Health Inequalities National Support Team

'How to Guide' on Tools, Methodologies and Datasets to Help Address Health Inequalities
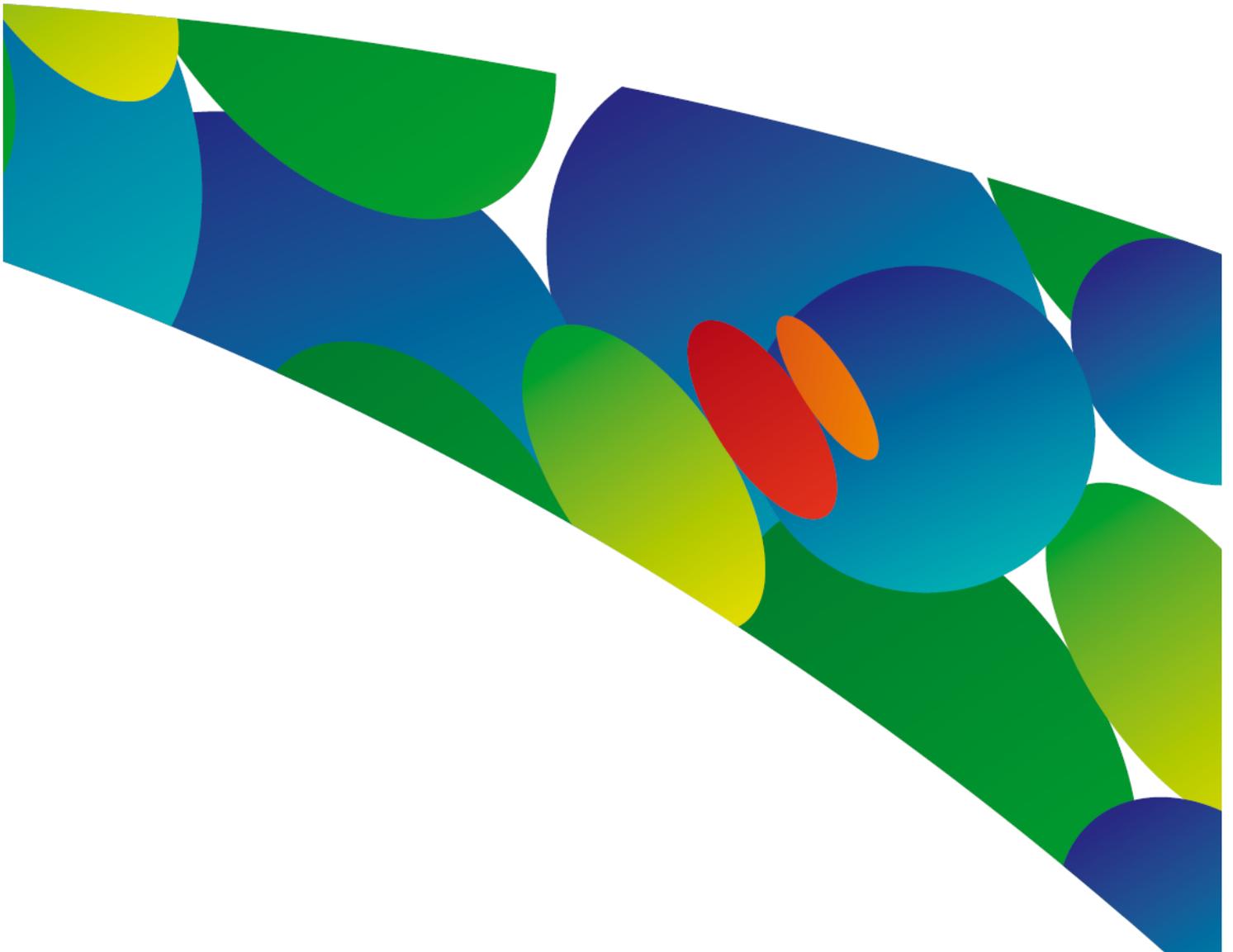
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Description	This 'How to Guide' aims to identify and demystify the wealth of tools, data and methodologies available to local commissioners and service providers to support design and delivery of services and programmes that contribute to a reduction in health inequalities. Website links are included to provide more information. This is offered as useful resource for commissioners: use is NOT mandatory
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For Recipient's Use	

Contents

Foreword

National Support Teams (NSTs) were established by the Department of Health from 2006 to support local areas – including Local Authorities, Primary Care Trusts (PCTs) and their partners – to tackle complex public health issues more effectively, using the best available evidence. By undertaking intensive, 'diagnostic' visits to local areas, spending time with key leaders (commissioners and providers) including clinicians and front-line staff, the ten NSTs provided intelligence, support and challenge to local areas to assist in their achieving better public health outcomes. The programme finished in March 2011.

The ten subject specific teams (Sexual Health, Tobacco Control, Health Inequalities, Teenage Pregnancy, Childhood Obesity, Alcohol Harm Reduction, Infant Mortality, Response to Sexual Violence, Vaccination and Immunisation and Children and Young People's Emotional Wellbeing and Mental Health) were commissioned and established with a focus on improving health and reducing health inequalities.

The ten teams undertook more than 450 visits to local partnerships during the course of the programme and their findings and successes have been documented in Knowledge Management and Evaluation reports. Each team also produced reports setting out and consolidating the learning from their work. A further report that captures best practice identified by each team is planned to enable local areas to continue using the expertise and lessons learnt from the NST model.

The NST process involved a desk review of key documentation and data-based intelligence, and interviews with key informants, often in combination with a series of workshops or focus groups. Collation and analysis of findings was immediate, and the findings, including strengths and recommendations, were fed back straight away and on site to the key local players and leadership. Recommendations were accompanied by offers of support, either at the time of reporting, or as part of follow-up activity.

The Department is publishing a number of reports which distil the learning from the programme, and exemplify the methodology employed.

Executive Summary

This 'How to Guide' aims to identify and demystify the wealth of tools, data and methodologies available to local commissioners and service providers to support design and delivery of services and programmes that contribute to a reduction in health inequalities. Each section provides a brief overview of the purpose of the guide – 'what it is', along with 'who it is for', 'why it should be used', 'how if contributes to tackling health inequalities' and 'how to use it.' Website links are included to provide more information.

When using the tools, data and methodologies it is suggested, where possible, to collect and analyse data by the protected characteristics set out in the 2010 Equalities Act i.e.: by age; disability; gender reassignment; marriage and civil partnership; pregnancy and maternity; race; religion or belief; sex; sexual orientation. This will help to provide an understanding of the different health experiences by these groups and enable targeted interventions.

This is offered as useful resource for commissioners: use is NOT mandatory.

This guide is separated into three sections - tools, methodologies and data covering the following:

- **Tools**
  - Health Inequalities Intervention Toolkit
  - How to guide - to model the scale of the use of evidence-based interventions necessary to reduce inequalities in life expectancy
  - Health Poverty Index (HPI)
  - Strategic Health Asset, Planning and Evaluation tool (SHAPE)
  - Programme Budgeting: Spend and Outcomes Tool (SPOT)
- **Methodologies**
  - Health Equity Audit (HEA)
  - Health Impact Assessment (HIA)
- **Data sources**
  - Local Basket of Indicators (LBOI) and Health Inequalities Retrieval Tool
  - National, Regional and Local Health Profiles
  - Compendium of Public Health Indicators (also known as Clinical and Health Outcomes Knowledge Base)
  - NHS Comparators

The appendix provides examples of outputs from each of the tools, methodologies and data sources.

Who is the audience?

This guide is aimed at providing an overview of available tools, methodologies and data sets for NHS and Health and Wellbeing Commissioners, public health professionals and service providers. Some of the tools are specially designed to be used by analysts, although many require no technical expertise and the outputs from all the tools will be useful for a wider audience. A breakdown is included in the table on page 6.

Contribution to Cost Effectiveness

Data and information provided through use of the selected tools, methodologies and data sources can contribute to developing more efficient, cost effective services and interventions. For example, reducing variation in practice (e.g. among GPs) and aiming for high quality services that appropriately meet the health needs of those at greatest risk is an effective and efficient use of resources if applied systematically and at a sufficient scale to make population-level change.

Furthermore, improving the accessibility and appropriateness of services can facilitate earlier attendance at services by people with health problems and reduce downstream costs. Improving equity can be compatible with improving efficiency. SPOT, programme budgeting and SHAPE tools provide specific data and cost effectiveness analysis. More detail is provided in these sections.

	Health Inequalities Intervention Toolkit	Health inequalities in life expectancy	How to guide - ...reducing inequalities	Health Poverty Index	Strategic Health Asset, Planning & Evaluation tool	Programme Budgeting	Spend and Outcomes Tool	Health Equity Audit	Health Impact Assessment	Health Inequalities Retrieval Tool	Local Basket of Indicators / Health Inequalities	National Health Profiles	Local, Regional and National Health Indicators	Compendium of Public Health Indicators	NHS Comparators
Useful for															
• priority setting	√	√	√	√	√	√	√					√			
• needs assessment	√		√	√							√	√	√	√	√
• planning					√	√	√	√	√				√	√	√
• commissioning	√	√			√	√	√	√		√					√
Ease of use															
• easy – requires no specialist knowledge	√			√								√			
• some specialist knowledge					√	√	√	√	√		√			√	√
• analytical expertise recommended	√	√		√					√						
Main audience															
• information analysts	√	√												√	√
• health service commissioners (incl finance)	√		√	√	√	√	√	√	√	√	√				√
• wider audience including public												√			
• service providers					√	√	√	√	√	√	√				√
• local authority planners					√			√	√	√	√				
• limited to NHS use															√
Data provided by								N/A	N/A						
• ethnicity			√												
• age	√												√		
• gender	√	√											√		
• deprivation											√				
• socia0-economic group [	√														
• small area/GP practice															
• local authority level	√	√	√								√	√	√		
• PCT					√	√	√							√	√
• region												√	√		
• national											√	√	√	√	√
• international															
Allows comparisons at															
• small area/GP practice															√
• local authority				√							√	√	√		
• PCT					√	√	√								√
• region						√	√					√	√		√
• national	√				√	√	√					√	√		√
• international															
• ONS/other cluster	√										√				√
Cost/cost effectiveness															
• analysis					√	√	√								
• data and information to support analysis	√	√		√				√	√	√	√	√		√	√

6

Tools

Health Inequalities Intervention Toolkit

What is it for?

The **Health Inequalities Intervention Toolkit** has been developed to assist evidence-based local service planning and commissioning (including Joint Strategic Needs Assessments).

It includes four separate tools:
- *Spearhead Tool*: comparisons between former Spearhead areas and England as a whole
- *All Areas Tool*: comparisons between non-Spearhead areas and the England average
- *Commissioning Evidence-Based Interventions Tool*: modelling of the impact that systematically implementing evidence-based interventions at scale can have on reducing inequalities in life expectancy and all age all cause mortality (AAACM) between each Spearhead area and the England average
- *Infant Mortality Tool*: Analysis of Infant Mortality by Strategic Health Authorities (SHAs) in England and, in addition, for those local authorities with high numbers of infant deaths in the Routine and Manual (R&M) group. For strategic health authorities, the tool provides an opportunity to review contributory factors

Who is it for?

The toolkit is relevant to all local authority and PCT areas in England. It had been of particular relevance to the former Spearhead LAs and PCTs that were the focus of the former health inequalities life expectancy Public Service Agreement (PSA). (Although the PSA has ended, the interventions in the toolkit are still relevant and continue to be able to assist these local areas narrow life expectancy and infant mortality gaps).

Why to use it?

The toolkit provides information to support the:
- narrowing of the gaps between the areas with the worst health and deprivation (formerly Spearheads) and England as a whole?
- commissioning of interventions to increase life expectancy in disadvantaged areas
- narrowing of within-area gaps in all local authorities
- narrowing of the gaps in infant mortality across social groups

All the interventions contained in the Toolkit are highly cost effective.

The toolkit provides local areas with a set of tables and charts that illustrate the causes of death, and age groups that are making the greatest contributions to their life expectancy gaps.

The commissioning intervention tool indicates the gains in life expectancy that can be made by lowering levels of high blood sugar; increasing numbers of smoking quitters; lowering infant mortality and prescribing antihypertensives and statins. This supports planning and commissioning decisions to achieve positive outcomes in a number of health inequality topics.

Contribution to tackling health inequalities

The tools provide the user with information on what the key diseases are that contribute to the health inequalities in an area. It allows the user to model the impact of interventions to tackle health inequities.

How to use it

The Spearhead Tool: This tool presents the gaps in life expectancy between each former Spearhead area, the Spearhead national average and with England as a whole, based on data for 2006-08. A set of tables and charts are available that illustrate the causes of death, and age groups, and which of these are making the greatest contributions to these gaps. (See appendix 1 p34)

On entering the Spearhead tool – Commissioning Interventions, the user selects the former Spearhead area they wish to model and then clicks the 'Commissioning Interventions' button, a number of charts will appear.

Chart 1 shows the life expectancy gaps between the selected former Spearhead area and the England average for both sexes by cause of death. This is known as the 'scarf chart'. The scarf-chart illustrates the broad-cause groups that have higher mortality rates than the England average. These are therefore the causes with excess (or 'extra') deaths. The stripes of the scarf do not include the same number of people. Deaths in younger people, especially in babies, contribute a larger proportion of the gap, as more years of life are lost.

Similar charts break down results for males and females compared to the relevant sex-specific results for the former Spearhead Group of local authorities as a whole.

Further charts are available that show equivalent results for the life expectancy gaps, broken down by age group.

Tables also provide a more detailed breakdown of the results showing:
- contribution of each of 31 causes of death make to the life expectancy gap between this former Spearhead area and England as a whole and
- the same information based upon age group rather than cause of death.

The 2009 Spearhead tool (based on data for 2005-07) and the 2007 Spearhead tool (based on data for 2003-05) remain available so that trends can be considered.

The All Areas Tool: This covers all local authorities in England, former Spearhead and non-Spearhead, and provides information on inequalities within, as well as between areas. The tool provides data on gaps in life expectancy between the most disadvantaged quintile of each local authority and a range of comparator areas, including an analysis of the causes of death which contribute most to these gaps (similar to the Spearhead tool described above).

