other primary care sources and social services data.

The 2001 Census will be an essential source of denominators for age-sex populations as well as ethnic and social class populations. It will also allow deprivation measures such as the Index of Multiple Deprivation 2000, Townsend and Carstairs indices to be updated.

Table A3.1 Examples of data sources

This data source	which is aggregated at the level of	can be used to assess these dimensions of inequality	for this health measure(s)	at this geographical scale	and can be obtained from....
Public health mortality file	Individual	Age/ sex/ social class/ deprivation (if linked via postcode or ward to deprivation indices)	Mortality from various causes, life expectancy	National/ regional / local (PCT, ward)	ONS/ PHOs/ local
Public health birth file	Individual	Age/ country of birth/ social class/ deprivation as above	(Low) birth weight/ fertility	National/ regional / local (PCT, ward)	ONS/ PHOs/ local
Hospital episode statistics (HES)	Individual	Age/ sex/ ethnicity	Proxy morbidity measures e.g. stroke, MI, hip fracture, serious injury in children; and access measures for equity audit	National/ regional / local (PCT, ward)	HES/ PHOs/ local
Health Survey for England	Individual	Age/ sex/ ethnicity/ social class/ income/ educational attainment	Self reported morbidity e.g. angina (Rose Q'aire), asthma, diabetes, mental health (GHQ); risk factors e.g. smoking status,	National, regional, local (former Health Authority level)	UK Data Archive (online analysis available) http://www.data-archive.ac.uk/

			obesity, hypertension		
General Household Survey	Individual	Age/ sex/ ethnicity/ income/ education/ social capital (recent surveys)	Risk factors e.g. smoking	National, regional	UK Data Archive (online analysis available) http://www.data-archive.ac.uk/
Neighbourhood statistics	Individual	Deprivation, crime, education etc		Local authority	Neighbourhood Statistics http://www.statistics.gov.uk/neighbourhood.asp
Compendium of clinical and health indicators	Local authority	Age, sex	Risk factors, mortality, morbidity	GO region/strategic health authority	Available on CD_ROM, online via NHS net and through www.apho.org.uk
Local authority Best Value indicators	Local authority	Crime, education, deprivation	Social services data, fire statistics etc	GO region/strategic health authority	Via Audit Commission www.audit.gov.uk
VS conceptions	Ward level	Deprivation if linked to other ward level data e.g. IMD 2000 or Townsend	Teenage conceptions <16 and <18	National, regional, local (local authority – PCT possible from aggregating wards but NB missing data because small numbers are suppressed)	ONS, PHOs, via teenage pregnancy coordinators
Vital Statistics 1-4	LA/ ward	Age/ sex	See PHMF	Regional/ local (HA/ LA/ ward)	ONS/ PHOs/ local

Appendix 4: Key policies on tackling health inequalities and health equity

The all-government delivery plan on tackling health inequalities

The government is about to publish the All-Government Delivery Plan on tackling health inequalities. This has been developed from the Cross-Cutting Spending Review on health inequalities completed in November 2002. The actions for 2003-2006 from the Spending Review are:

- Stronger focus on deprived areas in NHS resource allocation to improve access to services, and for schools in order to narrow the educational attainment gap
- Better preventive health care services for disadvantaged communities, particularly an expansion in smoking cessation advice and support
- Targeted services for disadvantaged communities to help families improve their children's nutrition and establish healthy eating patterns early in life
- Expansion of initiatives to raise levels of physical activity in disadvantaged communities, with a focus on children
- Improved housing conditions for families with young children and older people.

(Spending Review 2002 HM Treasury 2002)

The role of the NHS

"The two national inequalities targets we have set are now firmly embedded in the NHS Priorities and Planning Framework for the next three years. They are now core business for the whole National Health Service" (Alan Milburn November 2002)

Health inequalities are a priority in the NHS Planning and Priorities Framework. The NHS contribution is to:

- Ensure that the distribution of health benefit from service expansion and development consistently favours individuals and communities that have been traditionally under-served
- Ensure that service planning is informed by an equity audit and supported by an annual public health report by the Director of Public Health
- Tackle the wider determinants of health – agreeing a single set of local priorities with local authorities and other partners
- Contribute to regeneration and neighbourhood renewal programmes and ensure the NHS makes a full contribution to support the Sure Start programmes
- Build capacity for public health improvement and protection in PCTs.

Health inequalities indicators are now being developed within the NHS Performance Indicators. Current NHS Performance Indicators can be found in *Improvement, Expansion and Reform: Technical guidance on the planning process* (Department of Health 2002)

The role of local strategic partnerships

Local Strategic Partnerships have been recognised as the key local partnership to oversee the development and monitoring of local action to reduce health inequalities and tackle deprivation through neighbourhood renewal.

