



Mapping Health Toolkit

Helping local councils and Environmental Health
Officers respond to the new public health agenda

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October 2013

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Introduction to the Mapping Health Toolkit

Introduction – the policy context

The Health and Social Care Act, 2012 has heralded in a new era in relation to the delivery of public health at the local level within England. Statutory responsibility for public health has now been assigned to upper tier councils, and new institutional arrangements including the establishment of local health and well-being boards and clinical commissioning groups will see local councils operating within a new policy environment. The transfer of responsibility for public health at the local level to local councils represents not only a significant organisational transformation, but also poses challenges to those environmental health officers working within local authorities for whom public health in a wider context may not have previously informed their day-to-day responsibilities, nor figured within their career and personal development.

Despite concerted efforts to ensure a smooth transition in the transfer of responsibility for public health at the local level, these changes undoubtedly pose a significant challenge both to individual environmental health officers and the local authorities within which they are employed. The Chartered Institute for Environmental Health (CIEH) has therefore commissioned Nottingham Trent University to develop a mapping health toolkit that will enable environmental health officers to develop public health profiles for their locality which can:

- Identify the strategic public health policy priorities for their authority;
- Inform the Joint Strategic Needs Assessments that their local council will be required to contribute to and develop;
- Facilitate partnership working between local councils and the range of other local stakeholder organisations in order to deliver a joined-up and proactive response to public health issues and health inequalities within their local areas.

Who is the toolkit designed for?

This toolkit is primarily intended for users who are operating at the local authority level in England¹, and who have recently acquired a new organisational remit for identifying public health issues, and tackling health inequalities, within their locality. To this end, the toolkit is targeted at individuals within local councils who may be responsible for strategic decision-making and planning, targeting resources and local policy initiatives, or identifying and mapping public health outcomes and health inequalities within their local area.

Whilst the toolkit should be of use to any individual or stakeholder organisation currently working at the national, regional or local level within the realm of public health in England, the primary target audience is those individuals who are:

- new to the field of public health in its widest context;
- have a limited understanding of the extent of health inequalities, and patterns of health outcomes, across different segments of the population and localities;
- unaware of the full range of people, place, resource and policy factors that can shape and determine health outcomes and inequalities at the local level;
- have little working knowledge of the range of online data and mapping resources currently available relating to health outcomes and the determinants of health inequalities;

¹ The conceptual components of the toolkit relating to the determinants of health outcomes and health inequalities will be pertinent to users operating beyond the immediate local context within England. However, many of the data and mapping resources identified within the toolkit have either been generated specifically by organisations (e.g. the former public health observatories now subsumed into Public Health England) with an exclusively English remit – or have equivalents within other parts of the United Kingdom which have a different scope, content or underlying methodology (e.g. the indices of deprivation used within Northern Ireland, Scotland and Wales).

- not entirely sure how to use and analyse this data in order to inform their organisation's contribution to Joint Strategic Needs Assessments within their area;
- seeking a resource that will help their strategic decision-making, the targeting of resources and policy initiatives – and which will facilitate organisational and individual policy learning.

What is the toolkit designed to do?

From the outset, it is important to realise that this resource is designed to provide the public health 'novice' with a starting point on their journey to:

- understanding the nature and determinants of public health outcomes and inequalities;
- gaining an appreciation and working knowledge of the resources and tools that are available to help them identify public health priorities for their local area;
- developing a public health profile that maps a range of health outcomes, and the underlying causes of health problems and inequalities, within their local authority area;
- improving strategic decision-making and policy learning within their organisation, and the strategic and service delivery partnerships which they are members of.

The toolkit on its own however cannot provide the user with:

- an in-depth discussion of every aspect of public health, the causes of health outcomes and inequalities, and a comprehensive guide to the relevant academic and policy literature pertaining to these issues;
- a definitive guide to all of the available online official data and mapping resources that are currently in existence.

Only a cursory literature review by the toolkit user will reveal the dynamic nature of the ever expanding evidence base arising from:

- policy documentation and research reports generated by government departments and agencies with a remit to address the underlying causes of social problems and issues including public health;
- research commissioned by policy think tanks or research organisations (e.g. the [Joseph Rowntree Foundation](#) or the [King's Fund](#));
- specialist research centres within universities (e.g. the [Centre for Analysis of Social Exclusion \[CASE\]](#) at the LSE, or the [Spatial and Social Inequalities \[SASI\]](#) research group at the University of Sheffield);
- the volume of international academic literature and research journals spanning a wide range of academic disciplines that focus upon public health issues.

Furthermore, the data and mapping resources featured within the toolkit has been restricted in scope to include only those that provide information and statistics at the local authority, or sub local authority level, within England - although many of these do enable the user to acquire and analyse data at different spatial scales such as regions and counties, former primary care trust areas, the new clinical commission groups, and for GP practices. New sources of information, data and evidence are constantly emerging as a result of the commissioning of new resources and data applications, the updating of previous data, improvements in the underlying methodologies used to generate these datasets, and conceptual/technological advances in data dissemination (e.g. data apps) and the deployment of geographical information systems (GIS). So the user of the toolkit is advised to be constantly on the lookout for new resources that can enable them to refine or develop the public health profile that they have created for their local area.

How to use the toolkit

The toolkit is divided into two separate sections:

PART A:

What is our new remit, and what are the factors that shape local health outcomes and inequalities?

PART B:

How do we construct a public health profile for our locality – and where can we obtain the relevant data?

Each section of the toolkit is organised on the basis of a series of self-contained units that:

- introduce the user to specific issues and ideas;
- familiarise the user with a range of sources of online data and maps, and/or to point them in the direction of further resources and information.

The structure of Part A of the toolkit is designed to take as a starting point the existing public health remit of local councils, to then identify the new strategic policy and service delivery/intervention responsibilities of upper tier authorities (and the new institutional landscape in which they will be operating), to enable local councils and their officers to develop a wider understanding of public health that takes them beyond their previous contribution to local JSNAs. Part B of the toolkit then switches focus to concentrate on taking the user through the issues and stages surrounding the construction of a public health profile for their locality which will enable their council and partner organisations to make more informed policy interventions within their local public health environment.

The units that make up each component of the toolkit are as follows:

Part A: What is your new public health remit, and what are the factors that shape local health outcomes and inequalities?

A1:

The pre and post 2013 public health remit of local councils and environmental health officers.

A2:

The individual and contextual determinants of health outcomes and health inequalities.

A3:

Developing a wider understanding of public health: place poverty and neighbourhood effects.

Part B: How do you construct a public health profile for your locality?

B1:

Constructing a public health profile for your locality – what should you be measuring?

B2:

Using official statistics and drawing appropriate conclusions from the data.

B3:

Understanding the new statistical geography: an introduction to Super Output Areas.

B4:

Identifying key issues in relation to mortality, morbidity and health lifestyles and behaviour.

B5:

Population characteristics, social demography, area characteristics and the local economy.

B6:

Identifying levels of deprivation and social exclusion within your locality.

B7:

Assessing community cohesion and networks – levels of social capital and social wellbeing.

B8:

Using your public health profiles to inform your decision-making.

Each unit identifies the topic under consideration, sets out key words relating to the issues explore within the unit, delivers the relevant discussion and information, identifies the issues that the user should have grasped and understood at the end of the unit, and indicates how the material covered within the unit in question relations to other aspects of the toolkit.

Identification of key issues explores in unit.

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B7 Social capital and social well-being

Key words: Social capital, social networks, community cohesion, social well-being and happiness

B7.1 Introduction and policy overview:



In Unit A3 on place poverty and neighbourhood effects we saw the importance that community spirit and social networks can play not only in terms of delivering sustainable communities and social cohesion, but also in relation to addressing specific aspects of deprivation and health outcomes. Social capital and social cohesion were embraced as key policy drivers by governments and policy-makers alike from the late 1990s (Forrest and Kearns, 2001; Levitas, 2005; Millie, 2009). However, transforming this concern into concrete policy action was initially thwarted by methodological issues surrounding the conceptualisation and measurement of social capital (Narayan and Cassidy, 2001; Harpham et al, 2002; Van Deth 2003). The absence of local level data relating to specific elements of social capital also meant that it was difficult for local public services organisations to harness the power of social capital because they had

- Issues explored:**
- Introduction to social capital and social-wellbeing;
 - What aspects of social capital and social well-being should you be trying to measure?
 - Guide to data and mapping resources relating to social capital and social-wellbeing.

Discussion of key themes and ideas.

Social Wellbeing:

| | | | | |
|--|--------------------|-----------------------------|------------------------|----------------------------|
| EQUALITY | SOCIAL JUSTICE | SOCIAL INCLUSION | SOLIDARITY | ENGAGEMENT |
| EMPOWERMENT | MATERIAL WELLBEING | MENTAL WELLBEING | PERSONAL RELATIONSHIPS | |
| COMMUNITY RELATIONS | | SOCIAL NETWORKS AND SUPPORT | | FREEDOM FROM FEAR AND RISK |
| ACCESS TO LOCAL SERVICES AND AMENITIES | | ENVIRONMENTAL RESOURCES | | QUALITY OF LIFE |

Identification of online sources of official data.

Table 7.31 Social capital and social wellbeing data and mapping resources:

| Theme: | Resource: | Aspects explored: | Spatial scale: | Time frame: | Analysis: | Interactive mapping: |
|------------------------------------|---|--|---|---------------------|---|----------------------|
| Social capital and social cohesion | British Household Panel Survey (Institute for Social and Economic Research, University of Essex) | <ul style="list-style-type: none"> • Neighbourhoods; • Reciprocity; • Participation; • Trust. | <ul style="list-style-type: none"> • England, Scotland and Wales; • District. | Annual (since 1991) | <ul style="list-style-type: none"> • Raw data. | No |
| | Citizen Audit Questionnaire | <ul style="list-style-type: none"> • Attachment to local area; • Satisfaction; • Trust; • Participation. | <ul style="list-style-type: none"> • England, Scotland and Wales; • District. | September 2000,2001 | <ul style="list-style-type: none"> • Raw data. | No |
| | Youth Lifestyles Survey (National Centre for Social Research) | <ul style="list-style-type: none"> • Participation; • Socialisation. | <ul style="list-style-type: none"> • England and Wales; • District. | 1992/93 and 1998/99 | <ul style="list-style-type: none"> • Raw data. | No |
| | Place Survey (Audit Commission) | <ul style="list-style-type: none"> • Cohesion amongst people from different backgrounds; • Sense of belong to immediate | <ul style="list-style-type: none"> • England; • District. | 2008 | <ul style="list-style-type: none"> • Raw data. | No |

Identification of scope of data, timeframe and spatial scale at which data is available.

Information concerning whether the resources contains options to map and download data

Every effort has been made to ensure the validity and reliability of the information and ideas contained within the toolkit. Any errors or omissions are the responsibility of the authors. We hope that users find the toolkit a useful resource. We are of course eager to discover whether the toolkit has met its aims and objectives. In this respect, this type of feedback can only be obtained as a result of officials within local councils and public health organisations using the toolkit as a practical resource to aid local decision-making and planning. Any feedback on the effectiveness of the toolkit, and how it might be improved, are therefore very welcome.

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October, 2013

Part A: Public health, environmental health and the wider determinants of health outcomes and health inequalities

A1

The pre- and post-April 2013 public health remit of environmental health officers and local authorities

Key words: Environmental health, environmental health practitioners, public health, Medical Officer for Health, Director Public Health, Health and Well-being Boards, Joint Health and Well-being Strategies, Joint Strategic Needs Assessment, Clinical Commissioning Groups, Public Health Outcomes Framework

A1.1 Introduction

This Unit will provide a brief overview of the historical and contemporary context of environmental health in relation to public health. The roles and responsibilities of environmental health practitioners are outlined, along with the changing landscape in which the profession has developed and finds itself today. The new public health service in England means that from April 2013 local authorities have the lead for public health instead of the NHS, with Directors of Public Health leading this new service. The need to co-operate and to integrate services are reinforced, with local authorities and Clinical Commissioning Groups (CCGs) working together, with other partners, through Health and Wellbeing Boards to produce joint health and wellbeing strategies. These local strategies will be underpinned by the Joint Strategic Needs Assessment involving local communities in the process. The vision is to improve and protect the nation's health and wellbeing, improving the health guided by the Public Health Outcomes Framework. The relationship between environmental health and public health is changing for the better. Much closer integration is on the horizon. Environmental health skills are science-based, problem-solving and the basis for working holistically with partners. Closer working will allow these skills to be better recognised and applied across a broader range of settings. An understanding of local public health needs from an environmental health perspective is crucial; hence, the role and purpose of this toolkit.

Issues explored:

- Historical context of environmental health;
- Role of environmental health;
- Landscape for environmental health;
- Delivery of environmental health;
- New post April 2013 institutional landscape;
- The role of local authorities in the new public health environment;
- What can environmental health officers and their managers do?

A1.2 Historical context

Environmental health service provision is often designed and shaped around the needs and priorities of the local community. These services provide essential health protection and improvement for people, communities and the environment. This is the contribution of environmental health to public health. In order for the full extent of the 2013 public health changes affecting local authorities to be appreciated, it is first worth situating the profession of environmental health. The mid-19th century saw the emergence of the profession as 'Inspectors of Nuisances' within a local government setting and under the direction of a 'Medical Officer of Health' (MoH) with a primary responsibility to control or eliminate what were seen as key public health 'nuisances'. However, the 1974 UK reorganisation of local government saw the link to public health leadership (as provided by the MoH) being changed, and the profession having to create new links with public health, some more successful than others. To survive and thrive, it continued to develop and deliver its expertise at a technical level, focusing on environmental rather than health related matters – following leads provided by legislation and guidance and specific requirements set out by government departments and agencies. Through the devolvement of service delivery into departments other than bespoke environmental health and the consignment of heads of environmental health services in many instances to second, third or even

lower tiers of management within local government management structures; the eminent position of environmental health in local government has been eroded over the subsequent years.

Some commentators argue that the UK-based profession, devoid of public health-focused leadership, has assumed a 'bunker' mentality with respect to the delivery of its current and dominant regulatory role. Occasional observers of the profession within the UK such as the [Commission for Environmental Health \(1997\)](#), together with Sue Burke *et al* (2002), have also commented that the bunker mentality is akin to a 'silo' outlook that has confined environmental health to technical sub-disciplines rather than an overall philosophy based on public health goals and strategies, sustainable development, or other overarching concepts. The structure of many local authorities in the UK has been radically changed over the last twenty years with significant management de-layering taking place. For many local authorities in 2013, environmental health managers no longer form part of corporate management teams, and the ability of an environmental health approach to influence at the corporate level has been reduced. Additionally, in some instances the previously unique roles of environmental health officers have been subsumed into other professional groupings or delivery systems; as evidenced by the emergence of business compliance officers within the Association of Greater Manchester Authorities and elsewhere. On the other hand, some individual environmental health practitioners continue to find themselves at the forefront of influencing local strategic delivery.

A1.3 The role of environmental health

The latter quarter of the twentieth century saw environmental health increasingly focused on five technical domains: **food safety, occupational health and safety, environmental protection, housing** - and what is often termed '**public health**' that in reality is a catch-all category for other regulatory activities e.g. drainage, nuisances, licensing, etc.