The Commissioning Evidence-based Interventions Tool:
The **'Commissioning Interventions'** section of the toolkit allows the user to estimate the potential effect on their area's life expectancy gaps if action on the evidence-based interventions is increased. The tool then calculates whether the action is enough to narrow the local authority's life expectancy gap with the England average (see appendix p33).

Infant Mortality Tool: The Infant Mortality tool contains data for SHAs in England and for those local authorities with high numbers of infant deaths in the Routine and Manual (R&M) group. For strategic health authorities, the tool provides an opportunity to review contributory factors (see appendix 1 p39).

The Intervention tool can be found on *www.lho.org.uk*.

Examples of use:

"Wolverhampton PCT and Local Authority have found the Health Inequalities Intervention Tool a very helpful way to identify areas to target in order to reduce our life expectancy gap to the national average."

Jason Gwinnett, Senior Public Health Analyst, Wolverhampton PCT

The Department of Health Inequalities Toolkit gave us some pointers to the interventions that will have the greatest impact on reducing health inequalities in the short to medium term. Targeting interventions to the areas with the poorest health will be critical if we are to make the biggest impact on the gap in life expectancy in Sefton. The outcomes of this analysis were included in our Public Health Annual reports 2008 and 2009. Following this work we have also produced our own model that describes the gap in LE between Sefton and England in terms of the lifestyle factors that are the main topics within our Commissioning Strategic Plan (smoking, alcohol, mental health, obesity, CVD). We are currently producing this work at a GP consortia level, in order to inform their early commissioning priorities."
Steven Ward, Senior Public Health Intelligence Officer steven.ward@sefton.nhs.uk
http://www.sefton.nhs.uk/news_and_publications/publications/Public_Health_Annual_Reports.asp

How to Guide: Model the scale of use of evidence-based interventions to reduce inequalities in life expectancy

What is it for?

The purpose of this interactive tool is to enable local areas to quantify both the scale of the challenge to reduce All Age All Cause Mortality (AAAC) and visualise the contribution selected evidence-based interventions can make. It is based on the Health Inequalities Intervention toolkit (see p 8) but allows local areas to input their own data for analysis.

Who it is for?

This tool is intended to be used by those with an understanding of modelling and epidemiological techniques - primarily Public Health Analysts in PCTs. However, the outputs from the tool will help commissioners, public health professionals and senior managers to quantify delivery plans and support effective commissioning of appropriately scaled services to meet population health needs.

Why use it?

The tool is in two parts that allow the user to estimate:
- the reduction in the number of deaths necessary to achieve a local reduction in AAAC mortality (i.e. the 'scale of the challenge'). This is often described as 'modelling the numbers'[1]
- the scale of use of selected evidence-based interventions required to achieve a reduction in mortality. This is done by modelling the potential number of deaths averted if these interventions were given to all residents who would benefit – that is, what could be done to meet the challenge. It also includes numbers needed to treat to allow costing of the intervention.

Contribution to tackling health inequalities

This tool contributes to the process of 'demystifying' or clarifying the actions required to reduce the health inequalities mortality gap. It enables business-planning processes to address population-level health inequalities outcomes with sufficient system and scale. It also helps to improve the understanding across partnership organisations and the public about what action is needed to address health inequalities, which will promote joint ownership.

How to use it

Part One provides an opportunity to define the 'scale of the challenge', that is translating outcomes and rates into the actual number of deaths that need to be prevented, set out in a trend and trajectory graph (see page 38) .

The tool's spreadsheet model is intended for analysts and epidemiologists with responsibility for providing information to commissioners. It aims to enable greater refinement and development of information at a local level. In other words, it is a tool for 'developers' rather than 'end users'.

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[1] 'Modelling the numbers' is a reference to translating targets, expressed in terms of life expectancy or mortality rates, into the actual number of preventable deaths or the number of people who need to be treated by selected interventions in order to narrow inequalities. Calculating what targets mean, in terms of actual numbers within a population, provides a 'tangible' measure to inform the commissioning of services and establishes realistic delivery plans to reach the target.

Part Two provides a calculation of the contribution of different interventions of known effectiveness to improving population health i.e. it allows an estimation of the required scale of intervention delivery necessary to reduce AAACM.

The following are the known effective interventions and the outcome associated with each:

Intervention	Outputs (deaths averted & Numbers needed to treat (NNT)
Four treatments (beta blocker, aspirin, ACE inhibitor, statin) for all patients with a previous CVD event	CHD and stroke deaths postponed
Hypertensives with no previous CVD event: Additional hypertensive therapy and statins for hypertensives with high CVD risk	Reduction in AAAC mortality
Primary angioplasty (PCI) for heart attack	Heart attack deaths averted
Anticoagulant therapy (Warfarin) for all patients over 65 with atrial fibrillation	Stroke deaths postponed
Reducing blood sugars (HbA1c) over 7.5 by one unit	Reduction in AAAC mortality
Treatment with statins for COPD patients	Reduction in AAAC mortality
Eliminating smoking in pregnancy	Infant deaths averted
Brief intervention for 10% of harmful drinkers	Reduction in AAAC mortality
Increasing smoking quitters	Reduction in AAAC mortality

The table in Appendix 2 on page 41 shows the output of these calculations for a selected PCT, showing potential reductions in mortality and associated 'number needed to treat' estimates.

The tool and guide are available from www.dh.gov.uk/HINST

Examples of use:

"*During the development and refresh of our 5 year Strategic Plan and supporting commissioning plans, a key weakness identified was the lack of quantified plan of how the gap between our projected life expectancy trend and our target would be closed, both in terms of 'number of deaths prevented' and which specific intervention would prevent those deaths, through what action and at what cost.*

The HINST modelling tool allowed us to develop that quantified plan. It also helped to identify priority action that should be implemented, despite the current financial situation and how some resources committed in the strategic plan should be re-deployed as a matter of urgency to achieve our targets. The tool was key in helping us quantify, own and start tackling some of the most significant health challenges we face."

Dr Gifford Kerr, Consultant in Public Health, and
Dominic Harrison Director of Public Health, NHS Blackburn with Darwen

"*The health community in Nuneaton and Bedworth in Warwickshire recognises that in the challenging time ahead we need to ensure that any work being undertaken would support our overall aim of saving 110 lives, identified by using the HINST tool. The tool will help in the decision making process by using evidence based knowledge on how many interventions would expectancy, reduce risk and support our aim.*"

Sharon Beamish, Chief Executive General Elliott Hospital, and
Gail Hudson, Head of Communities and Communication, Nuneaton and Bedworth Borough Council

Health Poverty Index

What is it for?

The Health Poverty Index (HPI) allows users to compare groups, differentiated by geography and cultural identity, in terms of their 'health poverty'.[2]

Who is it for?

This index is for commissioners, public health professionals and analysts.

Why use it?

There is an expectation that there is an unequal distribution of health and its determinants between the selected groups. Therefore this tool helps to understand actions required to contribute towards tackling health inequalities in these groups.

Contribution to tackling health inequalities

This tool allows an analysis of the causes of health poverty in a selected population across the following areas:
- root causes (regional prospects, local conditions, household conditions)
- intervening factors (resourcing to support health, healthy areas, behaviours and environments)
- situations of health (resourcing for health and social care, appropriate care and health status)

The tool provides a domain score for each area. A score of 'zero' indicates the best situation in terms of health poverty and a score of 'one' indicates the worst situation. The data for each indicator has also been ranked, with the ranks converted to a scale from 'zero' to 'one'.

How to use it

The main comparator groups are Local Authority Districts (LADs) in England (as they existed from April 1st 2001) and ethnic minority groups in those districts. The tool also allows the user to select standard comparative areas based on the Office for National Statistics (ONS) area classification scheme. This feature allows the score for a group of people in a particular place to be compared to similar areas across England.

The HPI visualisation tool allows the comparison of health-related data in two different populations including comparisons between ethnic minority groups within a given area. It is possible to show the data in a variety of different visual formats - spider charts (referred to here as the HPI chart) DN don't mention HPI Charts again so is this ref needed? , bar-charts, HTML tables and Excel tables. The user is able reuse these tables and charts in documents. Once groups have been selected, click on 'View HPI data', and the navigation links on the left will show the formats in which the HPI data can be viewed. See p42 for an example chart.

There is a demonstration on the website that shows a step-by-step guide for how to use the tool. Further information can be accessed through **www.hpi.org.uk**.

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[2] A group's 'health poverty' is a combination of both its present state of health and its future health potential or lack of it.

Example of use:

" In Sefton PCT's Public Health Annual Report 2008 ,   the Health Poverty Index tool was used to show how Sefton compares with the England average for a wide range of health determinants. While some measures show Sefton experiences less health poverty than the England average, there are several key areas where Sefton is significantly worse off. These areas were: Gross value added per capita (GVA), Local government resourcing per capita, Lifestyle, Effective primary care, Psychological morbidity, Physical morbidity and Premature Mortality"
Steven Ward, Senior Public Health Intelligence Officer steven.ward@sefton.nhs.uk
http://www.sefton.nhs.uk/news_and_publications/publications/Public_Health_Annual_Reports.asp

Strategic Health Asset, Planning and Evaluation Tool (SHAPE)

What it is for?

SHAPE is a web-based and evidence-based tool for strategic planning of services and physical assets. The tool promotes an understanding of:
- geographical accessibility of services and service use
- efficiency and effectiveness of services
- financial stability of organisations delivering services
- quality of certain aspects of the clinical services and estate

Who is it for?

SHAPE is a multidisciplinary tool suitable for a range of roles and responsibilities. Uses include, for example:
- **Public health personnel** may choose to use it to investigate incidence of multiple patient admissions and to map local populations by medical conditions, age, socio-economic and public health factors
- **Contracting and performance managers and service improvement managers** may choose to use it to investigate performance of organisations on key estates and facilities indicators, to develop a repository of organisation and site estate information, to benchmark clinical services or to agree a location of a service
- **Medical or clinical directors** may choose to use it to investigate benchmarks for particular clinical conditions linked to specialties, or to investigate trends in caseloads over time

Why use it?

The tool can be used to map service locations, review health outcomes and support a shift of services from secondary to primary care. Examples include the following:

- **Maps service location -** The tool allows the user to:
  - o Map services against local geographic analyses of demographic data and therefore assess accessibility for particular population groups
  - o Investigate the accessibility of services to local populations (e.g. drive and walk time scenarios) and provide data to support health equity audits on service use against levels of need
  - o Map and cite new facilities against the characteristics of population served by a new or proposed facility – demographics, socio-economics, health status, long term conditions etc

- **Reviews health outcomes -** The tool allows public health indicators and clinical outcomes to be benchmarked across health organisations

- **Supports a shift of services from secondary to primary care -** The tool supports this by:
  - o identifying high volume cases that are due to long term, chronic conditions with a high risk of multiple admissions, where the development and implementation of a primary care-led pathway would shift the focus of service provision from acute to primary care and provide improved access
  - o mapping the prevalence and inpatient activity of long-term illnesses. This helps to determine where prevention resources could be targeted and allows interrogation, for example, of the areas that have high levels of deprivation or unemployment or older people and related hospital activity

SHAPE can also support Commissioners Investment and Asset Management Strategy (CIAMS)[3], by listing estates owned or under the control of a PCT and the estate where services are being delivered.

How it contributes to cost effectiveness

This tool provides an opportunity to develop good quality services by supporting activity to improve accessibility for those populations who do not readily access services. It does this by allowing the user to access geographical map services, benchmark the outcomes of the service and map the potential volumes for any planned moved from secondary care to primary care. This will help to aim for sufficiently scaled services to meet the demand.

Services can be designed to meet the requirements for these 'seldom seen, seldom heard' populations, meaning they will be more likely to access primary prevention, early detection and secondary prevention services earlier, and therefore reduce the need for more expensive and complex treatments.

More specifically it will:
• Quantify the potential bed day savings and hence potential for re-investment that would be generated if conditions with high rates of multiple admissions were reduced.
• Quantify the potential savings if providers improved on technical efficiency (such as improving average length of stay or 'day case ratio'). The tool asks whether these potential savings actually point to true 'savings' to the health economy or to a re-investment in primary care by shifting provision of some aspects of care from the acute to the primary care sector
• Demonstrate whether there is over- or under-referral for particular conditions and (where possible) intervention may reduce admissions

How it contributes to tackling health inequalities

This tool provides an opportunity to improve the accessibility of services for those populations who do not readily access services. It does this by allowing the user to locate services on a geographical map and match their location to the demographics of the population to work towards siting it in an area of greatest need. If a new service is a result of a planned move from secondary care to primary care, this tool will enable the mapping of potential service volumes. This will help to aim for sufficiently scaled services to meet the demand. Therefore bottlenecks in any service pathways will be reduced, which can often be a barrier to people experiencing health inequalities.

How to use it

SHAPE's components interact with one another, enabling:
• The display of incidence of clinical conditions on maps linked to demographic and socio-economic information about individual areas
• The display and description of key demographic and socio-economic information about user-specified areas

It does this by integrating clinical conditions, estates and maps, into a single package, which enables interactive investigations by SHAs, PCTs and trusts. SHAPE's estates database

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[3] *The overarching purpose of the CIAMS is to provide commissioners with a strategy for aiming for the relevant estate being properly developed and configured to meet service needs.*

contains relevant information drawn from national data sources that can be augmented with additional local information.

Examples of analysis can be found on page 44

Further information can be accessed through www.shape.dh.gov.uk

Examples of use:

"I routinely use SHAPE at least once a week. As part of 'North Kent Thames Gateway' NHS West Kent are expecting over 50,000 housing units to be built by 2026, with 30,000 in the next 15 years alone. We use SHAPE to consider our response to planning applications for significant housing site developments, above 250 housing units, and have found it very helpful in our discussions with Local Authority Planners and Developers.

We also use SHAPE regularly when considering applications for GP premises developments. We have found SHAPE's mapping of Health Indices very helpful, particularly when demonstrated against the 'Travel Times' isochrones for proposed surgery sites.

Recently, we have reviewed and updated our Estates Strategy/SSDP so I have been using SHAPE daily as a fundamental tool in that process.

I was a founder member of the NHS Estates Strategic Management Group, so have been aware of SHAPE since its initial inception at Yorkshire SHA. I have always been a committed advocate and a strong believer that 'a picture paints a thousand words'. I think that it is a very powerful tool in that regard and always recommended its use to healthcare planning colleagues, who ask me about it."