“Where deprivation, social exclusion, a poor quality environment and health inequalities are significant factors for any community, the community strategy will need to address how these are to be tackled and how the quality of life of those in deprived areas is to be improved.” (Preparing community strategies, government guidance to local authorities DETR 2000)

Health equity audit fits readily within the development and review of the community strategy as part of the steps set out in the government guidance. In particular, as part of ‘resource and activity analysis’:

“Councils and their partnership should carry out an analysis of their own expenditure, staffing and skills in relation to priorities and objectives identified in the community strategy. This should determine whether they are being used in the most effective and sustainable way, whether there are gaps, overlaps or contradictions in resource use.” (DETR 2000)

The national strategy for neighbourhood renewal and local neighbourhood renewal strategies set out the importance of a co-ordinated approach to tackling health inequalities alongside action on employment, housing, education, environment and crime. The Neighbourhood Renewal Fund is expected to pump prime local action within deprived areas.

In addition to the Neighbourhood Renewal Unit guidance and website www.renewal.net, the Department of Health has also produced guidance on health and neighbourhood renewal on the above site or available on www.doh.gov.uk/healthinequalities

The role of local authorities

Local authorities, in their own right, can play a key role through the development of LPSAs on health and other inequalities issues. The Department of Health has produced guidance for Local Authorities, particularly those authorities within or near the bottom fifth for life expectancy, who wish to adopt an LPSA target on health inequalities. The guidance, which

includes Local Authority rankings for life expectancy and examples of LPSA health inequalities targets that have already been agreed, can be found on the Department's website at: www.doh.gov.uk/lpsa

Local government scrutiny of health also provides a mechanism for reviewing and advising on action to tackle health inequalities and equity issues in service delivery. The power came into force in January 2003 and guidance is forthcoming on the Department of Health website.

Specific Government references to health equity audit

Improvement, Expansion and Reform: The next three years, Priorities and Planning Framework 2003-2006 (DH 2002) requires the NHS to ensure that service planning is informed by an equity audit and supported by an annual public health report by the Director of Public Health

The National Service Framework for Coronary Heart Disease (DH 2000) also requires Directors of Public Health to produce an equity profile to identify inequalities in heart health and in access to preventive and treatment services. The profile should comment on the needs of individuals and groups, particularly those at greatest risk. It will complement any health impact assessments of major policy/service decisions in the local area, to identify their effect on cardiac health.

The importance of health equity audit was signalled in the *Independent Inquiry into Inequalities in Health* (Acheson 1998) which recommended that Directors of Public Health should produce an equity profile for the population they serve, and undertake a triennial audit of progress towards achieving objectives to reduce inequalities in health.

Key policy documents:

- *Tackling health inequalities: summary of the 2002 cross-cutting review* (HM Treasury November 2002)
- *Health and Neighbourhood Renewal: Guidance from the Department of Health* (Department of Health October 2002)
- *Improvement, Expansion and Reform: The next three years Priorities and Planning Framework 2003-2006* (Department of Health 2002).
- *Improvement, Expansion and Reform: The next three years Priorities and Planning Framework 2003-2006: Technical Guidance on the planning process* (Department of Health 2002)
- *Tackling health inequalities; results of the consultation exercise* (Department of Health June 2002)
- *The national health inequalities targets: technical briefing revised* (Department of Health March 2002)
- *The Chief Medical Officer's Annual Report 2001* (Department of Health 2001)
- *Tackling health inequalities: consultation on a plan for delivery* (Department of Health October 2001)
- *A New Commitment to Neighbourhood Renewal: National Strategy Action Plan* (SEU 2001)
- *Opportunity for All: tackling poverty and social exclusion: Third Annual Report* (Department for Work and Pensions 2001)
- *The NHS Plan* (Department of Health 2000)
- *Independent Inquiry into Inequalities in Health* (Acheson 1998)

Appendix 5: List of Government targets on health-related inequalities

Department of Health

Cancer:

- Reduce the rate of smoking, contributing to the national target of: reducing the rate in manual groups from 32% in 1998 to 26% in 2010; 800,000 smokers from all groups successfully quitting at the 4 week stage by 2006
- Deliver a one percentage point reduction per year in the proportion of women continuing to smoke throughout pregnancy, focusing especially on smokers from disadvantaged groups
- Contribute to a national reduction in cancer death rates of at least 12% in people under 75 by 2005 compared 10 1995-7, targeting the 20% of areas with the highest rates of cancer

Coronary heart disease:

- Contribute to a national reduction in death rates from CHS of at least 25% in people under 75 compared to 1995-1997, targeting the 20% of areas with the highest rates of CHD

Mental health:

Focus on key disadvantaged groups, with targets in relation to:

- Delivering assertive outreach for adult patients with severe mental illness who regularly disengage from services
- Increasing breaks and support services for carers
- Improving mental health care in prisons

Older people

- Achieve the target of 70% uptake in influenza immunisation in people aged 65 years and over, targeting populations in the 20% of areas with the lowest life expectancy.