This focus on a technical and regulatory approach has often meant that the profession has been excluded from the wider dialogue within the public health community. Some practitioners have, however, gone beyond these technical roles and dealt with issues that contribute to the broader public health agenda such as smoking cessation, healthy diets, well-being in the workplace, etc. Nevertheless, taken as a whole, environmental health officers have always contributed to the public's health through their work in health protection and health improvement.

Burke *et al* (2002) explained that Environmental health practitioners, working with and alongside other public health professionals, are key partners in local and national efforts to protect and improve the health and quality of life of individuals and communities, and to reduce health inequalities. They maintain a direct relationship with the general public, and apply their expertise in responding to the needs of individuals, while also tackling the wider determinants of the population's health by identifying, controlling and preventing current and future risks as identified by McArthur and Bonnefoy in Figure A1 above.

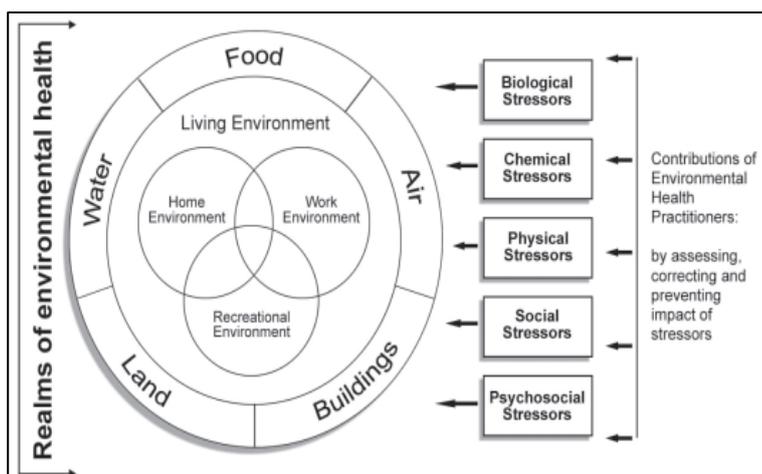


Fig. A1: McArthur and Bonnefoy's model of environmental health delivery (See Burke *et al* 2002)

A1.4 The landscape for environmental health

With the deep cuts in public spending that has taken place since the [Comprehensive Spending Review of 2010](#), the impact in terms of the realignment of public services cannot be over-estimated. Through programmes of comprehensive spending reviews, priorities have been established and cuts implemented. These are expected to continue through to 2015 and beyond, with their extent and scope dependent upon the overall performance of the economy at the national level. Furthermore, the Government has fundamentally re-evaluated the delivery of public health services, with the current mantra being that local communities rather than national or local governments should determine priorities and the amounts to be spent on public health interventions dependent upon evidenced public health need within the community. This provides a considerable challenge in the current economic climate although Government has, to some extent, ring-fenced budgets for the new public health service.

A1.5 Delivery

Historically, local authorities have always utilised their local knowledge whilst being mindful of national policy objectives to deliver health protection and improvement. Local authorities have engaged with Government departments and agencies such as the [Health and Safety Executive \(HSE\)](#), the [Food Standards Agency \(FSA\)](#) and the [Environment Agency \(EA\)](#) etc. to deliver the technical sub-disciplines of environmental health. This has been seen as contributing to the achievement of the public's health to the extent that the former Chief Medical Officer, Sir Donald Acheson, stated in 1998 that EHPs were the only local government based professional spending 100% of its time in delivering public health outcomes (Burke et al, 2002). Environmental health practitioners have always used data to influence decisions concerning service delivery. Appropriate examples of this were service delivery plans for food safety and health and safety delivery. Furthermore, in the years immediately prior to 2013, some played lead roles in the development, coordination and implementation of community health and wellbeing strategies. This was achieved through local strategic partnerships and working with NHS Trusts through Joint Strategic Needs Assessments to actively contribute to the public health agenda. Effective practice skills in strategic planning, partnership working and community development were developed to support this approach.

A1.6 The New Post April 2013 institutional landscape

As a result of the new public health system at the local authority level in England from April 2013, new institutions and roles have emerged:

| Institution: | Function: |
|---|--|
| Director Public Health (DPH) | The DPH is a statutory chief officer of their authority (located in first tier local authorities) and the principal adviser on all health matters to elected members and officers, with a leadership role spanning all three domains of public health: health improvement, health protection and improving health services. |
| Health and Well-being Boards (HWBB) | <ul style="list-style-type: none"> • The Health and Social Care Act 2012 has created statutory health and wellbeing boards in every upper tier local authority area to improve the health and wellbeing of local people; • HWBs bring together locally elected councillors with key service commissioners, including representatives of clinical commissioning groups and directors of public health; • HWBs assess local needs (through the joint strategic needs assessment) and develop a shared strategy (in the form of a joint health and wellbeing strategy) to address them, providing a strategic framework for delivering and commissioning services. |

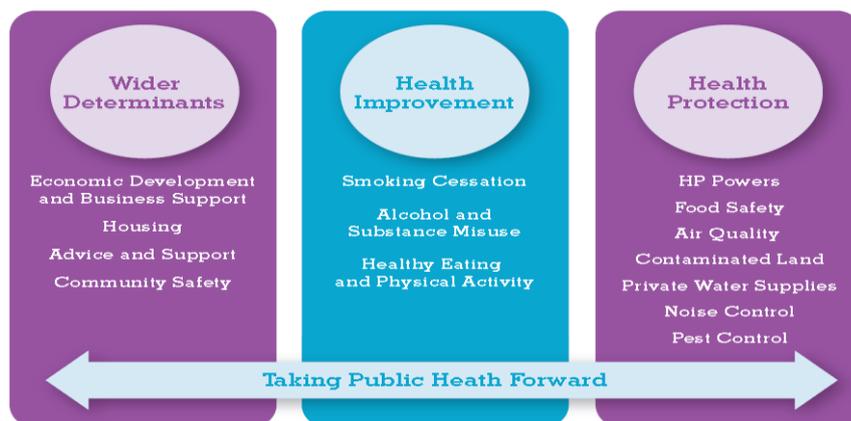
| | |
|--|--|
| <p><u>Joint Health and Well-being Strategies (JHWS)</u></p> | <ul style="list-style-type: none"> • The JHWS is a document that aims to inform and influence decisions about public health services so that they are focused on the needs of the people who use them and tackle the factors that affect health and wellbeing; • The document identifies strategic objectives for achievement; • The strategy is based on information in the Joint Strategic Needs Assessment (JSNA) as well as other policy related documents and views of local people. Using the JSNA plus existing and new views and experiences of a wide range of people, organisations and local communities, the JHWS puts the findings and vision into practice by providing high level priorities from which public health services will be delivered and commissioned through joint working and collective action. |
| <p><u>Joint Strategic Needs Assessment (JSNA)</u></p> | <ul style="list-style-type: none"> • A joint strategic needs assessment (JSNA) analyses health needs of populations to inform and guide the development, delivery and commissioning of public health services within a local authority area. • Producing an annual JSNA has been a statutory requirement for the NHS and local authorities since 2007; • The Health and Social Care Act 2011 created a central role for JSNAs so that health and well-being board partners jointly analyse current and future health needs of populations; • JSNA's central role is to act as the overarching primary evidence base for health and well-being boards to decide on key local health priorities; • The process can be driven by looking at data; stakeholder, key informant and service user views; and comparisons between and within different areas; • A JSNA is intended to improve health and well-being outcomes and address persistent health inequalities; • The JSNA should reflect the needs of a local population, not just the demand for services. |
| <p><u>Clinical Commissioning Groups (CCGs)</u></p> | <ul style="list-style-type: none"> • CCGs are groups that are responsible for designing local health services In England. They will do this by commissioning or buying health and care services; • CCGs work with patients and healthcare professionals and in partnership with local communities and local authorities; • All GP practices have to belong to a Clinical Commissioning Group. |
| <p><u>Public Health Outcomes Framework (PHOF)</u></p> | <p>The Public Health Outcomes Framework <i>Healthy lives, healthy people: Improving outcomes and supporting transparency</i> sets out a vision for public health, desired outcomes and the indicators that will help us understand how well public health is being improved and protected. The framework concentrates on two high-level outcomes to be achieved across the public health system, and groups further indicators into four 'domains' that cover the full spectrum of public health. The outcomes reflect a focus not only on how long people live, but on how well they live at all stages of life. The framework allows you to:</p> <ul style="list-style-type: none"> • Compare your local authority against other authorities in the region; • Benchmark your local authority against the England average. <p>Public Health Outcomes Framework baseline data will be revised and corrected in accordance with the general Department of Health statistical policy on revisions and corrections.</p> |

A1.7 The role of local authorities in the new public health environment

Many of the wider determinants of health (for example, housing, economic development, transport) can be more easily impacted by local authorities, who have overall responsibility for improving the local area for their populations. Local authorities are well placed to take a very broad view of what services will impact positively on the public's health, and combine traditional "public health" activities with other activity locally to maximise benefits.

Historically, as previously discussed, public health is not new to local government; environmental health is central to the delivery of public health outcomes within local government. Environmental Health activities not only actively promote improved health, but they also control conditions to protect and maintain health. The environmental health profession is ideally placed to support the Directors of Public Health in providing reminders to local council members and officers that public health is about the needs of local communities as well as the concerns of individuals - and that you have a unique and multidimensional role in improving outcomes across:

- The wider determinants of health – as explained in Unit A2;
- Health improvement - including contributing to increased life expectancy and healthier lifestyles as well as reducing inequalities in health and addressing the wider social determinants of health;
- Health protection - including protection from infectious diseases, environmental hazards and emergency response preparedness.



Source: [District Councils Network \(2013\) District Action on Public Health \(p4\)](#)

A1.8 What can EHO's and their managers do?

Environmental health practitioners (EHPs) and managers of environmental health services can contribute and help ensure that environmental health roles and responsibilities in public health are properly taken into account as the new systems for the delivery of public health are being embedded.

This could be achieved by considering how your service delivery can contribute to public health outcomes, specifically with a need to reduce health inequalities and by identifying an evidence base for your core activities to inform the JSNA or PHOF. To do this you will need to ensure you are able to access and utilise public health data to inform your determination of priorities and ensure you have or create an opportunity for a close working relationship with the director of public health. EHPs can use their expertise in a multitude of public health areas to be a potential provider, partner and sub-commissioner of public health interventions.

Issues you should have understood:

- The historical context of Environmental Health;
- The changing landscape surrounding public and environmental health;
- The realms of environmental health;
- The institutional landscape for the public health system 2013;
- The role of local authorities and the contribution of environmental health practitioners within the new system.

References:

Burke S., Gray I., Paterson K. and Meyrick J. (2002), *Environmental Health 2012 – a key partner in delivering the public health agenda*. London: Health Development Agency.

Key words: social determinants of health, health inequalities, Marmot, health burden, Public Health Outcomes framework

A2.1 Introduction

An individual's personal health burden is determined by a wide variety of factors, some which they may be able to personally control or intervene to improve, but many are outside their control. Those suffering deprivation have higher exposure to personal and environmental health risks, and often have less information on how to take steps to improve their health and address the underlying causes. Many of these wider determinants of health are within the capacity of local authorities, and specifically environmental health practitioners, to intervene in and seek to improve. This Unit will consider the wider social determinants of health, the implications of health inequalities, and how public health might seek to intervene.

Issues explored:

- Social determinants of health;
- Key factors in understanding health and specifically health inequalities.

A2.2 Social determinants of health (Dahlgren and Whitehead)

The social determinants of health are the circumstances in which people are born, grow up, live, work, and age, as well as the systems put in place to deal with illness. These circumstances are in turn shaped by a wider set of socio-economic and political forces that shape their opportunities and quality of life.

In focussing on the social determinants of health rather than the medical causes of specific disease, it is no exaggeration to say that without local government, adults and children would die sooner, would live in worse conditions, would lead lives that made them ill more often - and would experience less emotional, mental and physical well-being than they do now.

In 1991, Dahlgren and Whitehead set the subsequent agenda for understanding the scope, boundary, or the "realm" of environmental health; their seminal work was taken further by Barton and Grant in 2006 - and their adaptation of Dahlgren and Whitehead's model is graphically presented in Figure A2.1. This diagram demonstrates the realms in which local government and specifically environmental health can exert an influence to ultimately improve health inequalities and well-being.

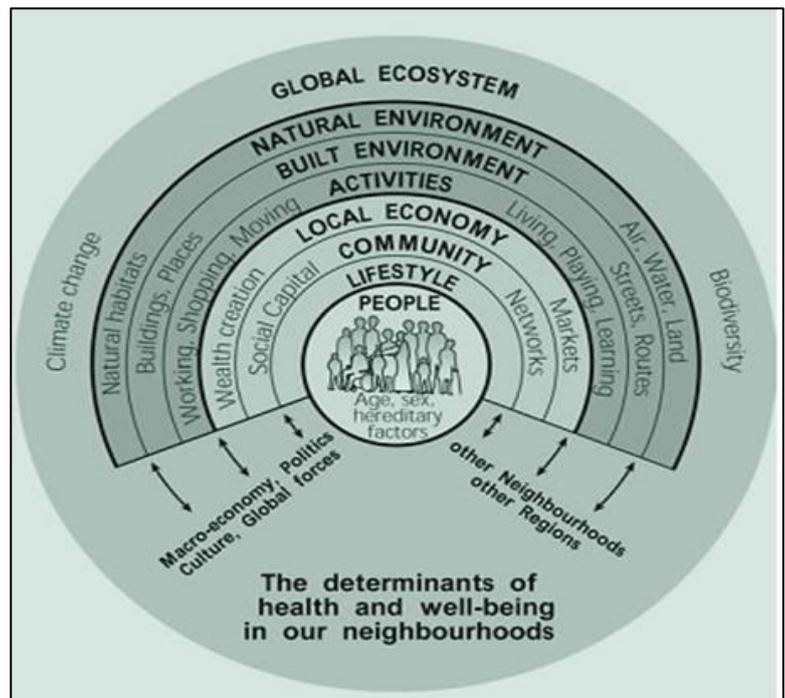


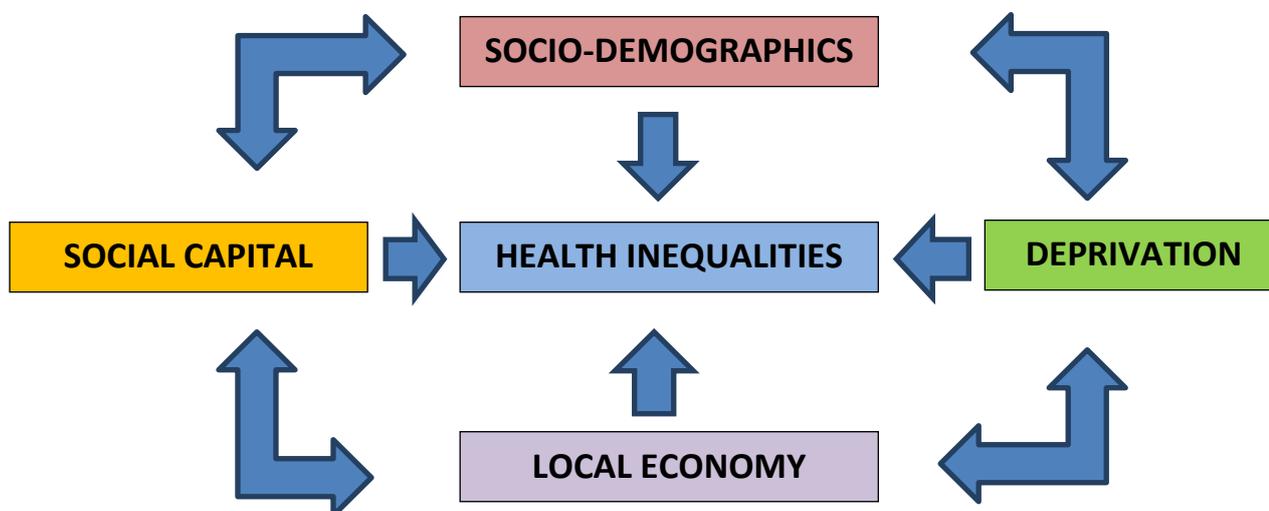
Fig. A2.1: The wider determinants of health and well-being (Barton and Grant, 2006)