Bob Sheridan, Assistant Director Capital Planning, Preston Hall Hospital, Aylesford, Kent

"In the Avon Gloucestershire, Wiltshire and Somerset (AGWS) Cardiac and Stroke Network we have been using SHAPE to help us look at differences in activity and outcomes for cardiovascular disease . We have used comparative data across the 8 PCTs in our network to identify potential opportunities for QIPP improvements. We have taken a programme budgeting approach, using a number of tools to look at differences in expenditure and outcomes.

SHAPE provides information at HRG level which is more detailed than the other tools, which focus at the Programme Budgeting subcategory level, and has shown differences in activity, length of stay and readmissions which we are using to help inform conversations between primary and secondary care clinicians on pathway development and other clinical issues relating to coronary heart disease management."

Elsa Brown, Avon Gloucestershire Deputy Network Director - Avon Gloucestershire Wiltshire & Somerset Cardiac and Stroke Network, Wiltshire and Somerset (AGWS) Cardiac and Stroke Network

Programme Budgeting

What is it for?

Programme Budgeting provides a standard framework that allows NHS clinicians, health service commissioners and their non-NHS partners to understand where the money is going in terms of health gain objectives, what activity is taking place, and what health outcomes[4] are being generated.

Who is it for?

Health service commissioners and providers.

Why use it?

Analysis of expenditure and outcomes using programme budgeting tools enables commissioners to examine the health gain that can be achieved through:
- investment
- identify potential shifts in investment that will optimise local health gains
- reduce health inequalities and improve value for money

Through the application of a whole system perspective, rather than focusing on primary, secondary or tertiary care in isolation, programme budgeting promotes solutions that complement activities in all sectors.

Contribution to cost effectiveness

This programme supports the health service focus to reduce unwarranted variation and optimise value for every pound spent. A slide pack is available on the website for every PCT, which provides a high level view of potential disinvestment or investment opportunities using the tools.

Contribution to tackling health inequalities

A good quality service achieves good outcomes for all. This requires the service being appropriately designed to meet the needs of groups who experience health inequalities, which can be facilitated by this tool's ability to identify variation.

How to use it

The following are the tools that present benchmarking information using programme budgeting data and other spend and outcome indicators. The basic recommended process is to analyse spend, link it to outcomes and then analyse the potential drivers of spend (e.g. prescribing, emergency admissions etc) (Demonstration of use can be found on p45).
- The **Spend and Outcomes Tool** (SPOT) enables commissioners to identify a high level link between expenditure and selected health outcomes, how their expenditure and outcomes compare with other commissioners nationally within similar demographic areas and against any other commissioners of the user's choice (see p19 for more detail)
- The **Programme Budgeting PCT benchmarking tool** enables commissioners to identify how they spend their allocation over the 23 identified diseases and their respective

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[4] The outcomes have been compiled using several data sources including those available through the National Centre for Health Outcomes Development (NCHOD) website (nwww.nchod.nhs.uk), the Quality and Outcomes Framework (QOF) outcome data, and the dental epidemiological survey programme undertaken by health authorities and coordinated nationally for the UK Health Departments by the British Association for the Study of Community Dentistry (BASCD).

subcategories; how, and by how much, their expenditure distribution pattern compares with PCTs nationally, locally or with similar characteristics[5]; and how their expenditure distribution has changed over time

- The **Programme Budgeting Atlases**[6] enable commissioners to link programme budgeting expenditure data, as presented in the programme budgeting spreadsheet, with a wide range of outcome and activity data. Data is presented for each programme in the form of interactive maps and correlation plots (See also Compendium of Public Health Indicators website section on page 28)
- **NHS Comparators**: this benchmarking tool enables health commissioners and providers to investigate detailed variation in activity, costs and outcomes; provide variation over time at specialty and disease level; examine a wide variety of datasets in the same format including secondary care activity, Quality and Outcomes Framework data and prescribing (costs and volume) (see page 32 for more detail)
- **The Inpatient Variation Expenditure Tool** is an Excel 'ready-reckoner' to calculate potential savings by reducing admissions across major disease groups and for interventions with the highest spend

This guide has provided more detail explanation on the SPOT (see next section) because it provides a detailed report with useful explanation notes in a visually 'friendly' way and allows comparisons between the area, England and ONS clusters. It also outlines the NHS Comparators tool as it provides a useful general data source.

All of these tools and e-guides on how to use them are accessible through the Health Investment Network website at:
http://www.networks.nhs.uk/nhs-networks/health-investment-network

Further information on programme budgeting is available on the Department of Health website:http://www.dh.gov.uk/en/Managingyourorganisation/Financeandplanning/Programmebudgeting/index.htm

Example of use

"NHS NE Lincolnshire have used programme budgeting to inform their prioritisation framework for investment and disinvestment. By using SPOT, NHS NE Lincolnshire identified areas of highest spend and lowest outcomes to prioritise the areas of focus for Multi-criteria Decision Analysis. This analysis involves the scoring of plans against agreed weighted objectives (which reflect addressing health inequalities throughout).

Initially NHS NE Lincolnshire identified COPD. The key to success of the approach has been that the prioritisation has been built into the existing governance structure of the PCT and the clinical engagement in the stakeholder group. We are now exploring adapting the method to see if it can be undertaken more rapidly in another clinical area."

Richard Little, Health Economist,
Yorkshire and Humber Public Health Observatory & NHS NE Lincolnshire

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[5] The ONS cluster groups are grouped using multi-dimensional relationships within 41 key characteristics drawn from the 2001 Census data and provide the basis on which a PCT can be compared to like PCTs with similar key characteristics
[6] At present access is restricted to those on the NHS network

Spend and Outcomes Tool (SPOT)

What is it?

The aim of this tool is to support PCT areas in analysing the impact of their expenditure across all health programmes. This allows easy identification of areas at risk that require attention (such as high spending and poor outcomes) and a potential shift in investment opportunities to optimise local health outcomes and aim for the efficiency and effectiveness of expenditure.

The SPOT tool includes two separate fact-sheets, that allow:
• comparison between the PCT area and England as a whole
• comparison between areas with similar demography (ONS cluster), region and England as a whole

Who is it for?

The tool is aimed primarily at health service commissioners and senior managers.

Why use it?

Specifically the tool demonstrates how to:
• identify high level links between programme expenditure and relative health outcomes, and how expenditure and outcomes compared to the national average (using for example a visual diagram that categorises each programme into 4 quadrants in terms of spend and outcome, see p45)
• assess current variation in spend and outcomes compared to similar demographic areas, regionally and nationally, to allow instant visual identification of significant differences for the highest spend programmes

The tool provides areas with a set of diagrams and charts, which illustrates the cost effectiveness of each main health care service based on programme budgeting data against the standardised mortality indicators as outcomes. The SPOT tool indicates the areas that require higher priority (overspending and poor outcomes), and therefore supports commissioning decisions and the planning to achieve efficiency and effectiveness of their expenditure.

Contribution to cost effectiveness

The tool can help local service providers and commissioners improve quality of service and optimise value for every pound spent. It allows realistic delivery plans to be set to increase usage of the cost-effective evidence-programmes, which have a known impact on health outcomes.

Contribution to tackling health inequalities

A good quality service achieves good outcomes for all, working towards meeting the needs of groups who experience health inequalities. SPOT facilitates identification of areas that require increased focus.

How to use it

The intervention tool can be found on http://www.yhpho.org.uk.

Example of use:

"The SPOT tool gives a local health community a valuable 'challenge to explain' but should always be interpreted with caution and prompt further investigation and validation before coming to conclusions or action.

In NHS Croydon we found three programmes in the bottom left hand corner – low spend and poor outcomes.

Two of these, respiratory system and endocrine system, correlated with our view that they did need additional investment and did need improvement in outcomes. Both were significant drivers of health inequalities too, so investment was part of the solution. Marginal analysis advisory groups are being set up in both, drawing on the input of users, referrers, providers and payers. A third programme in this quadrant was vision, but here we felt the indicator was poor (not a fault of the tool – just a reflection of need for better outcomes reporting) so we have written to the local provider about reporting outcomes. You will find the SPOT tool referenced in the Croydon Joint Strategic Needs Assessment, annual public health report and the PCT's operating plan, with specific reference to respiratory disease and diabetes.

In other quadrants of the tool we have tried to explain expected and unexpected findings, and in each case it opens up a constructive dialogue about where the money goes, what good it does, and how we might spend it better, irrespective of where any programme might sit on the chart."

Dr Peter Brambleby, Director of Public Health, NHS Croydon

Methodologies

Health Equity Audit

What is it for?

Health Equity Audit (HEA) is a methodology that supports health commissioners and providers to target resources or implement changes in service provision to tackle local health inequalities.

It is a cyclical process, the overall aim of which is not to distribute resources equally, but relative to people's need. This is the essential part of the process. The HEA cycle is not complete until something changes that is likely to reduce health inequalities demonstrably.

Who is it for?

HEA is designed to be used by service planners, commissioners or providers, in conjunction with their local community partners. Any service commissioner or provider, including local government, can use HEA to help inform planning and steer resources relative to need.

Why use it?

HEA helps local areas understand the levels of use by certain population groups and therefore of the services needed by those populations. It helps to identify how fairly services or other resources match the health needs of different groups.

Contribution to tackling health inequalities

HEAs can be used to target resources or implement changes in practice to tackle local health inequalities, addressing the unfair 'inverse care law', whereby areas and groups with the highest needs often have the worst provision. HEA can help identify which changes in mainstream NHS activity will have the most rapid impact and will be of most benefit to those with the highest needs. The focus of the HEA in terms of services is for local determination by the commissioner or provider and their partners, prioritised using knowledge of health inequalities.

How to use it

There are six main stages to the HEA cycle:
1. Agree priority issues and partners
2. Do an equity profile: baseline data collection and analysis
3. Use evidence to identify effective local action
4. Agree local outcomes to improve equity with partners
5. Take action to address inequitable provision through changes in investment/service delivery
6. Measure and review progress/impact against local outcomes to make services more equitable

Health Equity Audit cycle

1   Agree partners and issues
• Choose issue(s) with highest impact eg cancer, CHD, primary care, over 50s, infant health
• Relate issues to service planning & commissioning, take opportunities where changes are planned
• Identify factors driving low life expectancy
• Take on views of front line staff and users
• Scope for joining up services with local government

2
Equity profile: identify the gap
• Use data to compare service provision with need, access, use & outcome
• measures including proxies for disadvantage, social class, ward in the bottom quintile, BME, gender or other population group
• Focus on the third of population with poorest health outcomes

3
Agree high impact local action to narrow the gap
• Quality & quantity of primary care in disadvantaged areas
• Address inequalities through NSF implementation
• Commission new services, change or amend existing contracts
• Develop LIFT projects where health need is highest
• holistic services through partnerships

4
Agree priorities for action
Identify highest impact interventions for effective local action, for example:
• Diet & physical activity
• Promoting healthy life styles in over 50's
• Ensure choice, responsiveness & equity for all
• Smoking prevalence
• Screening
• 'flu vaccinations
• accidents
• Statins & antihypertensives
• Maternal and infant health

5
Secure changes in investment & service delivery
• Move resources to match need
• Develop service delivery to match need
• Ensure changes in contracts & commissioning are reaching areas & groups with highest need
• assess impact on inequalities

6
Review progress & assess impact
• Ensure effective monitoring systems are in place using indicators etc
• Review progress
• Assess the impact of action, has change been made and is it fast enough?
• Identify local areas or groups where more action is required

Use data on Health Inequalities to support decisions at all levels:
make appropriate comparisons by area, ethnicity, socio-economic group, gender, age etc

Health Equity Audit has been developed as a practical approach rather than an exact science. It brings evidence of gaps in service delivery to certain groups – service inequities, where services are not meeting high needs – to bear on decisions about service investment and organisation. HEA should be used pragmatically, choosing issues with high impact and avoiding 'data paralysis', or a search for perfect data, by assessing the evidence on whether it is 'fit for purpose' for the decision being taken.

The guidance document in the web link below contains local examples of Health Equity Audit:
http://www.dh.gov.uk/en/Publicationsandstatistics/Publications/PublicationsPolicyAndGuidance/DH_4084138

Example of Use:

Following the development of an HEA action learning set, HEA is developing into mainstream activity in Gateshead and is being tied more clearly into the NHS SOTW high level organisational goal 'fair access to services'. A local guide to HEA is planned to support this process.

The strategic aim in Gateshead is:

> *Health Equity Audit (HEA) to be applied across service areas. Audit findings to be used to target services to particular population groups/neighbourhoods to ensure equity of access to those services*

The next steps in 2010-11 are:

- *Review HEA as part of commissioning and service delivery (e.g input to the commissioning strategies for adults and children as these are reviewed)*
- *Develop the application of HEA within Council settings, working with Heads of Service and following priorities within the Joint Strategic Needs Assessment*
- *Embed HEA within Council processes (e.g. it is currently part of the Children OSC Narrowing the Gap)*
- *Develop training and awareness events building on the HEA guide once it is produced*
- *Review strategic approach to HEA and develop a three year plan 2011-14*

'We need to stop HEA being a technical tool and enable commissioners and managers to routinely ask themselves two questions:
- *how do I measure need for this service?*
- *how do I measure uptake of this service in relation to need?*

This should help develop real time responses to equity issue'".

Alyson Learmonth, Gateshead Director of Public Health, South of Tyne and Wear

Health Impact Assessments

What are they for?

Health Impact Assessment (HIA) is intended as a methodology to help make policy and planning decisions by predicting the health consequences if a proposal were implemented. It also produces recommendations as to how the good consequences for health could be enhanced and how the bad consequences could be avoided or minimised.

The principles and methods of HIAs can also be used to assess health consequences as part of another impact assessment (such as Strategic Environmental Assessment [SEA] or Environmental Impact Assessment [EIA].)

Who is it for?

This is a tool designed for use by policy makers, planners, commissioners and analysts. The outcomes of a HIA can be useful to a wide range of decision-makers, including council members and health commissioners. It is particularly helpful to support decision-making of non-health sector proposals, where health is not the primary objective. Initiatives that are not specifically focused on health can have major implications for the health and wellbeing of people, and these are frequently not anticipated unless a HIA is undertaken.