Life chances for children

The Children's National Service Framework will provide the basis for work to tackle health inequalities among this group. There is already a range of targets aiming to improve the life chances and health of looked after children, and to support all children and families living in

low income households and areas (through Sure Start and Children's Centres). Targets include:

- Improve the educational attainment of children and young people in care by increasing to 15% by 2003-4 the proportion of children leaving care aged 16 and over with 5 GCSEs at Grade A*-C and maintain this level up to 2006
- Improve the level of education, training and employment outcomes for care leavers aged 19, so that levels for this group are at least 75% of those achieved by all young people in the same areas by March 2004, and maintain this level up to 2006.
- Reduce by 2004, the proportion of children aged 10-17 and looked after continuously for at least a year, who have received a final warning or conviction, by one third from September 2000 position. Maintain a reduction to a local maximum of 7.2% up to 2006.
- Maintain current levels of adoption placement stability so that quality is not compromised, while increasing the use of adoption (40% increase by 2004-5 and 50% by 2006).
- Increase to 95% the proportion of looked after children placed for adoption within 12 months of the decision that adoption is in their best interests.

Teenage conception

- Achieve agreed local teenage conception reduction targets while reducing the gap in rates between the worst fifth of wards and the average by at least a quarter in line with national targets

Breastfeeding

- Deliver an increase of 2 percentage points per year in breastfeeding initiation rate, focusing especially on women from disadvantaged groups.

Drugs

- Increase the participation of problem drug users in drug treatment programmes by 55% by 2004 and by 100% by 2008 (against 1998 baseline)
- Increasing access to general medical services for all problem drug users

Physical facilities:

- Improve GP premises to contribute to national target of 500 centres by the end of 2004, 125 more by 2006 and a further 125 by 2008

Access:

- Improved access to services and disadvantaged groups and areas, particularly:
- early antenatal service booking

- antenatal and child health screening services
- sexual health services, and breast/cervical screening
- strengthened primary care services through increased numbers of health professionals and improved facilities in under-served and deprived areas.

Other departmental targets concerned with socio-economic inequalities

Department for Transport - adult and child road accidents

- Reduce the number of people killed or seriously injured in Great Britain in road accidents by 40% and the number of children killed or seriously injured by 50% by 2010, compared with the average for 1994-1998, tackling the significantly higher incidence in disadvantaged communities.

Office of the Deputy Prime Minister - housing conditions

- By 2010, bring all social housing into decent condition with most of this improvement taking place in deprived areas, and increase the proportion of private housing in decent condition occupied by vulnerable groups

Home Office - crime reduction

- Reduce crime and the fear of crime; improve performance overall, including reducing the gap between the highest crime 'Crime and Disorder Reduction Partnership' areas and the best comparable areas

Department for Environment, Food and Rural Affairs - fuel poverty and rural access to services

- Reduce fuel poverty among vulnerable households by improving energy efficiency of 600,000 homes between 2001 and 2004.
- Reduce the gap in productivity between the least well-performing quartile of rural areas and the English median by 2006, and improve the accessibility of services for rural people

Department for Work and Pensions - child poverty, employment rates, benefit uptake and pension credit

- Reduce the number of children in low-income households by at least a quarter by 2004, as a contribution towards the broader target of halving child poverty by 2010 and eradicating it by 2020.
- Double the proportion of Parents with Care on Income Support and income-based Jobseekers' Allowance who receive maintenance for their children to 60% by March 2006.

- Over the next three years to Spring 2006, increase the employment rates of disadvantaged areas and groups, taking account of the economic cycle – lone parents, minority ethnic groups, people aged 50 and over, those with the lowest qualifications, and the 30 local authority districts with the poorest initial labour market position, and significantly reduce the difference between their employment rates and the overall rate.
- Reduce the proportion of children in households with no-one in work over the 3 years from Spring 2003 to Spring 2006 by 6.5%
- BY 2006, be paying Pension Credit to at least 3 million pensioner households.

Department of Trade and Industry - small business development

- Help to build an enterprise society in which small firms of all kinds thrive and achieve their potential, with:
 - an increase in the number of people considering going into business
 - an improvement in the overall productivity of small firms
 - more enterprise in disadvantaged communities.

Office of the Deputy Prime Minister, Department for Trade and Industry and HM Treasury - economic growth

- Make sustainable improvements in the economic performance of all English regions and over the long term reduce the persistent gap in growth rates between the regions, defining measures to improve performance and reporting progress against these measures by 2006.