A2.3 Key factors in understanding health and specifically health inequalities

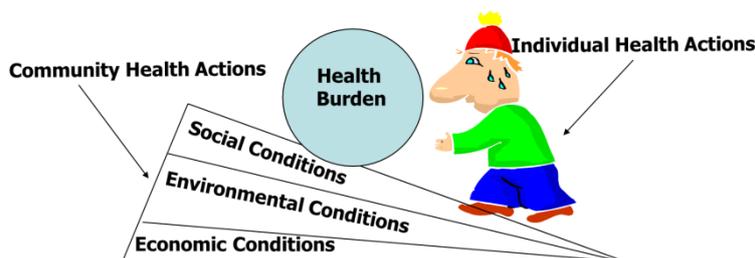
There are a wide range of factors that impact upon health outcomes, the presence of health inequalities, and lifestyles. Some of the key factors include:

- **Socio-demographics** – the population characteristics of a locality in terms of age, gender, ethnicity, disability, religion, and social class can all influence public health outcomes and the utilisation of health services. A key concern therefore is to identify within local authority areas both socio-demographic clusters, and 'significant' differences from the national picture, in relation to population characteristics in order to both predict and pre-empt the emergence of health inequalities;
- **Deprivation** – there is unsurprisingly a very strong association between various forms of deprivation and negative health outcomes. Differentiating between deprived and non-deprived areas within a locality is therefore important. Measuring deprivation however goes beyond simply identifying poor households in terms of income. Many forms of deprivation are of course linked to income, but other forms of deprivation and exclusion (e.g. access to services) are not necessarily the product of income deprivation per se. So it is important to not only develop holistic measures of deprivation and exclusion, but also to take into consideration the extent to which households are experiencing multiple forms of deprivation – and whether deprivation is concentrated within relatively few neighbourhoods, or is present in different guises across extensive parts of your local authority area;
- **Local economy** – measures of the 'health' of the local economy can take into consideration economic activity, unemployment, job availability, occupational status, sector of employment and benefits. A sustainable and resilient local economy that can attract both new employers and employees within growing and stable economic sectors, and where employment is not concentrated in one or two sectors or employers, has the potential to enable individuals and households to escape deprivation – and hence negative health outcomes;
- **Social capital** – a sense of belonging adds to individual physical and mental well-being; feeling connected to, and identifying with others in, the community forms part of this. Having a voice and being involved in local decision making, irrespective of scale, is also important in enabling people to develop a sense of identity and connection with their neighbourhood, and to sustain the informal support networks that are essential to supplement the direction interventions of public service agencies when health (and other social) needs arise.

These factors are of course often highly related to one another:



Addressing the consequences, and causes, of health inequalities is therefore dependent upon policy interventions that recognise the wider determinants of poor health outcomes – and seek to deliver a two-pronged strategy which both acknowledges, and brings together, individual and community orientated health actions:



Gray, I. (2007) *The health gradient and personal health burden* (Chartered Institute of Environmental Health)

A2.4 The scale of health inequalities in England - the Marmot Review

The report by the Marmot Review Team, [Fair Society, Healthy Lives: A Strategic Review of Health Inequalities in England Post-2010](#) (2010), discusses the health inequalities challenge facing England, and proposes the a series of practical, evidence-based strategies that are relevant drivers for future policy and action. The independent review, chaired by Professor Sir Michael Marmot, was commissioned by the UK government in response to the World Health Organisation’s report, [Closing the Gap in a Generation](#) (2008). This latter report showed that countries with more equitable policies and more just societies were healthier – a message that has been subsequently endorsed by Wilkinson and Pickett’s “The Spirit Level: Why Equality is Better for Everyone” (London; Penguin, 2010).

Fair Society, Healthy Lives emphasises the "causes of the causes" of health inequalities, and the need to address these wider determinants (see above). To tackle inequalities and reduce the steepness of the social gradient, the Marmot Review recommends actions of sufficient scale and intensity to be universal but also proportionately targeted. Strategies need to target those at the lower end of the gradient as well as throughout the whole of society, according to the level of disadvantage.

Marmot identified that there is significant relationship between life expectancy and deprivation across England with the graph in Fig A3 showing almost a 10 year difference in life expectancy between the least and most deprived (1999 to 2003). Marmot also showed (see Fig A4 overleaf) that mortality rates also varied in accordance with socio-economic classification. However, the Marmot focus is not on how long we live – our life expectancy, but on how well we live – our health life expectancy, at all stages of the life course and on reducing health inequalities between people, communities and areas in our society. This is the focus adopted for the [Public Health Outcomes Framework for England 2013-2016](#).

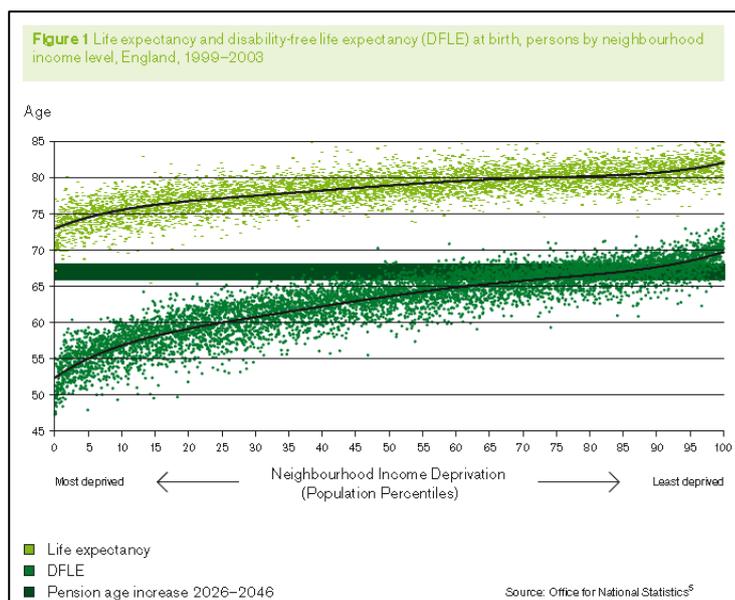


Fig. A3: The relationship between life expectancy (and disability free life expectancy) and neighbourhood income deprivation (Marmot Review Team, 2010)

The six policy objectives set out by Marmot, and listed below, have now been adopted into health outcome targets by Public Health England:

- Give every child the best start in life;
- Enable all children, young people and adults to maximise their capabilities and have control over their lives;
- Create fair employment and good work for all;
- Ensure a healthy standard of living for all;
- Create and develop healthy and sustainable places and communities;
- Strengthen the role and impact of ill health prevention.

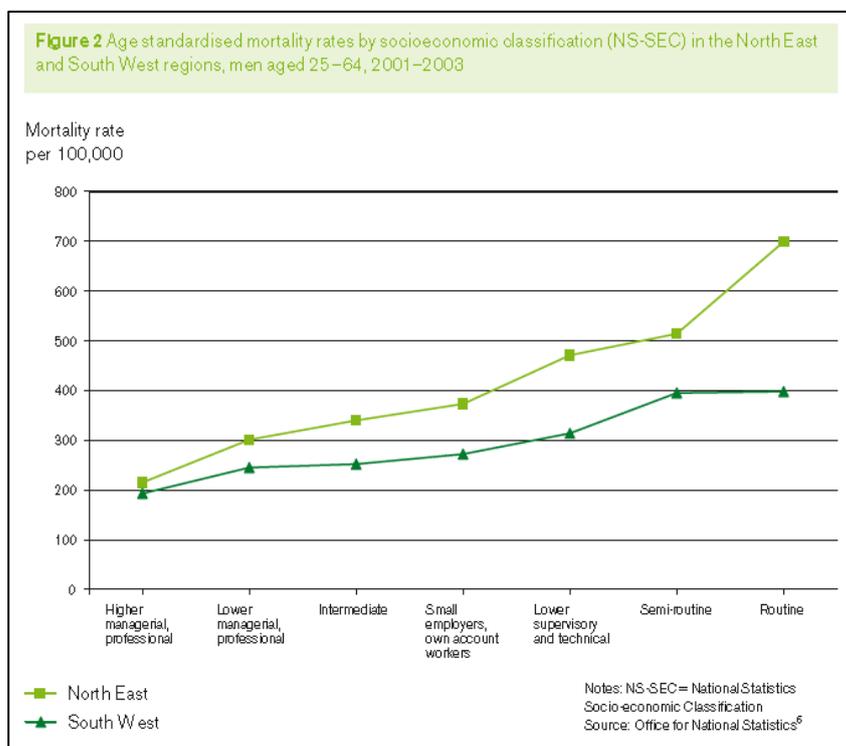


Fig. A4: Age standardized mortality rates by socio-economic classification (Marmot Review Team, 2010)

Through the Public Health Outcomes Framework (PHOF), Public Health England are producing baseline figures, utilising previously available data where robust that correspond, as closely as is currently possible, to the indicators proposed in [Fair Society, Healthy Lives](#). Where robust data does not currently exist, for some key indicators of the social determinants of health, health outcomes and the social gradient, new empirical work is being undertaken. The indicators demonstrate the emphasis on prevention through environmental and population-wide interventions. They include air quality, children in poverty, diet, domestic abuse, excess winter deaths, falls and injuries, green spaces, homelessness, smoking and sustainable development. Many of these indicators are where EHPs already deliver, or contribute to, public health improvement - and many local authorities already hold data that can support the PHOF.

Issues you should have understood:

- The social determinants of health;
- The concept of health inequality;
- The 'health burden' concept;
- The key findings, and influence, of the Marmot Report.

Other components of the toolkit which are related to this Unit:

- Unit A3 Place Poverty and Neighbourhood Effects;
- Units B5 to B7.

References:

- Barton, H. and Grant, M. (2006), 'A health map for the local human habitat'. *The Journal for the Royal Society for the Promotion of Health*, 126 (6). pp. 252-253. ISSN 1466-4240;
- Dahlgren G., and Whitehead, M. (1991 Oct 26) 'What can be done about inequalities in health?' *Lancet*. 338(8774). pp. 1059-63;
- Gray, I. (2007) *The Health Gradient and Personal Health Burden*. London: Chartered Institute of Environmental Health.

A3

Developing a wider understanding of factors that shape public health: place poverty and neighbourhood effects

Key words: Geographical patterns of health outcomes, people poverty, place poverty and neighbourhood effects

A3.1 Introduction:

Does where you live shape your chances of experiencing poor health outcomes and limited access to quality healthcare? In the previous Unit, we explored the individual characteristics, circumstances and lifestyles that contribute to the presence of health inequalities. These factors are all important in understanding the prevalence of variations in mortality and morbidity across different sectors of the population. But they do not tell the whole story concerning why there are such extensive gaps in life expectancy and variations in the incidence of early deaths from cancer or heart disease, or the prevalence of teenage pregnancy or childhood obesity across the United Kingdom.

Most of us will be aware of the so called 'North-South' divide or postcode lottery that is regularly highlighted by the media in relation to both health outcomes, and access to specific forms of medical treatment or healthcare services. Performance ratings published by the [Care Quality Commission](#) and organisations such as [Dr. Foster](#) have also consistently highlighted significant variations in the standard of care provided by, and organisational performance of, different NHS trusts across England. The emergence of an identifiable geography of health has furthermore been confirmed by a growing and extensive body of evidence that highlights a distinctive spatial pattern to the distribution of health inequalities (and other social outcomes) across the United Kingdom (e.g. McCormick & Philo, 1995; Shelton et al, 2006; Dorling et al, 2007; Thomas and Dorling, 2007; Shaw et al, 2009).

Conventional explanations have sought to explain the geography of health inequalities by pointing to the socio-demographic and economic characteristics of local populations i.e. male and female life expectancy in Blackpool is currently significantly lower than in Kensington and Chelsea because of who is living in these areas (rather than to do with anything about Blackpool or Kensington and Chelsea as places). However, once factors concerning individual characteristics, circumstances and life choices are taken into account, geographical variations in health outcomes cannot be entirely explained by simply controlling for the type of individuals living within different localities (e.g. Congdon et al, 1997; Curtis et al, 2004; Dibben et al, 2006). This evidence thus points to the possibility that localities and neighbourhoods do exert an impact and influence upon their residents, and that the **presence of health inequality hotspots may be explained by the characteristics of neighbourhoods rather than the citizens living within them.**

So what is it about places that actually matters? The aim of this Unit is to introduce you to the concepts of place poverty and neighbourhood effects as a mechanism for understanding the presence of positive and negative health outcomes within certain localities. In exploring why place matters, the discussion will introduce you to the range of factors associated with neighbourhoods, rather than the characteristics of the individuals living within them, that can shape the public health profile of different areas.

Issues explored:

- Why does place matter?
- People poverty and place poverty;
- What is it about place that matters – the concept of neighbourhood effects;
- Types of neighbourhood effect.