Why use a Health Impact Assessment?

A HIA helps to assess the potential health impacts of a policy proposal and consider the options, once it has been established that there might be significant impacts. HIA also helps decision-makers to appreciate the health gains and losses with different options.

Contribution to tackling health inequalities

HIAs predict not only the overall consequences for a population of a particular policy/plan but also the distribution of health impacts in that population (i.e. which groups benefit and which groups lose or at least benefit less). HIAs therefore help to inform actions needed to address health inequalities.

How to undertake a Health Impact Assessment

- **Step one - Preliminary considerations:** Initially consider the impact of the proposed initiative on direct determinants of health, the wider determinants, the health of the population as a whole, any disproportionate impact on particular groups and what can be done to work towards inequalities not being widened

  (The methodology recommends that it is often easier to identify links between the policy and ill-health risk factors, rather than trying to link policy and ill-health directly)

- **Step two - Health and wellbeing screening questions:** The following questions will help the determination of whether there are significant[7] impacts on health and wellbeing:
  - Will the policy have a significant impact on human health by virtue of its effects on the wider determinants of health?
  - Will there be a significant impact on any lifestyle related variables?
  - Is there likely to be a significant demand on any health and social care services?

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[7] The definition of 'significant' is that it refers to the whole population, a major sub group of the population or the degree of severity of the impact.

If the answer to two or more of these questions is YES, then it is recommended that a full health impact assessment is carried out.

The full HIA consists of the following six steps
1. **Screening** - Decide whether a proposal requires assessment by HIA (see above)
2. **Scoping** - Clarify the questions to be answered by the HIA and how the assessment will be carried out
3. **Appraisal and assessment** - Decide what and how significant the health impacts will be by considering each pathway by which the proposal could impact on health
4. For each option **make recommendations** as to how good health consequences could be enhanced and how bad health consequences could be avoided or minimised, and how health inequities could be reduced
5. **Communicate** the findings of the HIA to the decision-makers
6. **Evaluate** the quality of the HIA, highlighting lessons for future HIAs. Build in a monitoring process to identify which proposals went forward and if possible, assess whether any predictions made were correct

The involvement of stakeholders and local residents is an essential part of HIAs.

Further information and a full set of guides that have been produced for specific issues can be found through the Association of Public Health Observatories' website:
http://www.apho.org.uk/default.aspx?RID=40141

The HIA gateway page gives access to documents and information that will help to understand, to do or to commission an HIA or assessment of health consequences as part of some other impact assessment process.

Further information can also be obtained from the WHO website: www.who.int/hia/en/

Example of use:

"Greenwich Healthier Communities and Older People Scrutiny Panel successfully bid to the Centre for Public Scrutiny for funding to develop a healthy urban planning framework. A key element of this process were a number of action learning sets which brought together key stakeholders, including health, transport, regeneration and planners, to scope out what the local issues were and identify priorities and ways that the significant redevelopment that was taking place in Greenwich and the planning process itself could be used to create a healthier urban environment. The Health Impact Assessment methodology was a useful focus to this process, which was adapted for adapted to suit local needs."

Alain Lodge Corporate Performance and Scrutiny Unit Chief Executive's Department Greenwich

"Using the HIA tool for the proposed housing investment in the Neighbourhood Renewal Area resulted in a full HIA being undertaken. This study highlighted the key impacts of poor housing in this particularly disadvantaged area (especially mental health problems linked to high levels of worklessness and high crime rates) and subsequently was used to influence development plans. These included some housing clearance, a whole street face lift, environmental projects, home zone project etc with the HIA results being used to ensure the best design principles to deliver better economic, social and environmental outcomes."
Cynthia Manson-Siddle, Deputy Director of Public Health,
North East Lincolnshire Care Trust Plus

Data sources

National, Regional and Local Health Profiles

What are they for?

Health Profiles give a snapshot overview of health information on health and determinants of health presented at a local, regional, national, and international level. They present a set of key health indicators that show how the area compares to the national and regional average.

There are three types of profiles – national, regional and local.

Who are they for?

These reports are designed for key individuals in local communities and at local authority level to support the promotion of health in their area. Directors of Public Health are key users of these documents.

Why use them?

They are designed to help local government and health services make decisions and plan to improve local people's health and reduce health inequalities. They also have a key contribution to make to the local Joint Strategic Needs Assessment (JSNA).

Contribution to tackling health inequalities

This data set compares a comprehensive range of key health inequalities indicators and trends to the England average to support needs assessments. This includes, for example:
• percentage of people living in the 20% most disadvantaged areas of England (deprivation scores)
• percentage of children living in families receiving means-tested benefits (children in poverty)
• statutory homeless
• life expectancy
• trends in all age all cause mortality
• early death rates for heart disease, strokes and cancer

How to use them?

The website allows the user to find the required profile by the area name using a text search, or by selecting it using a clickable geographical map. These interactive maps can be accessed using the atlases provided in the 'Maps' section of the website.

The Online Interactive Atlas allows users to compare indicators in different areas using the same information available in the Local and Regional Health Profiles. It also allows users to create charts, maps, and other graphics that bring together various indicators of health and health determinants. These graphics can be turned into reports for local use. See p51 for an example of how the Instant Atlas can be used.

For more information about the Health Profiles, the full indicator set and data for each local authority in England, please visit http://www.communityhealthprofiles.info/index.php.

Examples of Use - Extracts from South East Public Health Observatory Health Profiles Evaluation (March 2009)

Common uses:
- to inform development of JSNAs and other strategic documents
- to prepare briefings to ministers and colleagues
- to develop presentations to the less informed
- as tools to challenge delivery plans, for example in scrutiny discussions
- to support funding applications for third sector organisations
- to feed into a 'leadership training programme'
- to benchmark neighbourhood data against to establish 'narrowing the gap' baselines

Case Study 1: Using Health Profiles to support a local health improvement programme
The Local Health Profile was used to establish baselines for the a ward-based health improvement programme, in terms of the 'gap' that exists for key indicators between the particular ward and the borough average. And where it was not possible to obtain ward-level data, some of the local indicators in the Health Profiles were used as proxy measures, such as for teenage pregnancy.

The Health Improvement manager felt the quality of the data was very good, and although she would like to have access to some of the indicators for a smaller geography, acknowledged that this would be difficult to obtain. She thought that the ethnicity profile was a good indicator for family health with "brilliant" confidence intervals, and was a competent measure.

She also felt that, with local third sector organisations, the Local Health Profiles was a "fantastic" resource for groups when bidding for funding and used the resource in response to tenders for borough-wide health services e.g. development of a family learning bid, and supports local Health Trainers to use the resource to highlight local inequalities to help inform their work programme.
Health Improvement Manager a London PCT

Case Study 2: Using Health Profiles to support development of JSNA
A local authority commissioning manager used the Local Health Profiles when preparing for the development of the JSNA. It had helped the local authority and the PCT to agree on priority areas and how to structure the document and focus on key areas, which they then took forward to build up a bigger picture of health needs in the area.

The commissioning manager explained that while the profiles do not contain enough detailed information on their own to inform decision making, their value lies in informing which areas the local authority and PCT should look at in greater detail.
A local authority commissioning manager

Case Study 3: Using Health Profiles to inform Local Area Agreements (LAAs)
A Regional Deputy Director of Public Health used the Health Profiles to support the Local Area Agreement process. Within his team, each member has a lead responsibility for one or two local authority areas.

Each member of the team took the Local Health Profiles for their relevant local authority areas to meetings with the Local Strategic Partnerships. The Health Profiles were used to challenge the LSP in their discussions and decisions, and in this way, the resource supports the Government Office team in their 'challenge role'.
A Regional Deputy Director of Public Health

Compendium of Public Health Indicators Website

What is it?

The **Compendium of Clinical and Health Indicators** - also known as the Clinical and Health Outcomes Knowledge Base - contains over 270 statistical indicators (see table below).

It includes a Compendium Interactive Atlas, Compendium Workbench for Mortality and Cancer Incidence indicators and Programme Budget Atlases that use these indicators.

Who it is for?

Data analysts and public health specialists.

Why use it?

The *Compendium* indicators cover various aspects of population health and clinical and health outcomes. Data is analysed by age, sex, NHS and government geographical boundaries (national, regional, local) and health care institutions. Trend data is available for selected indicators. This enables the user to compare a wide range of indicators to other areas to support needs assessment and prioritisation.

The main groups of indicators are:

Mortality (deaths)	Cancer incidence
Years of life lost	Cancer deaths at home
Life expectancy	Cancer survival
Infectious diseases	Cancer screening programmes
Births and infant mortality	Vaccinations
Fertility and conceptions	Congenital malformations
Abortions	Oral health in children
Population indicators including ONS 2001 Census based estimates and GP registered and resident relevant estimates	Primary care based indicators from the Quality Outcomes Framework
2001 Census based indicators about the population	Indices of Deprivation
Health Survey for England (HSE) and General Household/Lifestyle Survey indicators (e.g. about health status, body weight, smoking and alcohol drinking)	Hospital Episode Statistics (HES) based indicators (e.g. about admissions, emergency readmissions and procedures)
Fat consumption indicators	ONS Area Classification

Contribution to tackling health inequalities

This data set will provide invaluable information to support a comprehensive health needs assessment to enable effective service and programme planning to tackle health inequalities.

How to use it

The Compendium Interactive Atlas presents Compendium Indicators in a user-friendly, graphical format combining maps, tables and charts in a way that allows the user to select, filter, sort and generally explore the data. For example, moving the cursor over the area on the map highlights the values for that area in the table, chart and map. Comparison data for England and other higher geographies are also shown (See appendix 5 p51).Many, but not all,

indicators from the *Compendium* are available within the atlases.

Compendium Workbench for Mortality and Cancer Incidence indicators is a set of tools enabling the user to select data from the Compendium for specific organisations and for specific indicators by statistical methods, gender and age group, and export them in customised spreadsheets. Users can create a spreadsheet containing subsets of data (by statistical method, gender and age group) for a *single* organisation or indicator:

- By organisation: subsets of data can be downloaded for all indicators available in the workbench for an individual organisation
- By indicator: data can be downloaded for all organisations for a particular indicator

The **Programme Budget Atlases** for NHS users links NHS expenditure by 23 'programme budget' categories with clinical and health indicators (e.g. mortality data, prescription volumes and expenditure, data about hospital activity). The atlases present data in a graphical format, combining maps, tables and charts in a way that allows the user to select, filter, sort and explore the data (Please refer to programme budgeting section p48).

Further information can be accessed through http://www.nchod.nhs.uk/

"Our public health intelligence team thinks NCHOD is one of the most useful sites around for public health analysts. Not only does it have a range of different indicators in one place, but you can easily and quickly download the comparative data for different PCTs in excel, ready for your own analysis. Recently, we have used NCHOD data to feed into our Annual Public Health Report 'Understanding the Gap: Improving Life Expectancy in Islington'."
Dr Sarah Dougan, Principal Public Health Information Analyst, NHS Islington

"Sefton PCT makes great use of NCHOD data , particularly for benchmarking. The programme budgeting atlases allows us to plot outcomes against spend. We have used this to improve the COPD pathway and reduce admissions (using the Triple Aim methodology)".
Steven Ward, Senior Public Health Intelligence Officer steven.ward@sefton.nhs.uk

Local Basket of Indicators and the Health Inequalities Retrieval Tool

What are they for?

A **Local Basket of Indicators** (LBOI) has been developed to provide a wide range of measures that can be used locally to track progress against local priorities for action on health inequalities. It was developed to be used as a supplement to the Compendium.

The **Health Inequalities Retrieval Tool** allows the user to compare indicators against other types of organisations in the country.

Who is it for?

The LBOI and Health Inequalities Retrieval Tool are designed to be used by local authorities, PCTs and local partnerships to help them monitor a variety of specific indicators. None of the indicators are mandatory and all of them may be used in conjunction with additional locally available measures of progress.

Why use it?

The main purpose of the LBOI and Health Inequalities Retrieval Tool is to support local action to reduce inequalities by highlighting data/indicators relevant to addressing the outcomes. It can also assist local areas with monitoring progress towards reducing locally agreed priorities.

Contribution to tackling health inequalities

The set of indicators helps local areas to deal with the diversity and complexity of local health inequalities as generic health inequalities outcomes (e.g. all age all cause mortality) are often a high-level measure. The tool also:
- gives information on the current state of health inequalities to support local partnerships in identifying their priorities for action and to monitor the effects of action
- supports the setting of specific local inequalities outcomes or establishing broader objectives
- identifies measures of local success to support achievement of health inequalities outcomes
- provides indicators for incorporation into service planning, performance management and appraisal mechanisms
- monitors progress at a local level (including measures of activity and outcome) and supports equity audit
- influences the joint actions of local partner organisations
- acts as the basis for reviews/annual health and other reports/evaluations

How to use the Local Basket of Indicators

The LBOI has been developed from a wide range of existing indicators from a number of data sets that are relevant to health inequalities[8]. Localities can choose which are the most suitable

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[8] The LBOI is a collection of around 60 indicators within 13 broad areas such as education, crime, access to local health and other services and older people. Data for local areas in England (e.g. local authorities, primary care organisations, local education authorities) is presented for each indicator. It contains measures of health status or health outcomes, measures of the determinants of health, measures of access to services and process measures. Metadata is provided for each indicator detailing the rationale for inclusion of the indicator, the definition and the source of the numerator and denominator.

indicators for their area, supplemented with additional locally available and relevant indicators, to track progress and monitor the effect of action taken.

How to use the Health Inequalities Retrieval Tool

This tool allows the user to select the organisation type it wishes to compare with others in the country (e.g. County Council). The comparator indicators sit under four broad headings:
- **Access to services**, such as the number of primary care professionals (GPs) per 100,000 population; proportion of patients on waiting list who have been waiting more than 3 months for treatment
- **Lifestyle, such as** the number of smokers who had successfully quit at the four week follow-up per 100,000 population
- **Maternal, infant & child health,** such as the percentage of children with active dental decay
- **Older people,** such as the percentage uptake of influenza immunisation in people aged over 65
- **Tackling the major killers**, for example patients waiting longer than three months for revascularisation; proportion of cancer patients waiting more than one month between diagnosis (decision to treat) and treatment by primary care trust; proportion of women aged 53-64 who have been successfully screened for breast cancer

The tool will then list the results across all the organisations in England.

For more information on LBOI, call the London Health Observatory (LHO) on 020 7307 2828 or visit the LHO website at www.lho.org.uk/HEALTH_INEQUALITIES/BasketOfIndicators.aspx

Example of data can be found on p49

NHS Comparators

What is NHS Comparators for?

NHS Comparators is a national resource for England, providing access to NHS GP practice-level indicators and activity data. It supports comparisons at practice, PCT, strategic health authority and national levels, enabling users to investigate aspects of local commissioning activity, costs and outcomes. It is designed to offer a standard view of national data and can be supplemented by information available in local systems.

Who is it for?

NHS Comparators provides comparator data for NHS commissioning and provider organisations. It contains approximately 200 comparators and is designed to make information easily available and understandable to all health professionals, not just information specialists.

The website is also aimed at primary care clinicians to enable them to:
• become more involved in commissioning decisions to support the local health needs of their populations
• access a range of indicators and activity data at practice level, enabling a better understanding of local commissioning activity, referral patterns and outcomes
• enable comparisons to be made with other practices, PCT norms and national data, related to practice populations as appropriate

It is free to NHS users.

Why use it?

NHS Comparators is designed to help NHS organisations improve the quality of care for all by benchmarking and comparing activity and costs on a local, regional and national level. It provides an opportunity:
• to gain an overview of care pathways to help identify where improvements can be made
• to gain a better understanding of local commissioning activity, referral patterns and outcomes
• to view comparators for providers to see their performance on a range of local and national comparators as it looks at a whole range of activity: in-patient, outpatient and disease-specific

Contribution to tackling health inequalities

By using local knowledge in interpretation, the comparators can indicate areas where a variation in activity or clinical practice may be contributing to the health inequalities in the area. Useful data includes estimated vs. QOF prevalence data (indicating the potential gap between prevalence of disease and numbers on general practice registers) and emergency admissions (indicating, for example, quality of long term condition management).

How to use it

Users must register before using the website. Once registered, there are two major areas through which a user can explore data – the 'Commissioners View Tab' and the 'Providers View Tab'. Within these tabs, there are two further sub-tabs called 'NHS Comparators' and 'PbR Indicators' (payment by results). There is then an opportunity to select the relevant SHA, PCT and practice required and links are made to relevant data sites.
The website can be accessed via www.nhscomparators.nhs.uk

Example of Use

"At NHS Islington, we have found NHS Comparators really useful to enable us to benchmark our hospital admission rates against other London PCTs so we can quickly see whether we are an outlier or not. We have recently used it to inform our work on ambulatory care sensitive (ACS) admissions as we know we have high rates, particularly among the poorest in the borough. Using NHS Comparators we can easily get rates by general practice and see where there are 'excess' admissions, prompting further investigation at a local level."
Dr Sarah Dougan, Principal Public Health Information Analyst NHS Islington

Examples of presentations of analysis for each of the tools, methodologies and data sources

APPENDIX 1: Health Inequalities Intervention Toolkit

Spearhead Tool
**Life expectancy gap between *Spearhead area* and England average:
breakdown by cause of death, males and females, 2006-08**

The chart shows the percentage contribution of various diseases to the life expectancy gap between the former Spearhead area and England. This example shows that mortality from cancer is the major contributor to the life expectancy gap for both males and females (31 and 34 per cent respectively), followed by respiratory diseases (25 and 23 per cent respectively.) The life expectancy gap can also be analysed between the most disadvantaged and the most affluent area within the same local authority.
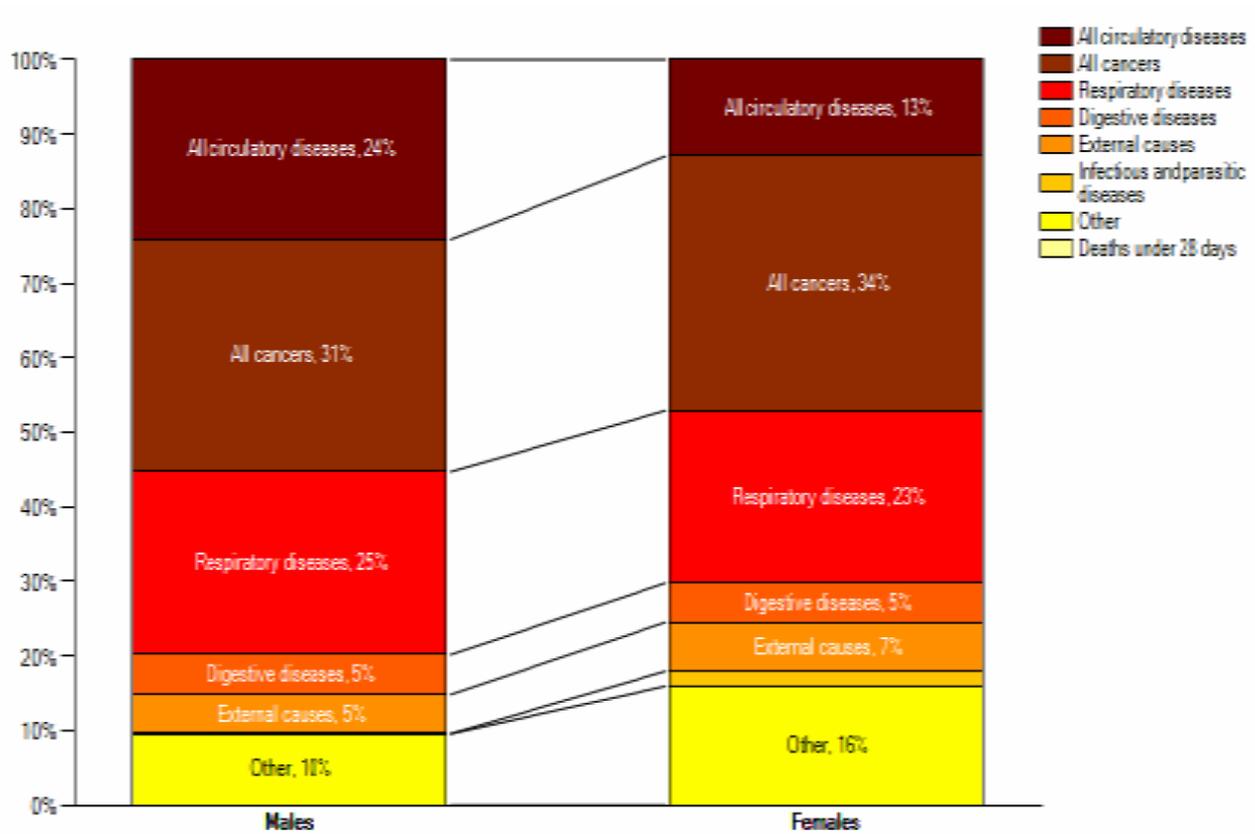
Circulatory diseases includes coronary heart disease (CHD) and stroke; Digestive diseases includes alcohol-related conditions such as chronic liver disease and cirrhosis; External causes includes injury, poisoning and suicide

Source: LHO

Commissioning Intervention Tool
Life expectancy gap between Spearhead area and England
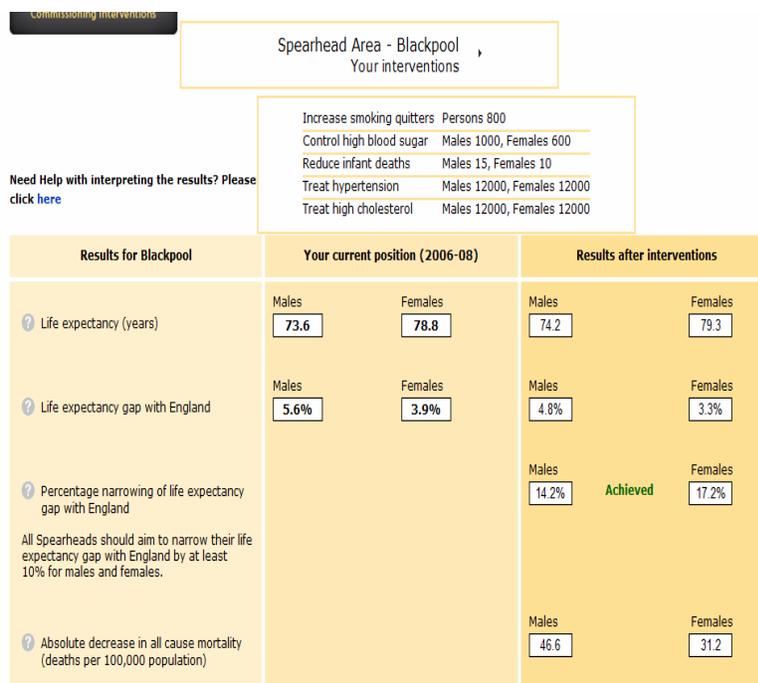
The tool allows users to examine the impact of evidence-based interventions on reducing the gap in life expectancy between each former Spearhead area and England. This example illustrates the gains in life expectancy by increasing smoking quitters (about 800 persons), lowering levels of high blood sugar (for example by controlling high blood sugar for extra 1600 patients), lowering infant mortality (preventing 25 deaths of newborn babies) and prescribing antihypertensives and statins (for about 24,000 patients). As a result of these interventions and the hypothetical numbers of patients needed to be treated, the gap with England can be effectively being reduced (for example 14 and 17 per cent reduction for males and females respectively).

Source: LHO

Tool for all areas

Life expectancy gap between a selected area and England average:
breakdown by cause of death, males, 2006-08

The chart shows the percentage contribution of various diseases to the life expectancy gap for males between a selected area and England. DN I thought it was the most disadvantaged quintile in a selected area – this reads like whole area v England. This example shows that male mortality from all circulatory diseases are the major contributor to the life expectancy gap (24 per cent), followed by mortality from external causes (20 per cent).

Male

All circulatory diseases, 24.4%	■ All circulatory diseases
All cancers, 16.7%	■ All cancers
Respiratory diseases, 13.2%	■ Respiratory diseases
Digestive, 12.0%	■ Digestive
External causes, 20.1%	■ External causes
Other, 9.8%	■ Infectious & parasitic diseases
	■ Other
	■ Deaths under 28 days
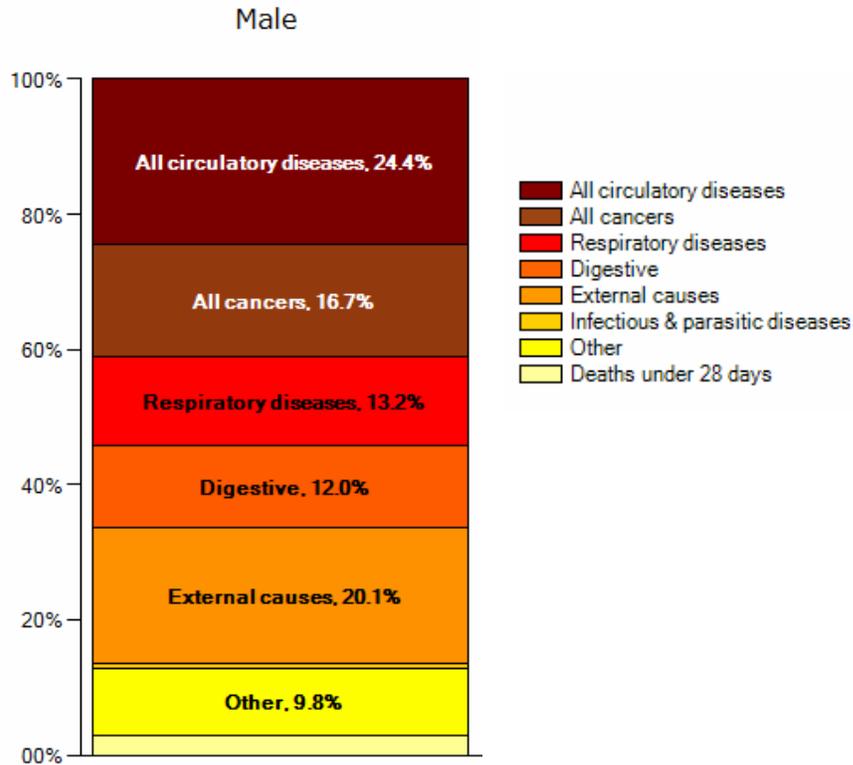
Tool for all Areas

Life expectancy gap between a selected area (Local Authority) and England average: breakdown by cause of death, males and females, 2006-08