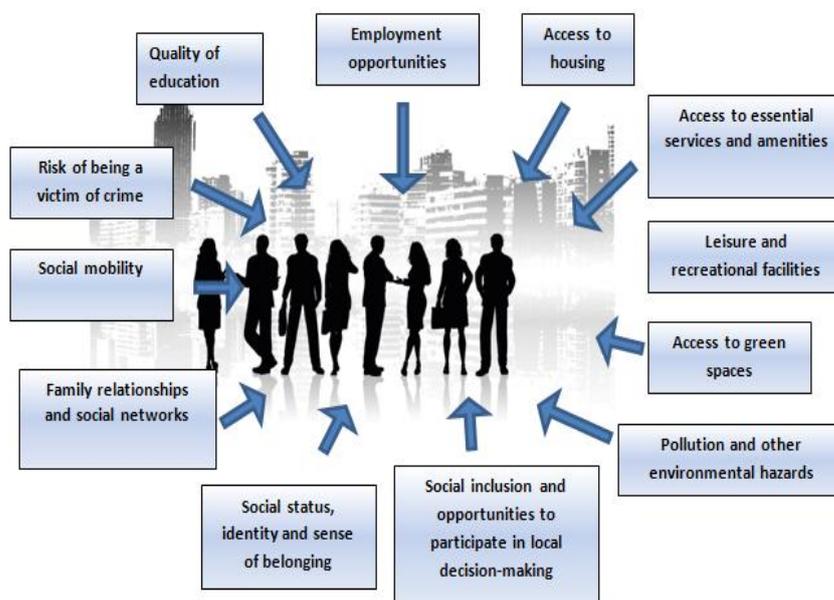
A3.2 Place poverty and neighbourhood effects: Moving beyond the conception of poor health outcomes as the product of individual circumstances and lifestyles

3.21 Why does place matter?

If you pause for a moment and reflect on your life so far, and on the personal opportunities and misfortunes that may have arisen, **it is not difficult to grasp the importance that place exerts upon our lives.** Where you went to primary and secondary school was most likely determined by the catchment area you lived in. The physical environment and social characteristics of the neighbourhood you grew up in would also have quickly imparted a message about who you were, and whether you were living on the 'right side of the tracks' or not. The nature and availability of employment within this area will

also have determined personal decisions concerning whether to go to university, and whether to return back home after your studies or seek employment elsewhere. When you chose to settle down in a specific locality, factors such as the quality of local schools, employment opportunities, access to healthcare, the availability of other amenities, or crime levels are all key factors that probably shaped your final decision – and were likely to be of as much importance as the actual property that you were looking to buy or rent. When we visit a city, town or neighbourhood for the first time, we also quickly reach first hand impressions about the merits or otherwise of the area based upon its physical appearance and the individuals we see walking or hanging around. The places we choose to live in, or end up living in, ultimately shape our life chances – but they also shape who we are, how we relate to other individuals, our identity, and our sense of belonging and inclusion within, but also, beyond our neighbourhood.

The impact of neighbourhood upon our life chances and quality of life

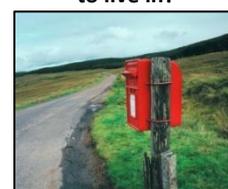


3.22 People poverty and place poverty

The media often like to highlight the 'best' and 'worst' places to live in England. Unfortunately the results are often all too predictable. The best neighbourhoods seem to be predominantly located in the Home Counties, whereas the places you should avoid are centred on the big urban conurbations and their industrial satellites in the Midlands and the North. Of course there are some wonderful places to live in 'the North' and there are equally some extremely deprived and struggling areas in 'the South'. But apart from perhaps providing an overly simplistic conception of the real geographical divide in the England, these types of analysis also suffer from a focus upon rather traditional conceptions of poverty, which tend to be measured on the basis of indicators which are very much driven by a perspective that views deprivation as an urban problem - and conceives of rural areas as highly desirable places to live in, and localities which are 'problem free'.



Which is the best place to live in?



If you measure poverty in terms of, for example, levels of unemployment, crime, low life expectancy, households living on benefits then the 'usual suspects' in terms of places are going to turn up at the top of your list of undesirable neighbourhoods in which to live. However, if you focus on factors such as educational deprivation in the form of poor educational outcomes at the end of secondary school, you will quickly discover that many high performing institutions are based in our inner cities, whilst some of the poorer performing schools are located in the leafy suburbs or rural localities. If you live in the countryside and have to travel substantial distances to access basic services which most of us living in urban areas take for granted such as a cashpoint, a post office, a pharmacy, a supermarket, or a primary school, then the 'poverty' of lifestyle that you are faced with has little to do with your personal levels of wealth. If the **rural nature of your neighbourhood** also poses significant difficulties for local public service organisations to maintain a comparable level of access and response e.g. when you need emergency health care or you have been a victim of crime, distance is no respecter of wealth. There is also a conventional view that living in a poor area also means poor quality public services. Whilst there are clearly schools operating in deprived catchments, the impact that these schools have had upon their pupils in terms of the value they have added to their educational performance is often high. Many of the highest performing NHS trusts, police forces or local councils are operating within the context of high levels of deprivation and demand on their services. In contrast, in relative terms, the performance of their comparator organisations in the supposedly ideal places to live in is considerably worse.

So if we are to have a more holistic and rounded understanding of the factors that shape health outcomes and inequalities, we need to recognise a wider range of issues that relate not only to the deprived and excluded circumstances of individuals, but also to the levels of access to quality local services and policy interventions. To this end, we need to combine the factors and circumstances that are focused upon the individual with those that relate to the places people are living in, and the local public service organisations that are responding to their needs. This requires us to embrace the concepts of both '**people poverty**' and '**place poverty**':

'PEOPLE POVERTY'

'PLACE POVERTY'

People poverty occurs "where low-income people occupy certain parts of a city by virtue of their low income, but their money incomes are not low because of where they live." (Smith, 1977:112)

Place poverty "emerges when other benefits or penalties compound the advantages or disadvantages of particular groups by virtue of where they live". (Smith, 1977:112)

Definition

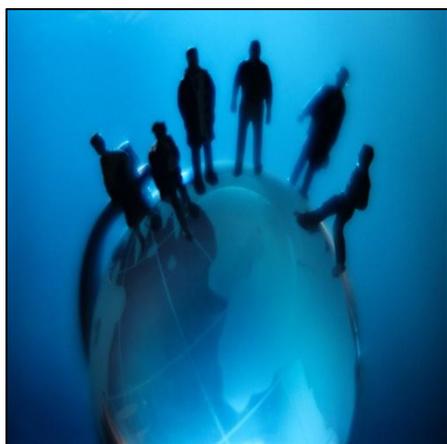


Health inequalities occur within specific neighbourhoods because of the **characteristics, circumstances and lifestyles of the people** living within these areas.

Health inequalities occur within specific localities because of the **characteristics of the neighbourhood** rather than those who are living within the area.

Causes of health inequalities

The concept of place poverty is not seeking to provide an alternative explanation for the presence of poor health outcomes amongst certain sections of the population within certain neighbourhoods. It does not seek to refute the importance of factors such as age, gender, ethnicity, social class, lifestyles and values in determining levels of mortality and morbidity. Instead it is designed to help focus our attention on to the **additional importance of the physical and social characteristics of neighbourhoods in which people are living as potential causes of negative health outcomes**. Public health initiatives and services which merely seek to tackle health inequalities by focusing upon unhealthy individuals will not on their own eradicate the gap in health outcomes and quality of life across different areas in England. We need to consider how the creation of sustainable and healthy communities which can offer a good start in life, promote equality of opportunity and social mobility, can be best achieved. We need to create places that offer secure levels of employment and income, access to quality local services, which are free from crime and fear of crime, and which enable people to feel socially included, and involved in decisions that affect their communities can contribute to reducing the incidence of unhealthy neighbourhoods.

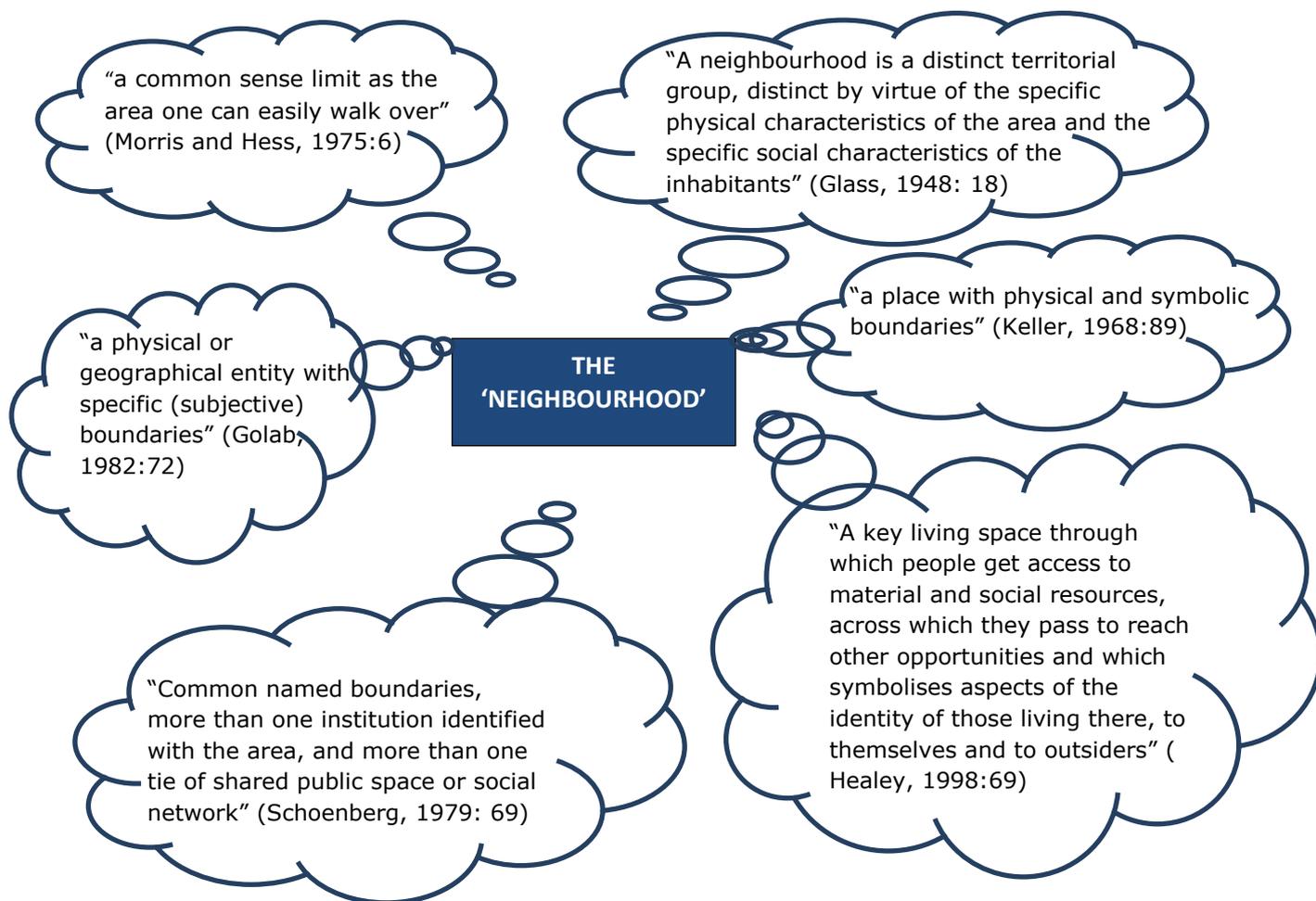


Of course in reality 'place' and 'people' are inextricably linked. Many of us have a strong sense of identity which is based as much upon where we come from as opposed to who we are as people. Trying to tease out the **relative impact of people and place based factors in explaining the presence or otherwise of health inequalities within specific neighbourhoods is therefore a difficult task**. Many individuals who are struggling to find employment often complain of the forms of exclusion that they experience as a result of their postcode. In most cities and towns there are a number of more or less desirable neighbourhoods in which to live. But in relation to the less attractive localities it is often difficult to determine the extent to which the neighbourhood stigma is a product of the run down and impoverished characteristics of the area

itself, or the archetypal view that local organisations and the local population in general have concerning the sort of person that comes from a specific neighbourhood, community or estate.

This link between people and place, and the difficulty of separating out the respective impact of individual and contextual factors, is also further complicated by **what we actually mean by a 'neighbourhood'**. Local residents will often complain that health initiatives, regeneration schemes or crime reduction measures are often imposed upon them by local strategic and public service delivery organisations on the basis that the professionals who have no personal connection within the locality in question know 'what's best' for the community. People living within a specific area will often have a more nuanced understanding of both the nature of the problems within their community – and the local factors that are giving rise to the issues in question. However, there is also the need to recognise the gap that exists between official conceptions of neighbourhood based upon ward boundaries and the physical and social perimeters of the 'neighbourhood' based upon local customs and perceptions. In some instances, area-based initiatives will therefore fail and be rejected by local communities because of the disjuncture between the officially defined scope of the policy initiative and an alternative community generated conception of their neighbourhood. According to Davies and Herbert (1993) the defining characteristics of neighbourhood include proximity to other neighbourhoods, physical and territorially defined boundaries, socially defined boundaries, a focal point for social interaction and networks, community cohesion and common identity, opportunity, history and sentiment. Evidence from the academic literature on the geography of social problems, and the link between people and places, which is displayed in Figure A3.1 (overleaf), reveals a wide range of factors that can shape the understanding of the parameters of the local area as understood by local residents.

Figure A3.1 – Different conceptions of 'neighbourhood'



3.23 If place does matter, then what is it about the neighbourhood that impacts upon health outcomes?

The idea that it is aspects of the physical and social characteristics of a locality that shape the presence (or absence) of social problems and inequalities within that area brings us to the concept of **neighbourhood effects**. Unsurprisingly there is an extensive literature that has sought to define and develop typologies/classifications of neighbourhood effects (e.g. Jencks and Mayer, 1990; Atkinson and Kintrea, 2001; Buck, 2001; Galster, 2001; Friedrichs et al 2003). If we draw upon the place and neighbourhood literature, we can identify a series of distinctive types of neighbourhood effect that can be deployed to explain the presence of health inequalities (or the factors that give rise to them) within specific communities. These ideas are set out in Table 3.1 (overleaf):

Table 3.1 Types of neighbourhood effect

| Neighbourhood effect: | Aspects of neighbourhood to consider: | Discussion: |
|---|---|---|
| <p>Function and relationship of, different cities, towns, villages, neighbourhoods and communities</p> | <ul style="list-style-type: none"> • Function of specific neighbourhoods (residential, commercial, industrial, leisure, etc.); • Single purpose or mixed used neighbourhoods; • Function of neighbourhoods within different periods of the day and year; • Degree of connection between, or isolation from, other neighbourhoods; • Presence of joined-up neighbourhoods – extent to which degree of connectivity enables the creation of an economically, socially and environmentally sustainable place; • Transport networks; • Social and geographical mobility between and within neighbourhoods. | <p>Life within specific neighbourhoods is often shaped by their function within the city or town they are located in. Most neighbourhoods have a primary role (e.g. residential, industrial, commercial, leisure). Increasingly within city and town centres we are creating neighbourhoods that have mixed functions. The role of an area or neighbourhood can influence they type of individuals, facilities, organisations, activities within localities. Crucially this can also dictate the presence of social problems and opportunities within specific areas.</p> <p>The relationship between places, localities and neighbourhoods is an equally important aspect to consider. Within cities and towns, the concept of identifiable zones of transition and stability has long been used to explain distributions of deprivation and wealth, and patterns of growth and development within urban environments (see Park, Burgess and McKenzie, 1925; Hoyt, 1939). The ability, or lack of ability, of certain elements of the population to move between different parts of cities and towns in order to secure resources, employment, accommodation, leisure, etc. can be a crucial factor in shaping the lives of individuals. We can replicate ideas concerning the relationship between neighbourhoods within places to consider the impact of the proximity of cities and towns to one another. Successive governments have placed an emphasis upon our major cities as being the socio-economic and political hubs that drive change within their respective regions. Areas that operate as satellite or dormitory towns surrounding these city regions however need to be sufficiently close, and well-connected in terms of transport links, in order to take advantage of the wealth and opportunities emanating from cities and urban conurbations.</p> |
| <p>Proximity to other neighbourhoods (spillover effects)</p> | <ul style="list-style-type: none"> • Distinction between presence and cause of health problems; • Recognition of the possibility of health inequalities occurring in one neighbourhood – but being caused by people or factors within neighbouring communities; • Extent to which the sustainability and reputation of neighbourhoods (and hence social and mental wellbeing of inhabitants) is shaped by the communities around them rather than their own internal populations or characteristics. | <p>Social problems are dynamic - and therefore do not respect political, administrative, or organisational boundaries. The 'contagious nature' of many forms of deprivation and exclusion means that social problems can quickly spread (or spillover) from one neighbourhood to another. Spillover effects, however, can also take a positive form. The location of new employment opportunities, a new school, or a new health centre within a specific neighbourhood may prove beneficial to a much wider group of individuals and communities than simply those living within immediate proximity to the new facilities. On a larger spatial scale, the concept of positive spillover effects in terms of employment and prosperity transforming the quality of life within the surrounding hinterlands of major cities is very much present within the current policy emphasis being placed by successive administrations on the significance of regions and core cities as key economic and social drivers.</p> |

Table 3.1 Types of neighbourhood effect (continued)

| Neighbourhood effect: | Aspects of neighbourhood to consider: | Discussion: |
|--|--|--|
| <p>Physical infrastructure, physical spaces and the built environment</p> | <ul style="list-style-type: none"> • Condition of the physical and built environment – and extent to which this is a source of harm or barrier to tackling causes of social problems; • Presence of specific facilities (e.g. factories) or institutions (e.g. takeaways, off licences) with direct link to health outcomes – or the potential to shape health impacting lifestyles; • Transport networks and infrastructure – and impact of health outcomes (e.g. link between traffic congestion and asthma); • Impact of physical environment upon social networks and interactions that promote inclusion; • Impact of physical environment upon levels of fear, exclusion and alienation – and the connection with physical and mental health; • Use of physical spaces and movement between locations – and how this impacts upon health outcomes such as obesity and physical activity levels; • Presence of green spaces. | <p>There is a clear link between the physical conditions of housing and health outcomes (e.g. Martin et al, 1987). There is also substantial evidence linking the physical infrastructure of neighbourhoods to health problems such as:</p> <ul style="list-style-type: none"> • higher levels of pollution; • increases in the incidence of childhood asthma (e.g. Ferguson et al, 2004); • variations in mortality in road traffic accidents (e.g. Jones et al, 2008); • drastically higher incidence of road fatalities amongst children from lower social classes (e.g. Roberts & Power, 1996). <p>How people relate to their physical environment in terms of well-being, or in terms of feelings of alienation, is equally important in understanding both social outcomes and the connection that people have with their neighbourhood. Within studies of place and neighbourhood has emerged an important body of literature that has recognised the need to explore the link between the physical environment and social problems, and how individuals relate to the physical spaces which they inhabit and utilise (e.g. Jacobs, 1961; Wood, 1961; Newman, 1973; Hillier, 1984).</p> |
| <p>Social capital, social cohesion and social wellbeing</p> | <ul style="list-style-type: none"> • Sense of identity and belonging; • Levels of trust; • Community spirit; • Support networks and levels of self-help and resilience; • Sense of personal and communal wellbeing. | <p>Many of the social networks that act as support mechanisms for people are of course also located within neighbourhoods. Whether it is in terms of family, relatives, immediate neighbours, or members of the wider community, many of our social interactions take place in the localities in which we live and work. There has therefore been a growing recognition amongst governments and policy-makers of the importance of individuals having a sense of connection with their neighbourhoods – and a high level of engagement with their fellow citizens and decisions that impact upon their communities.</p> <p>Physical regeneration that is not accompanied by social regeneration within deprived neighbourhoods often results in limited success in relation to tackling negative health outcomes and their underlying causes. This can particularly be the case where physical regeneration results in the relocation of the materially poor (but community rich) existing population in favour of supposedly more desirable or 'essential' populations. Of course some deprived communities are characterised by a high level of community spirit and connection – which is in marked contrast to the archetypal tree lined middle class suburbs that are materially rich, but often lack high levels of connection and interaction between neighbours.</p> |

Table 3.1 Types of neighbourhood effect (continued)

| Neighbourhood effect: | Aspects of neighbourhood to consider: | Discussion: |
|--|---|--|
| <p>Public services and institutions</p> | <ul style="list-style-type: none"> • Access to essential health services (i.e. GP, hospitals, mental health services, pharmacies, community health and support services, health education); • Access to services provided by local public service organisations responsible for tackling underlying socio-economic causes of poor health and health inequalities; • Volume of sufficient resources (financial and human) to address health problems and causes of health inequalities; • Distribution of health resources and services between communities; • Effectiveness of targeting of responses to poor health, and initiatives designed to improve health outcomes; • Quality of local service provision including service quality, information provision with service users, involvement of local citizens in local decision-making; • Performance of local service organisations (e.g. identification of service needs, efficiency of responses, effective partnership working); • Quality of local service provision including service quality, information provision with service users, involvement of local citizens in local decision-making; • Performance of local service organisations (e.g. identification of service needs, efficiency of responses and levels of organisational bureaucracy, effective partnership working); • Quality of local decision-making; • Strategic capacity of local public service organisations and senior officials to facilitate joined-up responses, acquisition of sufficient resources, ability to turn around failing organisations, development of long-term vision for services and places. | <p>The presence of schools, hospitals, GP surgeries, pharmacies, police stations, etc. within nearby proximity are vital not only in responding to, and preventing, health and wider social problems, but also in terms of maintaining the existence of communities. The devastating impact of the loss of local food shops or pubs within rural communities is evidence of the need for the preservation of core community institutions (Commission for Rural Communities, 2008). The type and quality of services provided to residents within neighbourhoods, as well as levels of access to service centres, also clearly has an impact upon the quality of life experienced by local residents. This is not only in respect of the direct services that are provided to the local community, but also in relation to the public service infrastructure required to create individual opportunity and to increase social/geographical mobility. In an increasingly fragmented policy environment, the need for local public organisations to successfully work in partnership with one another is equally crucial in shaping local circumstances and opportunities. Furthermore in the current performance assessment culture within which public service organisations operate, the increasing link between quality of performance, partnership working and the ability to secure additional funding/policy initiatives is creating a new form of place poverty. Afflicted by deprivation, with possibly poor access to services, residents within many neighbourhoods have to suffer the addition burden of poor performing schools, hospitals, police forces, etc. However, the link between poor neighbourhoods and poor services is not an automatic one. Many deprived neighbourhoods are served by high performing public service organisations, whilst the more problem free communities are often characterised by organisations whose performance might be better given the relatively lower level of demands being placed upon them.</p> |

Table 3.1 Types of neighbourhood effect (continued)

| Neighbourhood effect: | Aspects of neighbourhood to consider: | Discussion: |
|---|---|---|
| Ownership, attachment and stigma | <ul style="list-style-type: none"> • Sense of personal and community identity; • Ownership of problems, involvement in decision-making, participation in community regeneration and health renewal programmes; • Sense of community cohesion and positive interactions with other neighbourhoods and populations; • Quality of interactions between local public service organisations and specific communities and neighbourhoods. | <p>The final type of neighbourhood effect concerns our emotional relationship with places and communities, and the stigma attached to certain types of locality (Ellaway et al, 2001; Watkins & Jacoby, 2007). What outsiders might see as an irrational sense of belonging and attachment to places can result in individuals choosing to continue living within deprived and excluded neighbourhoods. Equally, the lack of connection with neighbourhoods, and the desire of some to get out of the area as soon as possible, can frustrate the best intentions of policy initiatives designed to turn round failing neighbourhoods and public service providers. The often unfairly acquired stigma that is suffered by specific neighbourhoods can often explain the low level of attachment felt by individuals to specific localities. The importance of social stigma attached to postcodes in relation to accessing education, employment, housing and the relationship between residents of 'sink' estates and public servants (e.g. the police) is unsurprisingly a widely recognised problem in analyses of barriers to social inclusion.</p> |

In attempting to construct a public health profile for your locality, it is therefore essential that you supplement the people-orientated measures of health, and causes of poor health outcomes, with indicators that capture the functional, physical, socio-economic, and cultural 'health and wellbeing' of neighbourhoods within your local authority area. It is only through then adding on measurements that focus upon the performance of local public service organisations in tackling health inequalities (and their underlying causes) that a genuinely holistic understanding and representation of the public health profile of your local area. The issue of what you need to measure, where you can obtain the relevant data and information, and how you analyse the patterns and trends in order to effectively inform local decision-making and service provision is addressed in the Units that make up the next component of the toolkit.

Issues you should have understood:

- The importance of place and neighbourhood in shaping health outcomes and opportunities;
- The role of place in creating the socio-economic circumstances that promote, or reduce, the presence of poor health outcomes and health inequalities;
- The inter-relationship between people-based and place-based determinants of health.

Other components of the toolkit which are related to this Unit:

- Unit A2 Individual and contextual determinants of health outcomes and health inequalities;
- Unit B1 Constructing a public health profile for your locality: what should you be measuring?

Further Reading and Resources:

For a more in-depth academic discussion of place poverty and neighbourhood effects, see:

- Buck, N. (2001), 'Identifying Neighbourhood Effects on Social Exclusion', *Urban Studies*, 38(12), pp. 2251-2275;
- Galster, G. (2001), 'On the Nature of Neighbourhood', *Urban Studies*, 38(12), pp. 2111-2124;

- Hunter, J. (2011) 'Place and Health'; in A. Barnard (Ed.) *Key Themes in Health and Social Care*. London: Routledge;
- Lupton, R. (2003) '*Neighbourhood Effects: Can we Measure them and Does it Matter?*', London: London School of Economics, Centre for Analysis of Social Exclusion Paper No. 73;
- Lupton, R. and A. Power (2004), *What We Know About Neighbourhood Change: A Literature Review*, London, London School of Economics, CASE Report no. 27;

Useful websites that report research findings and data relating to the geography of social problems (including health) and the relationship between place/neighbourhood and health outcomes include:

- [Centre for Advanced Spatial Analysis \(CASA\)](#) at UCL;
- [Centre for Analysis of Social Exclusion \(CASE\)](#) at the London School of Economics;
- [Place Poverty](#) Understanding contemporary society and social change in Britain (personal blog of toolkit author);
- [Social and Spatial Inequalities](#) research group at the University of Sheffield

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Part B: Developing a public health profile for your local area

B1 Constructing a public health profile for your locality: what should you be measuring?

Key words: key health outcomes, prevalence of disease and morbidity, mental health and well-being, lifestyle factors, health inequalities

B1.1 Introduction

Part A of the toolkit introduced you to the changing local operational context of public health, explored some of the individual factors that shape health outcomes, and identified the importance of taking aspects of place and neighbourhood into account when attempting to tackle the presence of health inequalities. In part B of the toolkit, we are now turning our attention to the issue of how to generate and construct a public health profile for your local authority area. This will enable your authority to more effectively contribute to Joint Strategic Needs Assessments (JSNAs), partnership working and local strategic decision-making.

In designing this toolkit, we have not set out to develop an 'off the shelf' profile template which the user can simply print off and enter the relevant data. This is because the range of important health outcomes, health inequalities, and underlying causes will vary in scale, distribution and impact across local areas. In addition, the existing public health data in the possession of local authorities (and other partnership organisations) is also likely to vary in quantity and scope from one district/county to another. So designing a template profile that is suitably fit for purpose for all authorities has not been attempted here. Instead, Part B of the toolkit is designed to provide a guide to (a) the public health issues (i.e. outcomes and causes) that need to be considered for inclusion within a local public health profile; and (b) and where the latest official information and statistical data relating to these can be obtained for your local authority area.

Issues explored:

- Constructing a local public health profile;
- Aspects of health outcomes and health inequalities to include;
- Important individual and place based factors that should feature within your local health profile;
- Building upon your existing knowledge and databases relating to local environmental health outcomes and issues.

In this Unit we are simply setting out to identify the thematic domains relating to health outcomes/inequalities, underlying socio-economic causal factors, and aspects of local service provision and policy responses to public health issues that should be included within your local public health profile. If you have not yet read Units A1-A3, this Unit will serve as a useful introduction to the kind of issues that you need to consider in relation to both constructing your public health profile, and thinking about the policy priorities for your locality. The Units that follow on from this one:

- explore issues to consider in utilising official statistics (B2);
- introduce you to the new statistical geography employed by the ONS (B3);
- outline the type and sources of information you can draw upon to populate your local public health profile.

B1.2 Key health outcomes and underlying causes of health inequalities

Your public health profile needs to identify two separate aspects of your local public health environment:

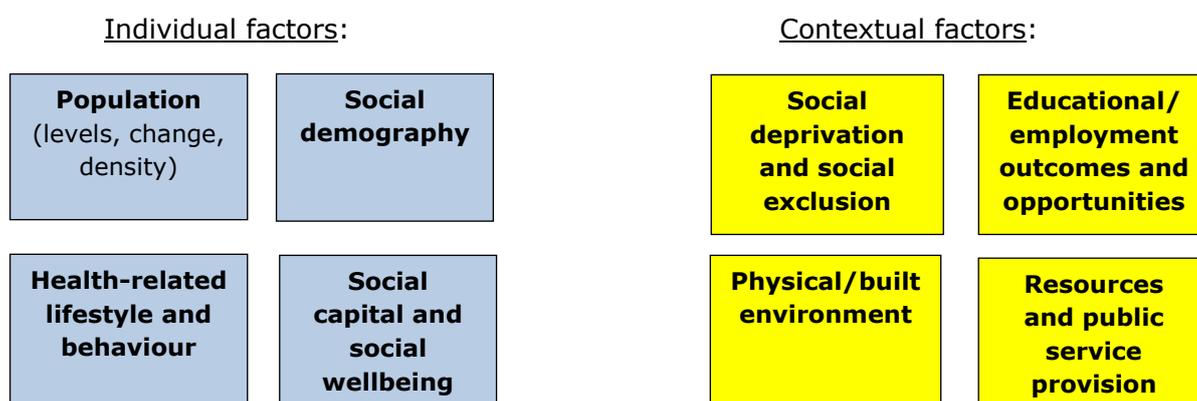
1. the nature and extent of local health outcomes and health inequalities;
2. the underlying socio-economic, and policy related factors, that may be shaping health outcomes within your locality.