The chart displayed below shows the life expectancy years that potentially can be saved in the most disadvantaged quintile of the local authority selected for each cause of death if the area had the same mortality rate as the England average. The chart helps to identify those diseases where there is excess mortality in the most disadvantaged quintile of the local authority in relation to the England average.
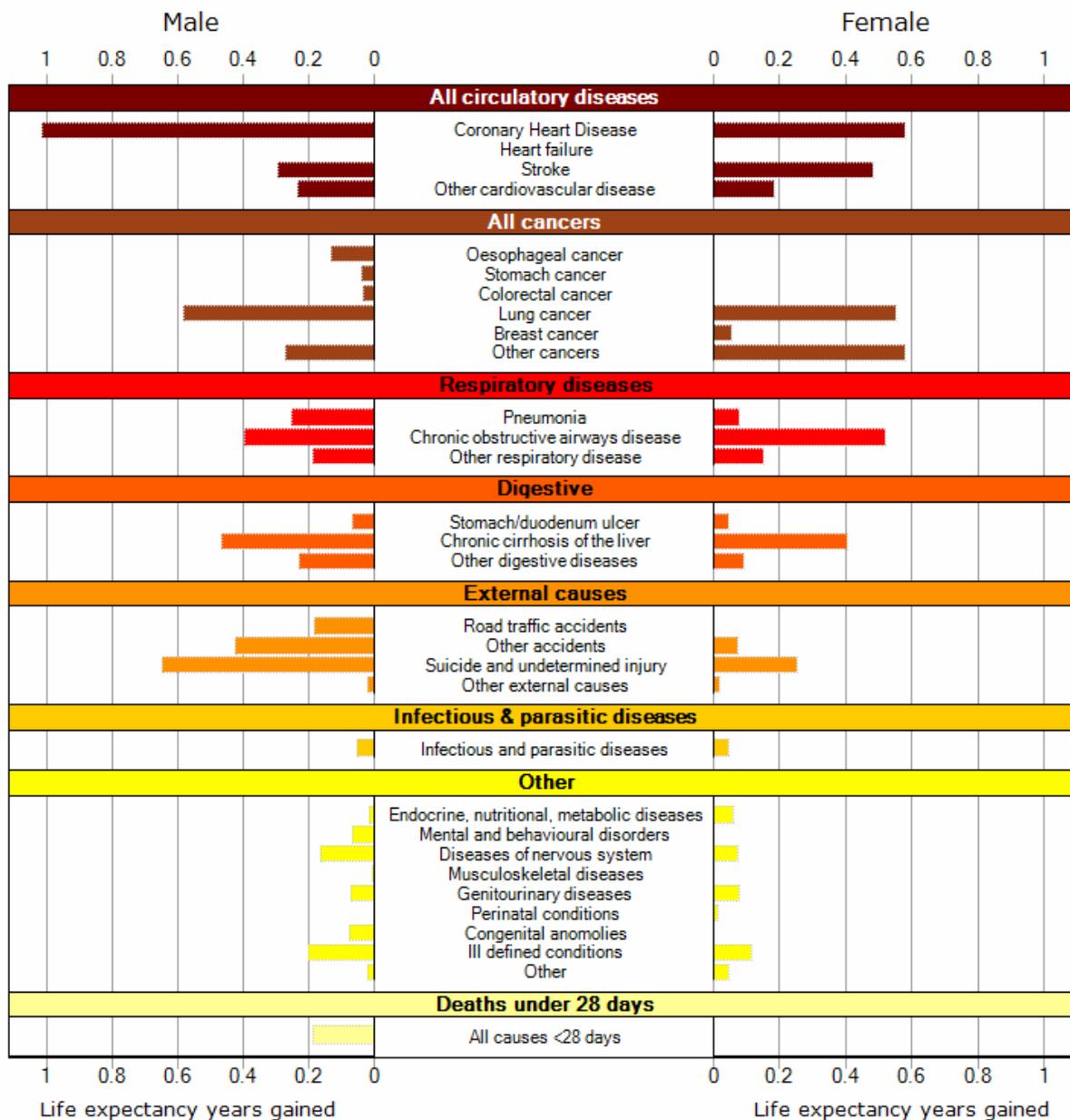
Infant Mortality Tool

This table demonstrates that in North East SHA, infant deaths per 1000 live deaths is higher than all births within marriage and joint registrations in England and Wales.

		Infant deaths per 1,000 live births 2006-08
North East	– Routine and manual group	4.6
England and Wales	– All births within marriage and joint registrations	4.5
Gap		0.08

This graph demonstrates that the biggest contributor to the gap in infant mortality is sudden unexplained deaths in infancy, followed by smoking in pregnancy.

The factors that contribute to the gap* are:

Teenage pregnancy	1%
SUDI - sudden unexplained death in infancy	46%
Smoking in pregnancy	36%
Obesity	10%
Poverty	1%
Not breastfed	5%
Other (factors not modelled)	0%
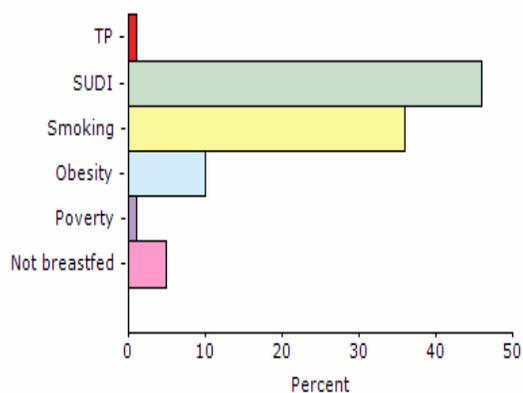
Source: LHO

This graph illustrates the 3-year average infant mortality rates 2002 – 2004 to 2006 – 2008 compared to England and Wales.

Three-year average infant mortality rates, 2002-04 to 2006-08

Rate per 1,000 live births

All births within marriage and joint registrations:
- ◆ North East
- ◆ England and Wales

Of which routine and manual:
- ▲ North East
- ▲ England and Wales

Sole registrations:
- □ North East
- □ England and Wales
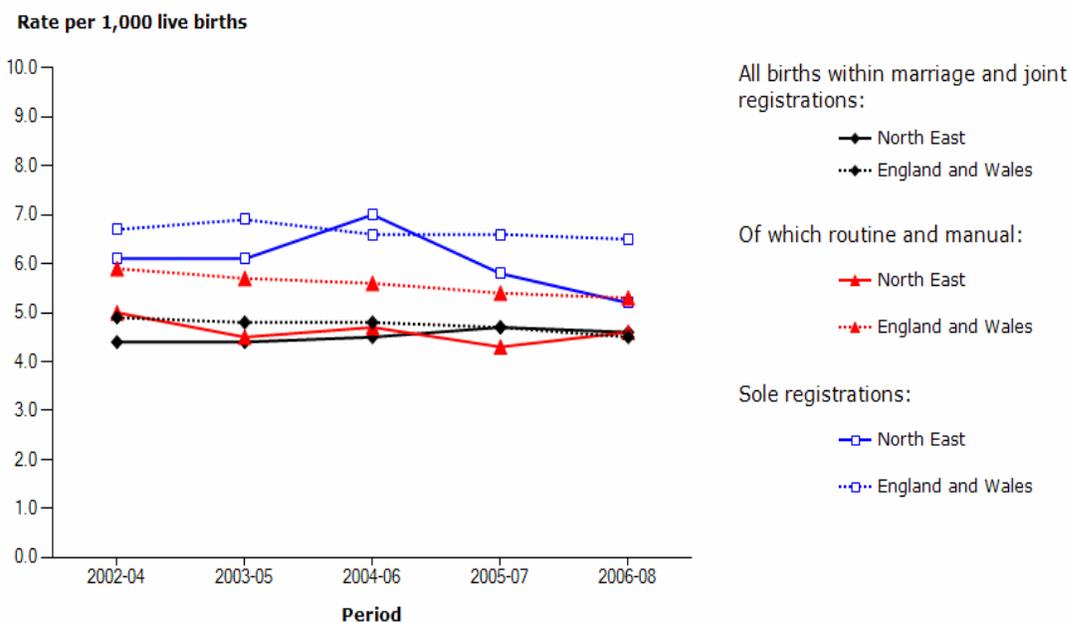
The graph demonstrates that the infant mortality rate of sole registrations had reduced since 2004-06 and in 2006-08 is lower than England and Wales. Of those that are routine and manual, the rate remains higher than England and Wales. The births within marriage and joint registrations are similar to England and Wales.

Appendix 2:

How to model the scale of use of evidence- based interventions necessary to reduce inequalities in life expectancy developed by the Health Inequalities National Support Team

This graph illustrates the male AAACM rate trend and trajectory to 2011 for a chosen area and plots against it the required rate to meet the agreed outcome. It compares the trend to the required level and quantifies the additional deaths needing to be averted each year in 2010 and 2011.

Males				Reduction from 2009 position		
Average deaths per year 2006-08 (actual)	Average deaths per year to achieve target 2009-11	Actual deaths in 2009	Required deaths per year in 2010 & 2011 to achieve target	Number of fewer deaths each year in 2010 & 2011 to reach target	Number of fewer deaths anticipated each year in 2010 & 2011 (Trend)	Additional deaths to avert each year in 2010 & 2011
2115	1826	2030	1725	-305	-135	-170

Figure 1: Males AAACM rate 2002-2009, trend and trajectory to 2011
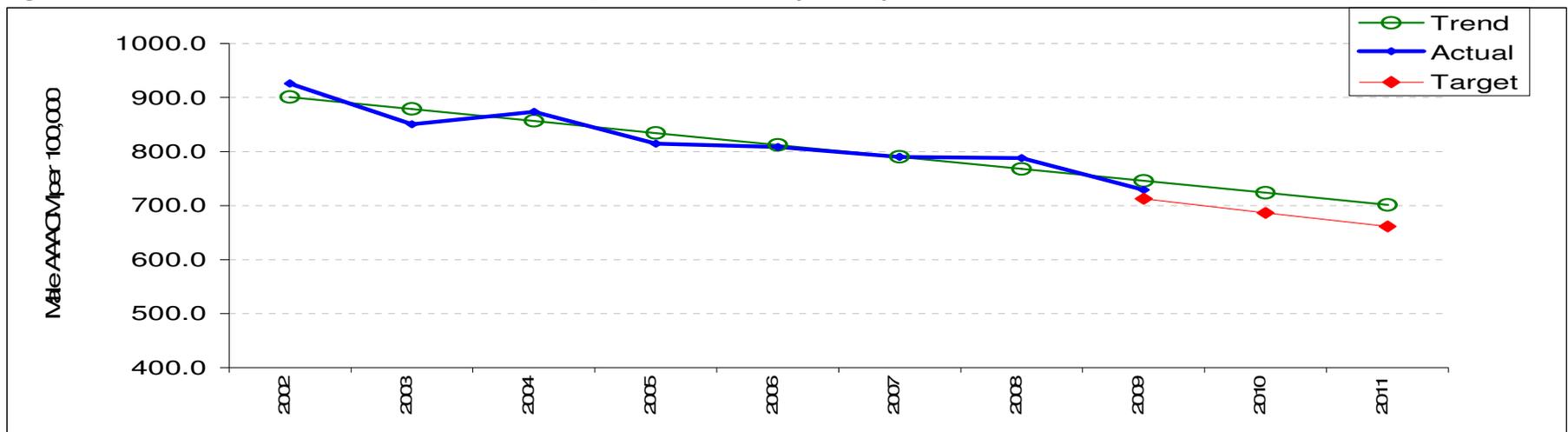
Modelling the contribution of evidence-based interventions to achieving health inequalities outcomes

This table demonstrates the output for a selected PCT showing potential reductions in mortality and associated 'number needed to treat' estimates. Model version 5.1 (August 2010)

Assumed treatment coverage of eligible population (%)	Intervention	Potential postponed deaths in one year (based on 2006-08 data)			Estimated population eligible for treatment			Number Needed to Treat (NNT) to postpone one death	Life expectancy gain (for local authority)		Change in All Age All Cause Mortality (AAACM) rate per 100,000 from 2006-8 actual rate	
		Males	*Females*	*Persons*	*Males*	*Females*	*Persons*	*Ratio*	*Males*	*Females*	*Males*	*Females*
	Cardiovascular disease: Secondary prevention Four treatments (beta blocker, aspirin, ACE inhibitor, statin) for all patients with a previous CVD event *Currently untreated*											
100%	CHD deaths averted	10	9	20	854	876	1,730	56	0.08	0.06	-7.08	-3.47
	Stroke deaths averted	4	7	11					0.03	0.04	-2.62	-2.57
	Currently partially treated											
100%	CHD deaths averted	20	14	34	6,491	4,692	11,183	213	0.16	0.09	-13.55	-5.27
	Stroke deaths averted	8	11	19					0.05	0.07	-5.02	-3.91
	Additional treatment for hypertensives with no previous CVD event											
100%	Additional hypertensive therapy	29	30	59	25,911	16,137	42,048	491	0.26	0.25	-20.89	-13.67
100%	Statin treatment for hypertensives with high CVD risk	14	13	26					0.13	0.12	-9.74	-5.34
	Treatment for heart attack											
100%	Primary angioplasty (PCI) for heart attack	3	2	4	-	-	476	107	-	-	-	-
	Anticoagulant therapy (Warfarin) for all patients over 65 with atrial fibrillation											
100%	Stroke deaths averted	7	9	16	252	414	666	41	0.04	0.05	-4.01	-3.22
	Diabetes											
100%	Reducing blood sugars (HbA1c) over 7.5 by one unit	12	4	15	2,253	1,024	3,277	212	0.09	0.03	-8.02	-1.87
	Chronic obstructive pulmonary disease (COPD)											
40%	Statins to address CVD risk among COPD patients	43	28	70	1,572	1,229	2,801	40	0.13	0.09	-11.50	-4.95
	Reducing smoking in pregnancy											
100%	Eliminating smoking in pregnancy (infant deaths averted)	1.0	0.8	1.8	-	-	734	400	0.49	0.47	-0.01	-0.01
	Harmful alcohol consumption											
10%	Brief intervention for 10% of harmful drinkers	1.9	0.7	2.6	782	464	1,246	479	0.03	0.02	-1.81	-0.71
	Lung cancer											
100%	Increasing rates of early presentation	6	5	11	*	*	*	*	0.02	0.02	-5.11	-2.75
	Smoking cessation clinics											
100%	Per 1000 setting a quit date	0.3	0.3	0.6	313	341	653	1007	0.00	0.00	-0.24	-0.17
	Total	**159**	**132**	**291**	**-**	**-**	**-**	**-**	**1.51**	**1.32**	**-89.61**	**-47.91**

Note: Totals may not sum due to rounding
* Eligble population and NNT figures will be provided in a later version of this model after further consideration of the evidence

Source: Health Inequality National Support Team (HINST)

Appendix 3: Health Poverty Index

Spider diagram (referred to here as the HPI Chart) illustrates the chosen area in red (Manchester) and the comparison group (Birmingham) in dark blue (a score of zero indicates the best situation in terms of health poverty and a score of 1 the worst situation).