The first component of your profile needs to provide you with an assessment of current state of health of your local population. This should seek to identify headline indicators relating to **key health outcomes** such as life expectancy, infant mortality, early deaths arising from key conditions such as cancer or heart disease, and fatalities/injuries resulting from accidents. When we refer to early deaths (either in relation to infants or adults aged under 65) we are talking about deaths which the State believes should be avoidable given the prevailing living standards, levels of economic prosperity, and quantity/quality of healthcare provision. All of these types of measure not only provide you with a raw data score for your locality, but also given their nature and definition contain an inbuilt indication of the presence, or absence, of health inequalities. The second element of the key health outcomes component of your profile needs to identify the **prevailing level of morbidity and health conditions** within the local population. This is designed to provide you indicators of the level of demand and scale of interventions required to address issues such as cancer screening/treatment, teenage pregnancies, diabetes, and alcohol/drug abuse. The final element of this component needs to identify **levels of mental health/illness and personal wellbeing** (e.g. dementia, depression) both in relation to prevalence, uptake of specific forms of treatment, and outcomes (e.g. suicide rates). It is also important within this section of your profile to capture and measure the inter-relationship between key health outcomes and physical/mental wellbeing:



The second component of your public health profile needs to focus upon the essential aspects of the **individual** and **contextual factors** that determine health outcomes - and hence the potential presence of health inequalities (see Figure B1.1 below). These relate firstly to the 'people' element of your local public health environment in terms of the physical (e.g. population change/density, age, gender, ethnicity, disability) and ascribed (e.g. social class, religion) characteristics of the local population. You also need to incorporate here measures relating to (a) health-related lifestyles and behaviour (e.g. smoking, physical exercise); and (b) levels of social capital and wellbeing (e.g. identity, belonging, volunteering, and participation) across different elements of your local population. In relation to the 'place/neighbourhood' characteristics of your locality, you need to factor in issues such as the physical/built environment (e.g. function/type of neighbourhoods, housing, transportation, pollution, access to green spaces), levels of social deprivation and exclusion, educational/employment opportunities and outcomes, and aspects of your public service provision profile (e.g. access to services, resources, quality of services, and strength of strategic leadership).

Fig. B1.1 Individual and contextual factors that shape local health outcomes



The specific issues that might feature within each of these individual and contextual building blocks is provided in Figure the different elements identifies above are provided in Figure B1.2 (below).

Figure B1.2: Local public health profile domains: Health outcomes and underlying factors

HEALTH OUTCOMES:

Key health outcomes:

- Life expectancy;
- Infant mortality;
- Mortality rates for early deaths from cancer, heart disease and strokes, and smoking;
- Accident mortality and injury rates (i.e. road and traffic, occupational).

Disease:

- Incidence of different types of cancer;
- Incidence of heart disease;
- Conditions such as diabetes, tuberculosis, sexually transmitted diseases;
- Age-related health (e.g. teenage pregnancies, hip fractures);
- Alcohol related forms of morbidity;
- Drug abuse.

Mental health and wellbeing:

- Incidence of mental health and illness (e.g. dementia, depression, learning disabilities);
- Treatment (e.g. admission rates, use of mental health services);
- Outcomes (e.g. suicide rates).

UNDERLYING FACTORS:

Lifestyle and behavioural factors:

- Immunisation take-up;
- Breast feeding;
- Child and adult obesity levels;
- Smoking;
- High risk alcohol consumption;
- Diet and healthy eating;
- Physical activity.

Population and social demography:

- Population levels and change;
- Population density and population sparsity;
- Age, gender and ethnicity;
- Religion;
- Social class;
- Household composition and formation (e.g. single person, lone parent, marriage, divorce).

Social capital and social wellbeing:

- Sense of identity and belonging;
- Relationships between people from different backgrounds;
- Participation in, and membership of, various associations;
- Volunteering;
- Participation in community decision-making.

Social deprivation and exclusion:

- Overall levels of deprivation and exclusion;
- Age related deprivation (e.g. child poverty);
- Specific forms of deprivation (e.g. income, employment, crime, barriers to housing).

Physical/built environment:

- Predominant nature (urban/rural), function (commercial, industrial, residential), and proximity of neighbourhoods;
- Transportation;
- Housing (type, tenure, amenities, overcrowding);
- Pollution levels;
- Presence of hazardous installations;
- Threat from natural hazards (e.g. flooding);
- Location and concentration of fast food outlets, off licences, fresh food deserts;
- Access to green spaces.

Educational/employment outcomes and opportunities:

- Key stage outcomes for primary and secondary education;
- Participation in further, higher and adult education;
- Qualification profile (no qualifications, degree level);
- Employment and unemployment rates;
- Job availability;
- Income and benefits levels;
- Occupational status and employment sector.

Access to services, resources, quality of service provision, partnership working, and strategic planning:

- Access to essential healthcare (e.g. GPs, hospitals, pharmacies);
- Access to essential services (e.g. schools, post offices, banks, local council services, public transport, broadband);
- Financial and human resources;
- Quality of service provision (delivery and impact);
- Quality of partnership working;
- Leadership and strategic vision.

Issues you should have understood:

- The aspects of health outcomes and health inequalities that need to be incorporated within a local public health profile;
- The 'people' and 'place' aspects of your local area which are likely to act as potential underlying causes in shaping positive or negative health outcomes within your area.

Other components of the toolkit which are related to this Unit:

- Units A2 and A3 – individual and place-based determinants of health outcomes and health inequalities;
- All other Units within Part B of the toolkit.

B2 Using official statistics and drawing meaningful conclusions from your data

Key words: Reactive and proactive policy-making, nature of official statistics, recent reforms concerning the collection and dissemination of official statistics, problems surrounding the use and interpretation of official statistics, alternative forms of statistical analysis.

B2.1 Introduction

Many of the subsequent Units in Part B of the toolkit provide you with information concerning the various datasets you can draw upon in order to generate the public health profile for your locality. However prior to both exploring these various datasets, and subsequently populating your public health profile with the data that you have obtained, it is necessary to develop a degree of critical awareness concerning the validity and use of official indicators. This is because the quality and effectiveness of your decision-making concerning public health priorities for your area is highly dependent upon (a) the quality of information that is being employed to shape your thinking; and (b) the type of inferences you attempt to draw from the data that you have in front of you. In order to avoid a 'garbage in, garbage out' approach, it is therefore necessary to develop a sceptical and cautious mind set when surveying the data that is in front of you. The aim of this Unit therefore is to introduce you to a series of issues that you need to consider in order to ensure that the construction of your local public health profile genuinely results in more informed and effective decision-making concerning how to respond to health issues and inequalities within your area. If you put garbage in the form of poor or problematic data into your decision-making systems, then the likely outcome will be poorly targeted policy instruments that are based upon inaccurate or incomplete levels of understanding concerning the nature, scale and causes of those aspects of mortality or morbidity that you are seeking to tackle.

Issues explored:

- What are the potential limitations of official statistics?
- Why is it important to identify what it is that you actually need to know in order to inform your decision-making?
- Why can using secondary rather than primary data be problematic?
- What questions should you ask before incorporating secondary data into your public health profile?
- What might the statistical analysis reveal about public health issues within your locality?

The key questions to ask yourself when considering whether to incorporate a specific official or self-generated piece of data within your local public health profile are:

1. What is it that we actually need to know?
2. What information is actually available (and how fit is it for purpose)?
3. What is the gap between what we need to know, and the information that is actually available (and therefore the problems with the data that is currently available)?
4. What analysis has the data been subjected to – and what can we meaningfully conclude on the basis of this analysis?

The discussion that follows is designed to help you understand why the above questions are important when seeking to measure health (or other social) outcomes, and the factors that may give rise to inequalities.

B2.2 Why using official statistics can be problematic

Most of us are aware of the degree of scepticism that is attached to official government data. 'Lies, damned lies, and official statistics' represents a mantra that has long come to reflect the perceived wisdom amongst many stakeholders and commentators concerning the collection and dissemination of

data by governments and public service organisations. Indicators and measures relating to levels of crime, unemployment, and immigration are common statistics that continue to generate significant levels of political debate, and arouse a level of suspicion amongst academics, media commentators and the general public.

These concerns regarding the validity and reliability of official data have seen **significant and concerted attempts in recent times to improve the quality and robustness of official information** in terms of how it is obtained and disseminated (e.g. the introduction of national standards surrounding the recording of official crime statistics by police forces in England and Wales). In addition, governments have sought to attach a greater degree of impartiality to official surveys and statistics (and hence 'depoliticise' the data in question) by transferring responsibility for the collection and dissemination of data from government departments to more independent organisations. An example of this approach has been the acquisition from the Home Office by the ONS for the Crime Survey in England and Wales (formerly the British Crime Survey). However, despite these reforms general levels of scepticism remain high - and ministers and opposition spokespersons are sometimes still brought to task by the UK Statistics Authority for interpreting official statistics in ways that do not stack up in terms of the focus, scope, validity or reliability of the information in question.



There is of course **no such thing as the perfect statistical measure**. Since definitions of many social problems are often hotly contested, it is difficult to sometimes even pass first base in terms of getting agreement on what we should be measuring - and this is before we have even considered whether it is possible to capture all of the dimensions of an issue within a quantitative measure, or concerned ourselves about the validity or reliability of the data we are drawing upon. So we need to recognise that **any official statistic is a 'work in progress'**, and one that reflects a best attempt at generating a policy relevant indicator given the constraints surrounding our ability to transform abstract concepts into reliable quantitative measures.

However this does not mean that there is no room for improvement. One of the problems that have often blighted attempts by governments to tackle a wide range of problems has been the **poor quality information** at their disposal concerning both the extent, and causes, of social issues. In part this has been because for a long time the default approach of state and public service organisations in responding to policy problems has been 'reactive' in nature. This is to say, that public service organisations and officials have waited for citizens to alert them to the presence of a problem (e.g. a patient visiting their GP, or a citizen reporting a crime) rather than proactively seeking to identify the presence of problems and issues that require tackling. The difficulties with this type of **reactive policy approach** are two-fold. Firstly, once you are faced with an issue, you are required to take action based upon the resources and policy instruments that are at your disposal at that point in time. There is no scope for forward planning or horizon scanning. Secondly, this reactive policy style allows little space to constructively and strategically think about the nature and causes of the problems that you are facing - and more crucially prevents the system from asking itself about the type of information and evidence that it actually requires in order to make a more informed and effective response to the issues that it is facing. As a consequence, much of the information that has been collected and recorded by public service organisations is a by-product of their interactions with citizens and other stakeholders rather than the result of a planned and co-ordinated approach to acquiring the information and knowledge that it actually requires to inform decision-making.

New Labour's Modernising Government and Better Policy-Making agendas were an explicit attempt to shift government departments and public service organisations from a reactive to a **proactive policy-making style** - and to foster a more rational approach to decision-making. Whilst initially introduced in order to achieve a greater focus upon evaluating the impact of policy initiatives, evidence-based policy-making has now evolved into an equal concern with obtaining a better understanding of the

nature and causes of policy problems through the creation of a more robust evidence base. Joined-up policy solutions are not only dependent upon joined-up government and joined-up delivery, but also a joined-up understanding of policy issues. These developments have resulted in an increase in the volume and array of official statistics, the form in which they are disseminated, and the spatial scale at which they are available (See Unit B3). In the field of public health, the arrival of, for example, generic local public health profiles (e.g. Community Health Profiles), mortality and morbidity specific data sources (e.g. National Cancer E-Atlas), or underlying behavioural profiles (e.g. Local alcohol profiles), are all testament to both a radical overhaul of official statistics – and an attempt to improve their fitness for purpose. Compared to previous eras, the local public health data that is available to central government departments and local public service organisations is therefore much more considerable in nature. However, this cultural shift in approaches to data acquisition is still a work in progress. It therefore still remains absolutely essential that when seeking to use official statistics you are guided by asking yourself: ‘what is it that we actually need to know?’ rather than ‘what can we find out based upon the data that we already have at our disposal?’.

Whilst moving towards a proactive and rational mind set is partially about changing your way of thinking about the policy issues that are confronting you, the realisation of this desire to obtain policy relevant information remains equally dependent upon your ability to obtain the relevant information that you require. Progress towards this goal can be significantly enhanced if you are in a position to generate **primary data** (i.e. information that is specifically collected for your intended purpose, and which did not exist prior to the research you are seeking to undertake). In contrast, secondary data is information that is already in existence, and which has been generated by another researcher or user for another purpose other than necessarily the one that you are seeking to use it for. There are of course a range of conceptual and practical methodological issues problems you will need to overcome if you are to generate valid primary data of your own. However, more often than not this ‘clean slate’ primary data approach is more likely to result in the acquisition of the specific information that you require since you have greater control over ‘what’ data is collected (and ‘how’ this is undertaken).



Unfortunately, the prohibitive cost in time and labour, and the policy and organisational context in which we are operating, often prevents us from obtaining primary data. So we are more often than not forced to use **secondary data** collected and disseminated by other official government departments or agencies. At first glance we may believe that we have found an existing official public health indicator that exactly fits the bill in terms of the type of information that we are after. However, in order to illustrate the caution that should be exercised when rushing to embrace

the indicator in question, it is necessary to pause for a moment and consider what we mean by the terms ‘official’ and ‘statistic’.

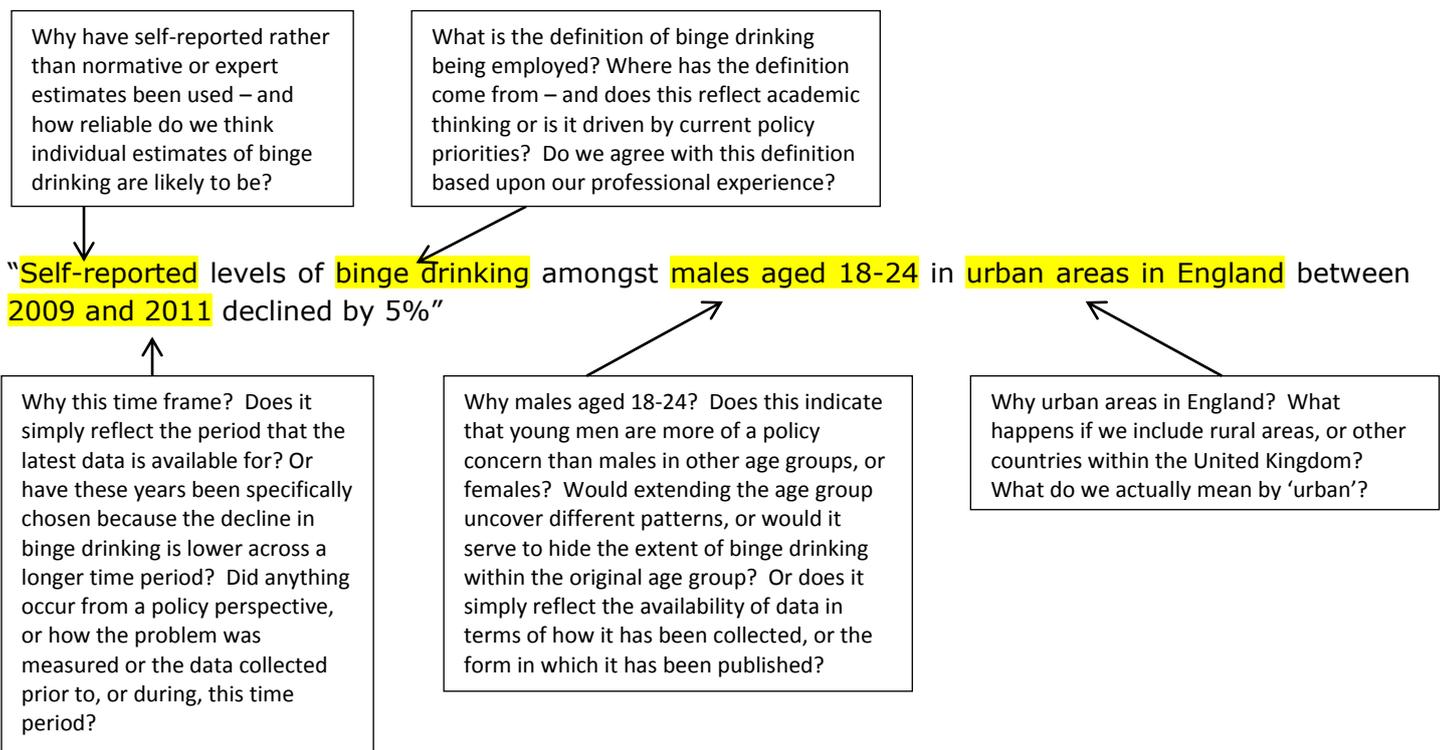
The term ‘official’ can refer to a number of aspects associated with the statistic in question. Firstly, it identifies that the indicator in question is information whose collection and dissemination has been directly undertaken or commissioned by a state organisation. Secondly, the term official may be used to imply that the indicator represents the measure of a specific social issue or phenomena that is deemed to be the one that ministers, politicians, government departments and public service organisations will use as the default or standard measure e.g. the official level of recorded crime, or unemployment levels. It is, however, extremely important to recognise that the term ‘official’ does not automatically imply that the indicator in question should be regarded as a more valid or reliable measure than non-official alternatives. Official indicators are often criticised for their narrow scope and definition, as well as concerns surrounding their reliability. The cautionary use of official statistics by central government departments within funding formulae that are used to allocate resources to local public service organisations might be taken as evidence that government in part does not entirely believe the data that it collects. For example the absence of official crime figures within the formula used by the Home Office to distribute grant funding to police forces in England and Wales would appear to raise certain questions about the reliability of official crime statistics. Researchers and statisticians

working in central government departments or agencies may have greater levels of resources to underpin the collection and dissemination of data. But they face the same conceptual and methodological problems as researchers working at the local level who in seeking to obtain accurate information of the scale and causes of specific social problems are constrained by the limited resources that they have at their disposal.

Having explored the concerns that we might have with regard to the 'official' component of government statistics, now let us turn our attention to what is meant by the terms 'data' and 'statistic'. **Data** refers to a number, or series of numbers, that in their raw form simply represents a numerical value (e.g. '5'). In contrast, a **statistic** (whether official or otherwise) is a figure which has been subjected to some form of analysis, and as a result has had an inference or interpretation attached. Once the number '5' has had both a descriptive prefix attached (e.g. 'binge drinking declined by'), and a subsequent unit of measurement ascribed to it (e.g. '%'), then the number '5' starts to take on some specific meaning. If we then add some information concerning the time frame, component of the population and geographical area to which the data refers, then we arrive at a statistic which has been defined in a much more specific way:

"Self-reported levels of binge drinking amongst males aged 18-44 in urban areas in England between 2009 and 2012 declined by 5%".

Irrespective of whether we believe a 5% decline constitutes sufficient progress, if we start to explore this official statistic in more detail then we quickly arrive at a series of questions concerning the validity and reliability of the indicator in question:

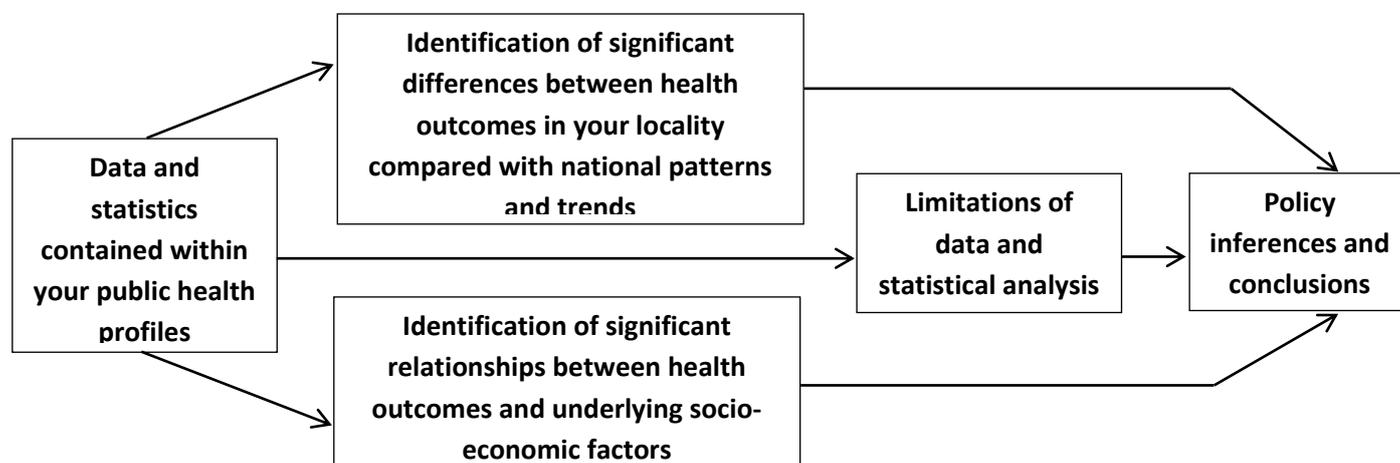


These types of questions are relevant in relation to any official (and non-official) statistic you are proposing to use. Having asked yourself these questions, you might decide to reject the indicator outright and, where possible, seek out an alternative measure. Equally you may have identified problems with the indicator in question that simply need to be born in mind when employing the statistic to inform your decision-making. There is unfortunately no magic methodological or policy relevant criteria for identifying whether the 'pros' outweigh the 'cons' in relation to the use of a specific

statistic. Faced with the absence of a viable alternative, the very existence of an indicator should not therefore automatically qualify it for inclusion within your local public health profile. The maxim that 'the only thing worse than no science is bad science' is therefore a useful cautionary principle to guide you in your engagement with official statistics.

B2.2 What might the statistical analysis reveal about public health issues within your locality?

Your decisions concerning which data to include within the public health profile for your locality should not however simply be influenced by the validity and reliability of the data and statistics that you have collected. This is because at the end of the day the purpose of the profile is to help inform your decision-making concerning which public health issues should constitute policy priorities – and which socio-economic factors appear to be the underlying causes of health inequalities that you need to tackle. The policy inferences and conclusions that you can draw from your profile are shaped by a number of factors relating to both the indicators you have used, and the analysis that they have been subjected to:



We have already explored the potential issues surrounding the limitations of official and non-official statistics in terms of their validity and reliability as indicators of the public health phenomena which they purport to measure. The discussion that follows is designed to examine the statistical forms of analysis that you are likely to encounter when engaging with research on health outcomes, or utilising datasets that you will might draw upon in order to populate your public health profile. The aim here is not to provide you with a crash course in descriptive or inferential statistics. Instead what follows in Table B2.1 (overleaf) is an overview of these forms of statistical analysis, what they are designed to show, and the issues that you need to bear in mind when using these forms of statistical indicator or test.

Table B2.1 Forms of statistical analysis and their use in identifying and evaluating health outcomes and inequalities

| Statistical indicator or test: | What is the indicator/test designed to tell us? | Policy significance: | What are the issues to bear in mind when using and interpreting these: | Examples of datasets/profiles containing this type of indicator/test: |
|---------------------------------------|---|---|---|---|
| Average | Designed to provide a representation of the distribution of values across a series of cases in a single figure. The average figure can represent the mean (average), median (mid-point) and mode (most frequent) value. | Provides a benchmark figure for comparing the scale of a specific public health issue within your own locality with other localities and the nation as a whole. | Mean may be a poor indicator for a number of reasons: <ul style="list-style-type: none"> • Extreme high and low values across the cases may distort the mean value; • If the distribution of cases is skewed rather than normal, then the mean value may mask the greater concentration of cases located in the high or low parts of the distribution of cases. | Appears in a variety of public health orientated profiles including: <ul style="list-style-type: none"> • Community Health Profiles; • Local Alcohol Profiles; • Various e-atlases relating to general or specific aspects of mortality and morbidity. |
| Minimum and maximum | Designed to illustrate the extreme values in a distribution of cases – and hence the range of scores across your cases. | Provides an alternative benchmark figure for comparing the scale of a specific public health issue within your own locality with other localities and the nation as a whole. | Viewed in isolation (i.e. without reference to average or standard deviation scores) can result in misleading impression of how your locality is performing. Extent of actual range of values varies considerably across different public health indicators. | |
| Standard deviation | Designed to illustrate the extent to which the actual values across the distribution of cases differs from the mean value. | Enables comparison of the relative distribution of different public health problems across localities – and the extent to which the average values are representative of the scale of these problems across localities. | Value of standard deviation is shaped by the unit of measurement (e.g. %, rate per 1000 population). Higher value of standard deviation for one public health indicator when compared to another may be the result of the different units of measurement rather than differences in the level of variation of values across your cases. | Not used within any official public health or socio-economic datasets – but frequently referred to within research publications relating to the nature and causes of health outcomes and health inequalities. |
| Ranks | Designed to place cases into ascending or descending order | Used to identify the 'worst' and 'best' localities in terms of life expectancy, deaths from cancer, teenage pregnancies, etc. | Converting raw values into rank scores results in the imposition of uniform intervals between cases. This can distort the scale of the gap between different cases. For example a locality that is ranked 5 places higher than another locality in terms of teenage pregnancies may actually have a rate which is 10 or 20 times higher. | English Indices of Deprivation 2010 |

Table B2.1 Forms of statistical analysis and their use in identifying and evaluating health outcomes and inequalities (continued)

| Statistical indicator or test: | What is the indicator/test designed to tell us? | Policy significance: | What are the issues to bear in mind when using and interpreting these: | Examples of datasets/profiles containing this type of indicator/test: |
|---------------------------------------|--|--|--|---|
| Statistical significance | Apparent differences in scores for a specific indicator between localities, or between a locality and the national value, may not represent a significant difference (and hence the existence of a real policy problem). In a similar fashion, an apparent relationship between two indicators may in fact represent a spurious relationship. A statistical significance score indicates whether we can be at least 95% confident that the scale of the difference, or the relationship, is a genuine one. | Can be used to identify: <ul style="list-style-type: none"> • Whether the incidence of a specific public health issue in your locality is significantly better or worse than in other localities (and therefore a policy priority); • Whether the relationship between, for example, levels of binge drinking and the distribution of off licences is a significant one – and therefore requires some form of policy intervention. | The level of statistical significance is shaped by two factors: <ul style="list-style-type: none"> • Scale of difference, or strength of relationship; • Size of the sample (and therefore the extent to which the cases in your dataset are representative of the wider population). <p>The level of statistical significance is also determined by the level of confidence required. In social science research the minimum confidence interval is conventionally 95%.</p> | Not used within any official public health or socio-economic datasets – but frequently referred to within research publications relating to the nature and causes of health outcomes and health inequalities. |
| Cluster analysis | Used to identify similar cases which display similar scores across a series of separate indicators. Similar cases are then placed into the same group or cluster. Enables the identification of cases within a dataset that are very similar in nature. | Can be used to: <ul style="list-style-type: none"> • identify localities with similar public health problems; • improve targeting of resources; • identify comparator localities in relation to comparing performance of local public service providers; • improve the success of policy transfer by enabling localities to identify similar places from which to copy successful initiatives or practices. | <ul style="list-style-type: none"> • Different combination of indicators results in different cluster membership; • No magic formula for determining the number of clusters – statistical analysis provides user with a series of cluster solutions. Choice of too few clusters results in cases (i.e. localities, households) that are in reality significantly different being grouped together. Choice of too many clusters results in cases that are in reality similar to one another being kept apart; • Interpretation of the nature of each cluster left down to the researcher i.e. cluster analysis does not automatically inform you that cluster two represents 'regional centres', 'coastal resorts', 'industrial hinterlands', etc. | <ul style="list-style-type: none"> • ONS area classification of local authority types; • CIPFA Nearest Neighbour Model; • Experian Public Sector MOSAIC (households). |

Table B2.1 Forms of statistical analysis and their use in identifying and evaluating health outcomes and inequalities (continued)

| Statistical indicator or test: | What is the indicator/test designed to tell us? | Policy significance: | What are the issues to bear in mind when using and interpreting these: | Examples of datasets/profiles containing this type of indicator/test: |
|---------------------------------------|---|--|--|---|
| Correlation | Used to identify the presence of a relationship between two variables | Can be employed to identify the underlying socio-economic factors associated with specific health outcomes or the presence of health inequalities. | Correlation indicates the extent of an association between two variables. Should be treated as hinting at a relationship between two indicators. Justification for a policy intervention requires the demonstration of a causal relationship between a dependent variable (i.e. health outcome) and an independent variables (i.e. underlying socio-economic factor). For a causal relationship to exist you need to identify the presence of a statistically significant relationship – and have controlled for all other independent variables that may have impacted upon both the independent and dependent variables that you are specifically focussing upon. | Not used within any official public health or socio-economic datasets – but frequently referred to within research publications relating to the nature and causes of health outcomes and health inequalities. |
| Regression | Used to identify the relationship between a dependent variable and a series of independent variables. Controls for impact of variables upon one another – and hence indicates the presence or otherwise of a causal relationship between a specific independent variable and your dependent variable. Also identifies the precise impact of a change in a specific independent variable upon your dependent variable. | Stronger evidence for supporting a policy intervention in relation to an underlying socio-economic cause of a specific health outcome or health inequality. Can also be employed to predict the consequence of, for example, cuts in funding, or increases in unemployment or lone parent households upon health outcomes. | There are a number of factors to bear in mind when interpreting regression results: <ul style="list-style-type: none"> • If independent variables designed to measure different social phenomena (e.g. income levels, social class, etc.) actually measure the same problem (e.g. income levels), then there is a danger of either drawing the wrong policy conclusions or believing that your model has accounted for socio-economic factors that do not actually feature within your model; • The addition or removal of specific independent variables will alter the explanatory power of the model – and the degree of impact of specific independent variables upon the dependent variable; • As with all statistical tests and forms of analysis, the results of the model | Not used within any official public health or socio-economic datasets – but frequently referred to within research publications relating to the nature and causes of health outcomes and health inequalities. |

Table B2.1 Forms of statistical analysis and their use in identifying and evaluating health outcomes and inequalities (continued)

| Statistical indicator or test: | What is the indicator/test designed to tell us? | Policy significance: | What are the issues to bear in mind when using and interpreting these: | Examples of datasets/profiles containing this type of indicator/test: |
|--------------------------------|---|----------------------|--|---|
| Regression (continued) | | | identify the presence of a significant <u>statistical</u> relationship between variables. Basing policy interventions upon these statistical results is not a guarantee of policy success because it assumes that you have taken all the relevant factors into account and that there are no problems surrounding how you have measured various phenomena or the quality of your data. | |

This Unit has been designed to develop your awareness of a range of issues concerning the use of specific data and indicators, and the statistical analysis to which they may have been subjected to. Just as we identified that there is no perfect statistical measure, there is equally no perfect model or form of statistical analysis. Your understanding, and ability to use, the public health profile that you have generated is thus dependent upon (a) your development of a critical mind when using statistical indicators and analysis; and (b) your assessment of what the statistical results appear to be telling you in light of your professional knowledge, experience and judgement.