Manchester: Scaled data, 2003, All ethnic groups
Birmingham: Scaled data, 2003, All ethnic groups
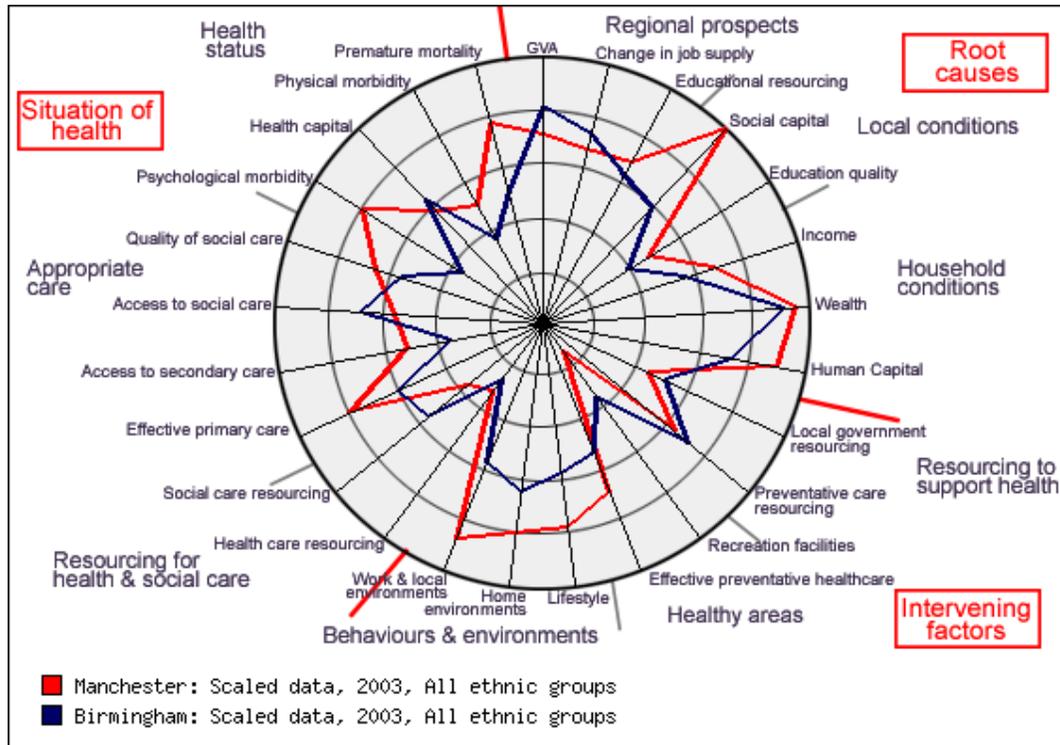
This diagram indicates that Manchester has worse health poverty on a number of factors (e.g. work and local environments, home environments, lifestyles and effective preventative health care) where the red line is further away from the centre that the blue line at these points. It has better health poverty on a number of factors (e.g. for access to secondary care social care resourcing and recreation facilities) where the red line is closer to the centre point than the blue line.

This data can also be displayed in a **bar chart**

The chart shows horizontal bars comparing Manchester (red) and Birmingham (dark blue) across multiple categories:

GVA, Change in job supply, Educational resourcing, Social capital, Education quality, Income, Wealth, Human Capital, Local government resourcing, Preventative care resourcing, Recreation facilities, Effective preventative healthcare, Lifestyle, Home environments, Work & local environments, Health care resourcing, Social care resourcing, Effective primary care, Access to secondary care, Access to social care, Quality of social care, Psychological morbidity, Health capital, Physical morbidity, Premature mortality.

X-axis: 0.00, 0.20, 0.40, 0.60, 0.80 (Worst situation in terms of health poverty), 1.00

Legend:
- Manchester: Scaled data, 2005, All ethnic groups
- Birmingham: Scaled data, 2005, All ethnic groups

source: www.hpi.org.uk

The Bar chart illustrates the chosen area in red and the comparison group in dark blue (a score of zero indicates the best situation in terms of health poverty and a score of 1 the worst situation).

Source: HPI

Appendix 4: SHAPE

Fig 1: This map shows the scale of percentage of disadvantaged households by postcode sector and location of GP practices for one PCT (red areas have the highest percentage of disadvantaged households and green the lowest percentage).
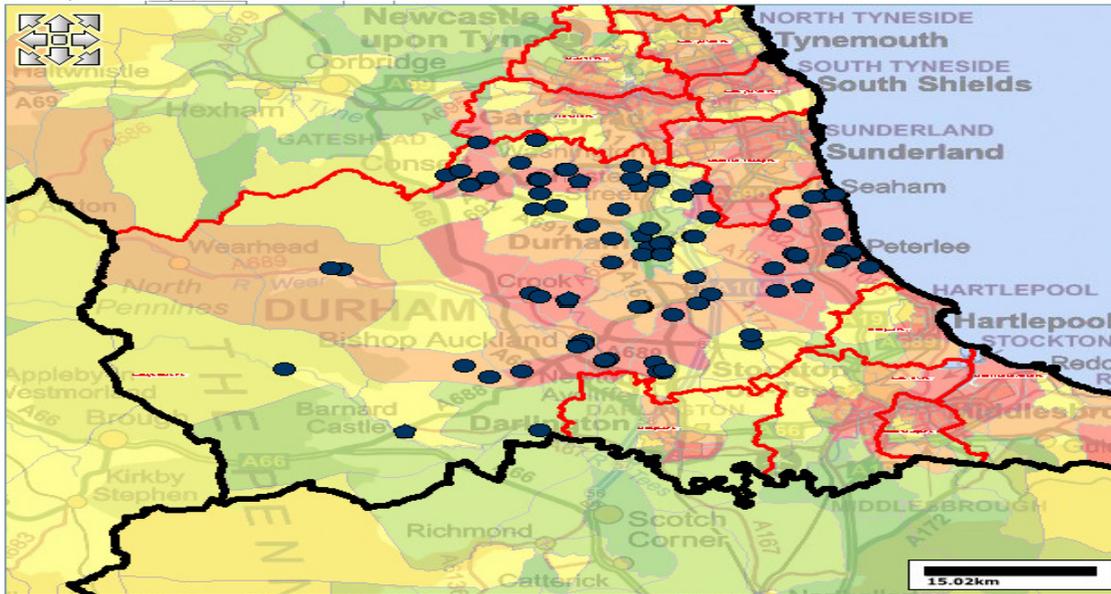
Source: SHAPE 2010

Fig2: This example provides the same map but with admissions for chest pain by postcode sector overlaid (dark blue postcode areas have highest rate of admissions for chest pain, lightest blue have the lowest rate).
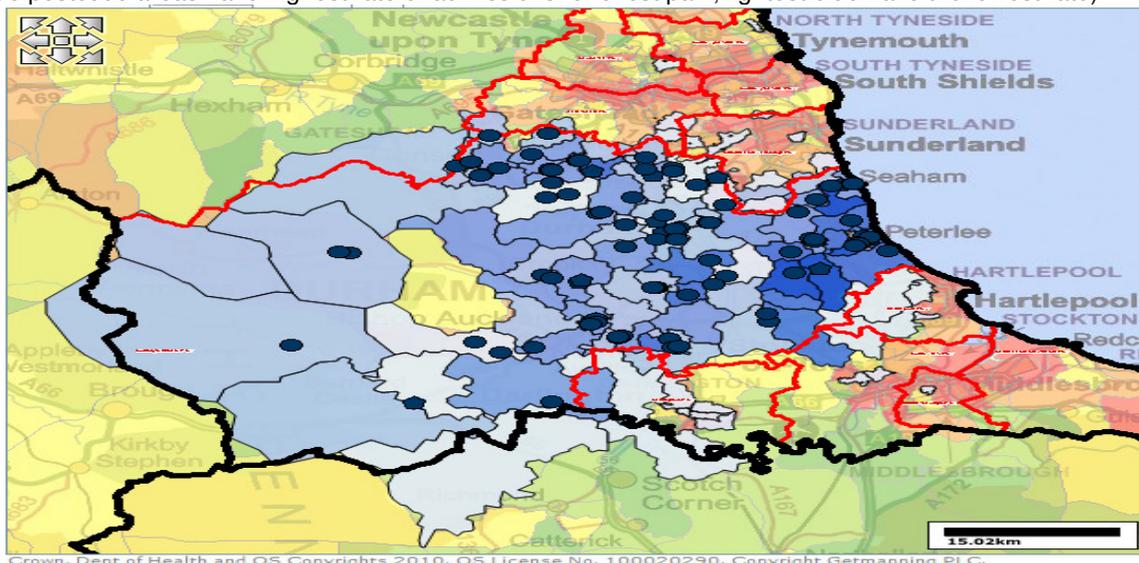
The interactive website allows an overlay of these two enquiries. Therefore it would be possible to identify a relationship between levels of general practice, chest pain and disadvantaged households. Figure 1 demonstrates a good spread of GPs across the PCT identified in the most disadvantaged areas and figure two shows the variation of the number of admissions for chest pain for each of these GP practices.

Source: SHAPE 2010

44

Appendix 5: Key Tools Using Programme Budgeting

Spend and Outcome Tool (SPOT)

This is a tool that enables PCTs to identify a high level link between expenditure on healthcare programmes and selected health outcomes, and how the expenditure and outcomes compare with other PCTs nationally. The tool can be easily accessed from the YHPHO website.

The SPOT diagram
The diagram identifies areas that require high priority. For example, a programme lying below the dark horizontal line has outcomes that are worse than England. A programme above the horizontal dark line indicates better outcomes than England. This specific example shows that there is an underspend on the most important health programmes (for example cancer, circulatory and respiratory diseases, trauma, neurology and infections) and their relative outcomes (expressed in mortality) are generally worse than other peer PCTs, with their budget being below average.

Spend and Outcome relative to other PCTs in England

Programme Area Abbreviations					
Infectious Diseases	Inf	Hearing	Hear	Disorders of Blood	Blood
Cancers & Tumours	Canc	Circulation	Circ	Maternity	Mat
Respiratory System	Resp	Mental Health	MH	Neonates	Neo
Endocrine, Nutritional & Metabolic	End	Dental	Dent	Neurological	Neuro
Genito Urinary System	GU	GI System	Gastro	Healthy Individuals	Hlth
Learning Disabilities	LD	Musculoskeletal	Musc	Social Care Needs	Soc
Adverse effects & poisoning	Pois	Trauma & Injuries	Trauma		

The SPOT spine chart

The chart illustrates variations in spend and the relative outcomes compared to similar PCTs (practices that share a similar population based on their IMD scores), the SHA and England, and allows instant visual identification of significant differences for the highest spend programmes. This example shows that overall budget in health care is below average but in programmes (for example on cancers, respiratory and circulatory diseases) where there is an apparent over spending, the relative outcomes (expressed in mortality) are generally better than average and other peer PCTs.

	PCT 07/08	2008/09 values				Notes
		PCT	ONS Cluster	SHA	England	
Overall						
Overall spend per weighted head of population	£1,407	£1,444	£1,525	£1,510	£1,531	
All age all cause mortality	588	584	538	590	582	2
Deprivation	18	18	15	20	22	1
Cancers and Tumours						
Cancer spend per weighted head of population	£119	£121	£101	£99	£95	
Mortality from all cancers, DSR*, under 75 years	114	114	105	113	114	2
% cancer patients receiving treatment within 2 months	97%	95%	97%	96%	97%	3
Mental Health						
Mental Health spend per weighted head of population	£150	£152	£171	£179	£191	
% CPA* follow-up within seven days	98%	98%	93%	93%	93%	3
Mortality from suicide and undetermined injury, DSR*	9.4	8.9	7.3	7.5	7.8	2
Neurological Disease						
Neurological spend per weighted head of population	£63	£63	£70	£67	£68	
Mortality from epilepsy, DSR*, under 75 years	1.3	1.5	1.3	1.3	1.5	2
Circulation						
Circulation spend per weighted head of population	£139	£152	£137	£130	£130	
Mortality from circulatory diseases, DSR*, under 75 years	76	73	63	74	75	2
Patients with CHD whose last blood pressure < 150/90	90%	90%	90%	90%	90%	4
Respiratory Disease						
Respiratory spend per weighted head of population	£81	£90	£77	£78	£78	
Mortality from Bronchitis, Emphysema & COPD*, DSR*, u75	10	11	9	12	12	2
Gastrointestinal Disease						
Gastrointestinal spend per weighted head of population	£94	£95	£81	£78	£78	
Musculoskeletal system						
Musculoskeletal spend per weighted head of population	£85	£91	£88	£91	£80	
Genitourinary system						
Genitourinary spend per weighted head of population	£66	£75	£74	£71	£74	
Genitourinary deaths within 30 days of admissions, ISR*	2687	3127	2619	2747	2609	2
% CRF* with hypertension on ACE*/ARB* therapy	80%	83%	86%	84%	87%	4
Maternity						
Maternity spend per weighted head of population	£61	£57	£57	£58	£60	
% Low birth weights	6.8%	7.0%	6.5%	7.4%	7.5%	2
Other						
Primary Care GMS*/PMS* spend per weighted head of population	£151	£149	£150	£151	£145	
Miscellaneous spend per weighted head of population	£35	£26	£71	£88	£82	

** z scores
A z score essentially measures the distance of a value from the mean (average) in units of standard deviations. A positive z score indicates that the value is above the mean whereas a negative z score indicates that the value is below the mean. A z score of -2 or 2 or more indicates that the value is statistically significantly different to the mean (at the 95% confidence level).

Legend:
- SHA range
- PCT value
- ONS Cluster value
- ONS Cluster range

Source: APHO

Programme Budgeting Atlas

The programme budgeting atlases enable PCTs to link programme budgeting expenditure data, as presented in the programme budgeting spreadsheet, with a wide range of outcome and activity data. Data is presented for each programme in the form of interactive maps and correlation plots. The tool is only available to those connected to the NHS network.

NHS Comparators

NHS Comparators is a benchmarking tool that has been developed by the Information Centre for Health and Social Care. It enables PCTs, Practice Based Commissioners, GP practices and providers to: investigate detailed variation in activity, costs and outcomes; provide variation over time, at specialty and disease level; examine a wide variety of datasets in the same format including secondary care activity, Quality and Outcomes Framework data, and prescribing (costs and volume). This link is to the NHS network connection. Non-NHS users can now access the tool but need to contact the Information Centre directly for registration details.

This is an example taken from the NHS comparators and illustrates the variations in emergency admissions, which allows easy visualisation and comparison of volume over time and across areas (each PCT, region and nationally).
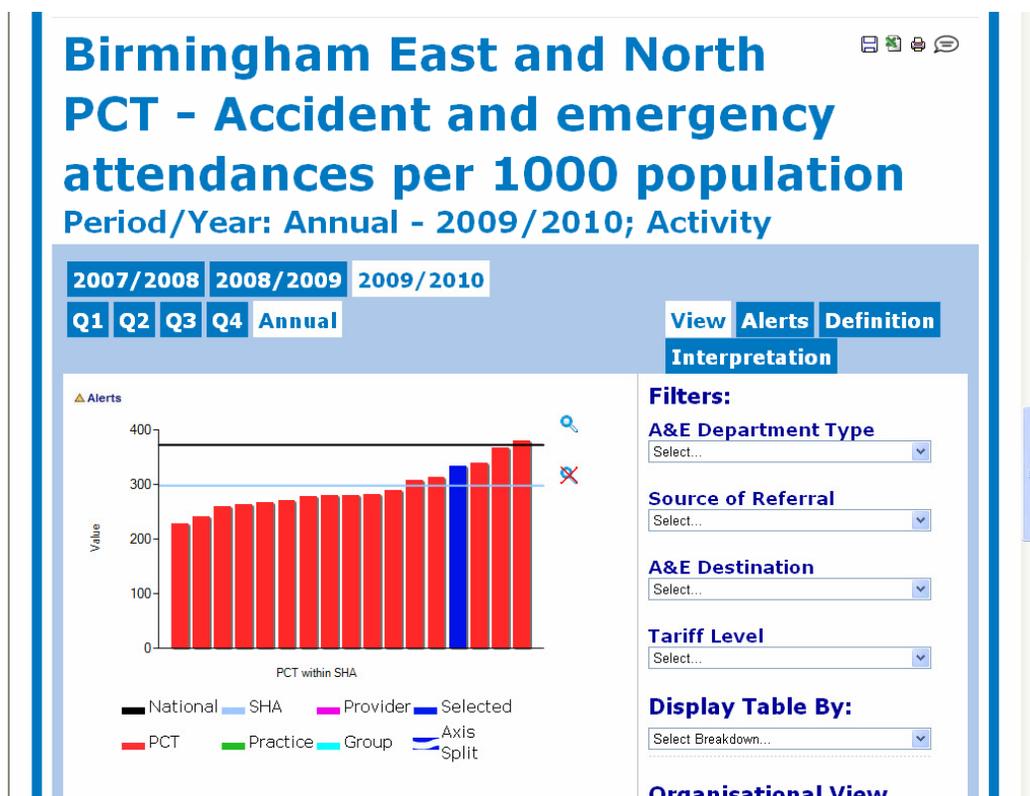
Source: NHS comparators

Inpatient Variation Expenditure Tool

This Excel 'ready reckoner' calculates potential savings by reducing admissions across major disease groups and for interventions with the highest spend. A guide is also provided detailing how to use the tool and emphasising that it should not be used in isolation.

The chart below shows a PCT which has inpatient spending below the national average (the default accounting for its population on cancer, circulatory and respiratory diseases). It is also spending £2.5 million more than expected compared to the national average on musculoskeletal problems.
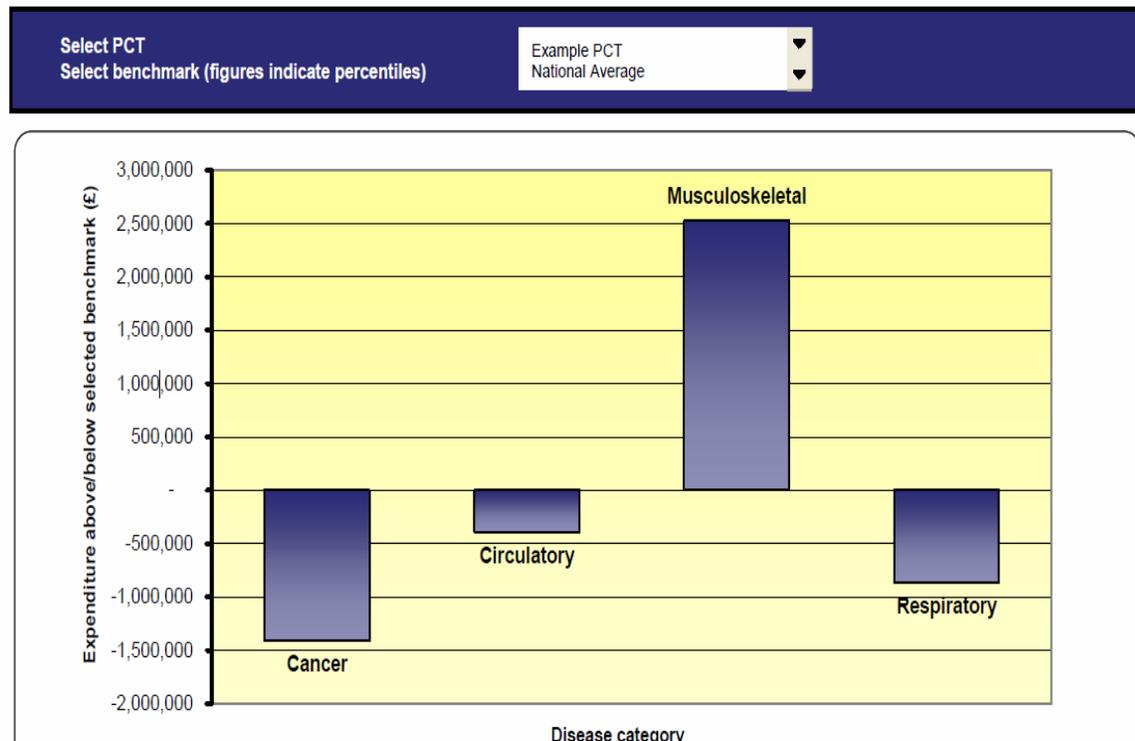
Source: NHS

Local Basket of Indicators (LBOI) and Health Inequalities Retrieval Tool

This is an example taken from the LBOI and Health Inequalities Retrieval Tool and illustrates the variations across selected indicators for smoking cessation (e.g. percentage of successful quitters), waiting list for treatment and breast screening for chosen areas and compared against the national average. The tool enables users to select areas of their choice to facilitate comparison across their peers (based on geographical or demographic characteristics) on a range of health indicators relevant to health inequalities.

Indicator 7.1 – The number of smokers who had successfully quit at the four week follow up per 100,000 population , PCT , London Areas

Organisation Code	Area Name	Rate per 100,000 population	Lower 95% CI	Upper 95% CI
5C2	Barking & Dagenham	820.00	-	-
5A9	Barnet	322.00	-	-
5A8	Greenwich Teaching	700.00	-	-
5H1	Hammersmith & Fulham	923.00	-	-
5LD	Lambeth	542.00	-	-
5C5	Newham	1083.00	-	-
Eng	England	739.00	-	-

Indicator 8.5 – Proportion of patients on waiting list that have been waiting more than 6 months for treatment , PCT , London Areas

Organisation Code	Area Name	Percentage	Lower 95% CI	Upper 95% CI
5C2	Barking & Dagenham	9.20%	-	-
5A9	Barnet	10.10%	-	-
5A8	Greenwich Teaching	5.50%	-	-
5H1	Hammersmith & Fulham	5.30%	-	-
5LD	Lambeth	6.50%	-	-
5C5	Newham	8.40%	-	-
Eng	England	8.60%	-	-

Indicator 13.1 – Proportion of women aged 53-64 who have been successfully screened for breast cancer , PCT , London Areas

Organisation Code	Area Name	Percentage	Lower 95% CI	Upper 95% CI
5C2	Barking & Dagenham	70.19%	-	-
5A9	Barnet	67.07%	-	-
5A8	Greenwich Teaching	68.68%	-	-
5H1	Hammersmith & Fulham	42.91%	-	-
5LD	Lambeth	59.72%	-	-
5C5	Newham	51.68%	-	-
Eng	England	75.00%	-	-

Appendix 6: National, Regional and Local Health Profiles - Online Interactive Atlas

A new interactive web-based resource ('Interactive Atlas') provides a useful tool presenting health indicators and information easily and broken down at detailed geographical level. It also allows users to visualise and compare levels and trends.

Fig 1 Maps illustrate the correlation betweeen the life expectancy at birth and deprivation in England by wards
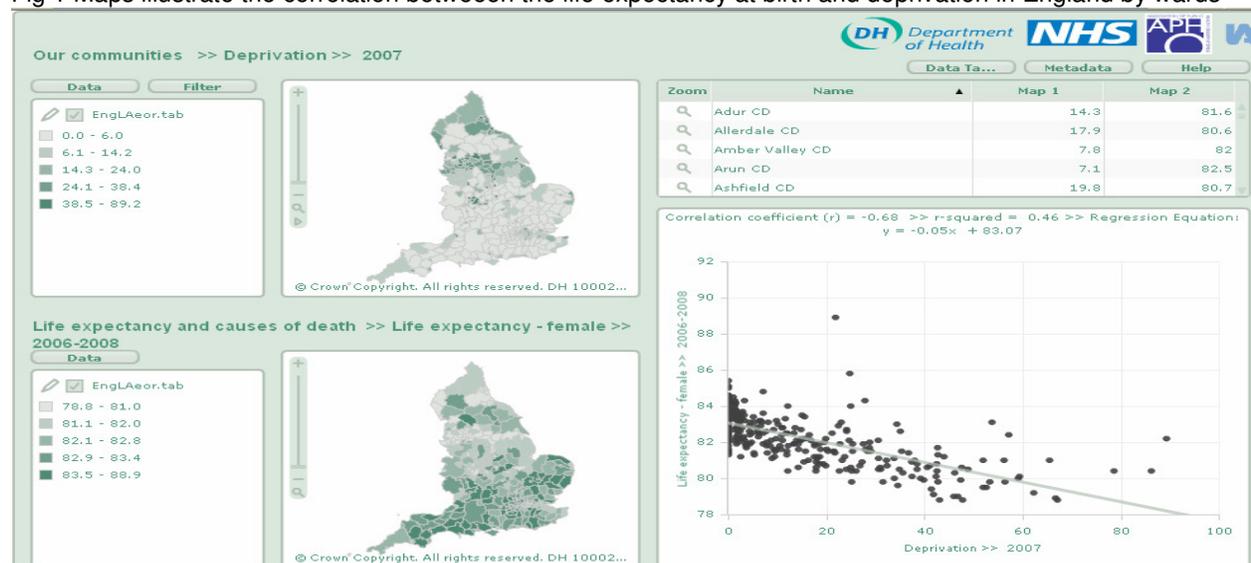
Fig 1 The Double Map from the Instant Atlas presents the relationship between two chosen indicators (e.g. deprivation and life expectancy at birth) and a Scatter plot to assess potential correlation and highlight anomalies. The example shows that there seems to be a correlation between life expectancy and the level of deprivation in the country: a decrease in the survival probability at birth seems to be correlated with the most disadvantaged areas in England.

Fig 2 Map presents amenable mortality rates in England by wards.
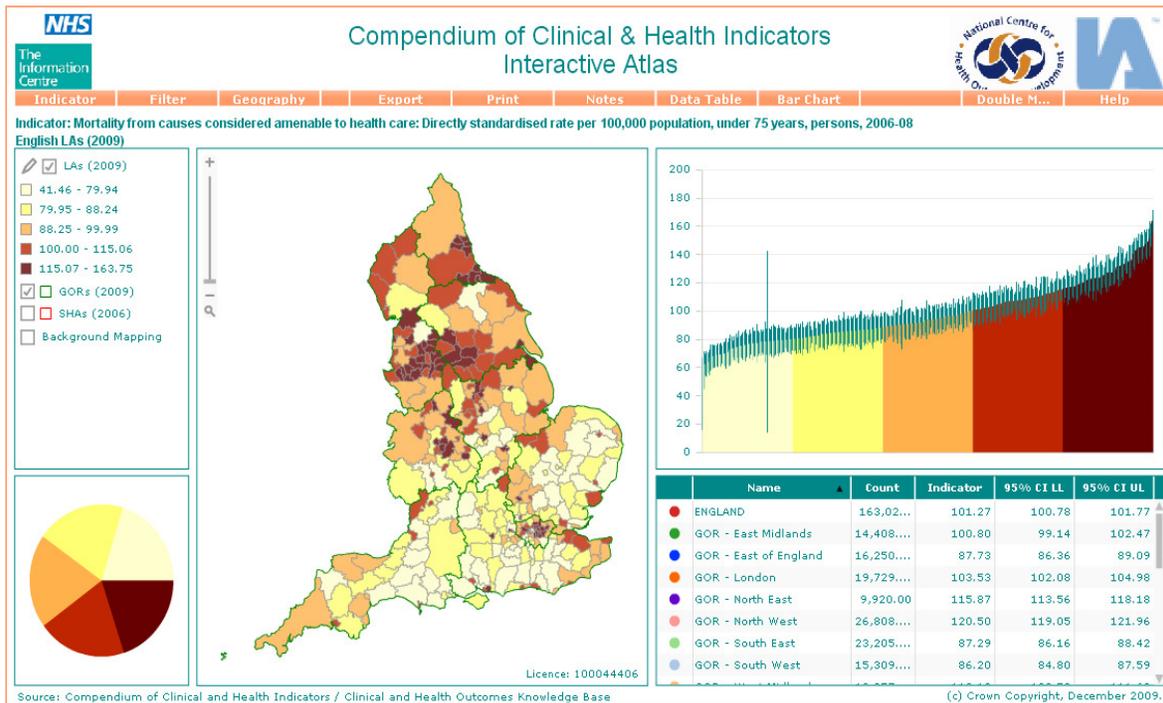
Fig 2 This example shows the detailed geographical distribution of mortality rates considered amenable across people aged under 75, with a noticeable increase in the North of England. The overall results (which include numbers and rates) for England and each region are also included in a table to facilitate comparison at national and regional levels.
Source: APHO

Appendix 6: Acronyms and abbreviations

AAACM	All age all cause mortality DN Jane I would just use one acronym
CIAMS	Commissioners Investment and Asset Management Strategy
HEA	Health Equity Audit
HIA	Health Impact Assessment
HPI	Health Poverty Index
HRG	Healthcare Resource Groups
HTML	Hypertext Mark up Language
JSNA	Joint Strategic Needs Assessment
LADS	Local Authority Districts
LBOI	Local Basket of Indicators
LHO	London Health Observatory
ONS	Office for National Statistics
PBC	Practice based commissioning
PbR	Payment by results
QIPP	Quality, Improvement, Productivity and Prevention
QOF	Quality and Outcomes Framework
R&M	Routine and manual
SHA	Strategic health authority
SHAPE	Strategic Health Asset, Planning and Evaluation tool
SPOT	Spend and Outcomes Tool
YHPHO	Yorkshire and Humber Public Health Observatory

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