Issues you should have understood:

- The importance of adopting a proactive and rational approach to the identification of the public health information that you require in order to inform your decision-making;
- The potential issues surrounding the use of official and non-official statistical indicators;
- The extent to which statistical analysis can inform your decisions regarding policy priorities and policy interventions.

Other components of the toolkit which are related to this Unit:

- Unit B3 Super Output Areas.

B3

Understanding the new statistical geography: An introduction to Super Output Areas

Key words: Statistical geography, wards, super output areas, middle and lower super output areas

B3.1 Introduction:

The importance of being able to identify the presence of social problems within specific neighbourhoods has been officially recognised for a long time. Apparently prosperous localities at the district level can contain deprivation hotspots within specific neighbourhoods that require intervention. Their presence can remain hidden however if we are unable to drill down below the local authority level. Conventionally, the lowest spatial unit of measurement within official

If you have recently accessed official statistics in order to explore issues such as deprivation levels within your local authority area, you will however have noticed that wards are no longer the lowest spatial level at which official data is being collected and disseminated. Within the Neighbourhood Statistical Geography developed by the ONS, wards are now being replaced by an alternative unit of statistical measurement called Super Output Areas (SOAs). Although some official databases (such as the [NOMIS](#) Official Labour Market Profiles) continue to display data at the ward level, SOAs have now become the default spatial scale at which official data below the local authority level is now being collected and displayed (see for example [Neighbourhood Statistics](#) or the [English Indices of Deprivation 2010](#)). The purpose of this Unit therefore is to:

Issues explored:

- Why have wards been abandoned as a statistical unit of measurement?
- The new statistical geography;
- Super output areas.

1. Explain why the Office for National Statistics (ONS) has abandoned wards as the preferred unit for small areas statistics;
2. Provide an introduction to the nature of SOAs, and how they are constructed.

B3.2 Why have wards been abandoned as a statistical unit of measurement?

Local authority wards have been utilised as the lowest spatial unit for official statistics across a wide range of policy areas in England for a considerable period of time. Their survival as the statistical unit of choice until very recently has primarily been the result of three factors:

- Firstly, the measurement of socio-economic issues at the ward level maintains a direct relationship between the identification of neighbourhood problems and issues being experienced by local residents, and the elected local representatives and local council that is directly responsible for meeting their service needs;
- Secondly, the prohibitive financial/labour costs and time required to collect, process and disseminate data has meant that identifying policy issues below the ward level has remained a non-reality for most government departments and public service organisations;
- Thirdly, many local area statistics have been collected by local public service agencies, and the data generated has often been the direct or indirect by-product of interactions between local officials and those members of the public who are demanding some form of service or intervention (e.g. GPs and patients, local authority housing officers and households seeking inclusion on housing waiting lists, etc.). Thus data has been collected at a spatial scale determined by the organisational jurisdiction of local public service providers rather than on grounds of methodological validity or reliability.

The replacement of wards by SOAs has occurred for a number of reasons:

1. **Undetected problem hotspots.** Since individuals and households remain the smallest social unit that can experience poor health (and other forms of socio-economic deprivation), social problems can materialise in the form of hotspots that are centred upon specific streets or estates rather than across whole neighbourhoods or wards. Measuring social problems at the ward level therefore gives rise to the potential for the official statistical picture of the locality to fail to record either the presence, or potential causes, of such problems. Not only does this result in the presence of unmet need within certain communities, but it also hampers the ability of local councils and other public service organisations to demonstrate the need for additional resources from funding agencies.
2. **Poorly targeted initiatives and the inefficient use of resources.** Not only has the lack of data below ward level prevented the identification of problem hotspots, but it has also constrained the effective targeting of policy initiatives. In the absence of key sub-ward level information, public service organisations are either faced with not addressing policy problems because they do not know where precisely to target policy interventions, or they have to adopt a scattergun approach of delivering services across a whole ward in the hope of obtaining the necessary policy 'hits' in relation to needy individuals or households. This is clearly an inefficient use of resources since it is likely to result in an approach in which a proportion of the policy intervention falls on 'fallow' ground. Better policy solutions require the development of more effective and efficient targeting of initiatives within local populations, and collecting and analysing data at the street level is clearly a prerequisite for this policy objective to be realised.
3. **Wards have the potential to distort the scale of policy problems.** Wards are not of a uniform size in relation to either the physical area that they cover, or the populations that reside within them. This lack of uniformity is not a problem when we wish to compare the scale of problems across wards providing the statistical unit of measurement has controlled for the size of the population (e.g. the percentage of the adult population who are classified as obese; or deaths from cancer per 100,000 population). However, once we attempt to map this data, then the potential for the visual distortion of the scale of the problem can arise. Wards that are geographically larger in scale but have the same intensity of a specific problem as geographically smaller wards can appear on the map to have a 'bigger' problem than the smaller wards. The physically larger wards appear to represent areas within a local authority that have more people experiencing a specific health issue, when in reality the raw number of people in need within this ward may actually be considerably lower than the number of individuals in need within the physically smaller ward.
4. **Frequent changes to ward boundaries.** Despite their historical longevity, wards have over time experienced frequent changes to their boundaries for administrative purposes and in order to take account of population change. Whilst the reasons for these boundary changes may be legitimate ones, the need to compare changes in a specific aspect of health (or any other social problem) over time is made more problematic by the lack of consistent ward (and local authority) boundaries even over relatively short periods of time.
5. **Improving the information and evidence base that informs policy-making:** As a result of New Labour's diagnosis that the modern system of government in the United Kingdom was no longer fit for purpose, the Modernising Government and Better Policy-Making agendas were designed to deliver a more rational and scientific form of policy-making within government departments and public service organisations operating at the national, regional and local level. One of the key aspects of these reforms was the introduction of evidence-based policy-making. Initially designed to discover 'what works' in relation to the success or failure of policy initiatives, it was quickly recognised that the existing evidence base in relation to the scale, and cause, of many social problems was equally inadequate in respect of the type and quality of data available to policy-makers, including the spatial scale at which it was collected. The current Coalition Government has dismantled many of the bureaucratic performance-based instruments of 'deliverology' which local public service providers were subjected to under New Labour. However, the underlying ethos of evidence-based policy-making which requires policy decisions to be informed by relevant statistical data and metrics remains firmly in place. To this end, the ONS and central government

departments/agencies have undertaken substantial overhauls of official statistics and indicators, and the methodology that underpins these, in order to ensure the development of a robust empirical database which can inform decision-making in an effective manner.

6. **Advances in computing and information technology.** Rapid advances in technology in recent times have delivered the means of measuring and mapping data relating to a wide range of socio-economic neighbourhood characteristics. This has not only enabled the development of more efficient approaches to data collection and collation, but has also enabled the much more extensive use of geographical information systems by public service organisations as a decision-making tool, and as a means of providing essential information to a range of local service providers, stakeholders and citizens.
7. **GPS generated data and citizen data 'expectations'.** Increasingly the GPS attributes of measuring equipment and mobile devices such as smart phones, laptops, tablets etc. enables the instantaneous attachment of geographical coding to data and information. Not only does this technology raise the possibility of service users and citizens generating their own neighbourhood profiles and community resources (e.g. Every Block), but it also enables online devices to support applications that allow users to access and display a wide range of information at a very small spatial scale, and to obtain virtual experiences of specific localities (e.g. Google Earth's Streetview function). As a result, measuring and displaying at the local authority or ward level increasingly appears 'old hat' now that we live in an era where online applications such as street-level [crime maps](#) have raised the expectations of citizens and data users in relation to interaction with official and non-official data.

B3.3 Introducing Super Output Areas (SOAs)

SOAs are based upon aggregating between Output Areas (OAs) which are the lowest spatial unit of measurement, and which were originally created for the purpose of the 2001 Census. The primary objective of SOAs is to deliver a statistical unit that is of a more similar size both in respect of the geographical area that it covers, and the size of the population living within its boundaries. There are two types of SOA: Lower Super Output Areas (LSOAs) which represent the smallest statistical unit of geography within the Neighbourhood Statistical Geography framework, and Middle Super Output Areas (MSOAs) which represent an aggregation of LSOAs into a large statistical unit of measurement. A primary factor in shaping the number and size of SOAs contained within each local authority district is the use of population thresholds (see Table 3.1 below). These thresholds are designed to (a) ensure the creation of statistical units that enable the collection of data within a sufficiently small area and cross-section of the population; and (b) form the basis for any revision to the SOA classification for localities that is required upon the basis of population change and movements (the original LSOAs derived from the 2001 Census Output Areas were revised for the purposes of the 2011 Census in order to take account of revised population estimates and changes in local authority boundaries since 2001).

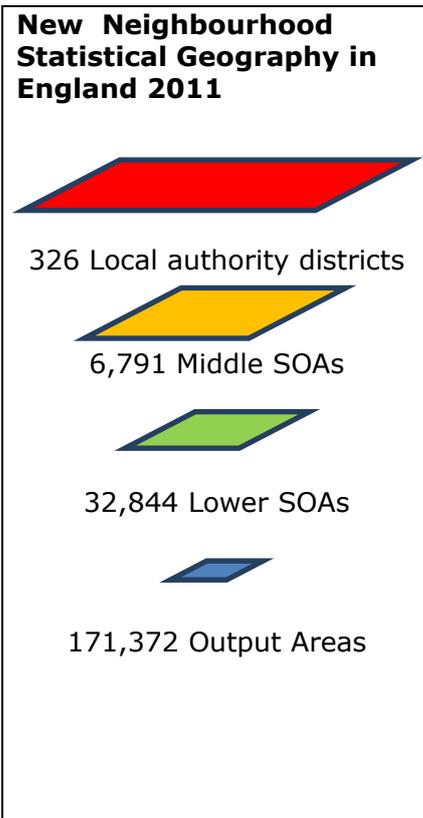


Table 3.1 Population and household thresholds for SOAs

| Geography | Minimum population | Maximum population | Minimum number of households | Maximum number of households |
|-----------|--------------------|--------------------|------------------------------|------------------------------|
| LSOAs | 1,000 | 3,000 | 400 | 1,200 |
| MSOAs | 5,000 | 15,000 | 2,000 | 6,000 |

(Source: ONS)

There are currently 32,844 LSOAs (up from 32,482 in 2011), and 6,791 MSOAs in England. The number of LSOAs within each local authority area varies considerably, and depends not only upon the size of the local population but also upon population density and sparsity. It is important to recognise that SOAs are computer generated statistical areas that do not automatically represent a readily identifiable real geographical area. Unlike wards or neighbourhoods, it is not possible to be walking around a particular part of for example Barnet and to be readily able to identify the specific SOA that you are standing in. Each LSOA is identified on the basis of a unique nine digit code and name (for example Barnet 035D, Barnet 033F, Barnet 038E, etc.). You can identify the name and code for a specific LSOA (and details of the MSOA it corresponds to) by visiting the Super Output Area page on the Neighbourhood Statistics website [here](#). In order to identify the part of your local authority which corresponds with a particular LSOA, however, you will need to obtain the relevant map of SOAs within your local authority area (which should be able from the in-house GIS team within your authority).

SOAs are statistical constructs, and whilst their boundaries in some instances are coterminous with local authority wards, their independence from local authority ward boundaries means that they are not subject to the vagaries of changes to ward boundaries. Equally importantly, their greater uniformity in size means that they provide us with a statistical unit that is of greater validity for the purposes of comparing the scale of problems across, and within, local authority areas - and displaying these within static thematic maps and geographic information systems in a manner which is less likely to lead to 'visual' misinterpretation.

Issues you should have understood:

- The problems associated with wards in terms of measuring and mapping social problems;
- The nature and structure of the ONS's new administrative geography in terms of Output Areas (OAs), Lower Super Output Areas (LSOAs) and Middle Super Output Areas (MSOAs).

Other components of the toolkit which are related to this Unit:

- Unit B2 Using official statistics and drawing meaningful conclusions from your data.

Further Resources:

You can obtain further information on SOAs by visiting the Census pages on the ONS's Beginner's Guide to UK Geography [here](#). For a more detailed discussion of the nature and mapping of OAs and SOAs visit the [Output Area Classification User Group](#) blog at UCL, or the [Social and Spatial Inequalities](#) pages at the University of Sheffield.

B4 Identifying levels of mortality, morbidity and health-related forms of lifestyle and behaviour

Key words: key health outcomes, morbidity, health-related lifestyles and behaviour, health inequalities

B4.1 Introduction:

The first task in constructing a public health profile for your locality is to identify the current state of health of the local population. As we saw in Unit B1, this will require you to examine three key issues:

- Key health outcomes (e.g. life expectancy, infant mortality, and early deaths from major killers such as cancer, heart disease and strokes);
- Levels of morbidity and health issues (e.g. incidences of cancer, diabetes, and teenage pregnancy);
- Forms of condition, lifestyle and behaviour that can have a positive and negative impact upon individual health outcomes (e.g. obesity, smoking, alcohol/drug abuse, and physical activity).

Issues explored:

- Key issues in evaluating and measuring health outcomes and health inequalities;
- Guide to official statistics and online data resources relating to health outcomes and health inequalities.

The aim of this Unit therefore is to provide you with a guide to the various official datasets and online resources that you can employ in order to explore the prevalence of these aspects of health within your area. In addition, the discussion here raises some of the issues that you need to think about in gauging the extent to which the outcome of your analysis reveals significant causes for concern in terms of the presence of health inequalities within your locality.

B4.2 Health outcomes and health inequalities – some key issues

Unfortunately despite specific policy interventions by successive governments, the deployment of extensive resources, a national health service, and general improvements in the standard of living over time, health outcomes across both different sections of society and different parts of the country remain unequal. Whether it is through reading extensive policy investigations such as the Marmot Review, through our professional expertise and practice, or through personal experience, we are all too aware of the **different life chances and health outcomes experienced by different individuals within different neighbourhoods**. Whilst major progress has been made in reducing the incidence of, and deaths from, major killers such as cancer and heart disease, too many individuals are still suffering an early death which in terms of modern medical knowledge and provision can be regarded as premature.

Furthermore, as soon as we believe we have got to grips with one form of disease or condition (e.g. tuberculosis), other major health issues raise their heads. For example, we might regard the period from the 1840s to the 1900s as representing an era characterised by the need to still address major public health issues such as cholera. During this time period, the abject poverty and physical conditions in which many individuals lived and work directly related to their premature demise and poor levels of health. The early part of the twentieth century witnessed the transformation from a fledgling to a more extensive form of Welfare State in which general improvements in living standards and income levels, along with major policy interventions in areas such as public housing, started to pay health dividends. The period from the advent of the National Health Service in 1948 until relatively recently might be characterised as one which witnessed an extensive period of gradual improvement in the health of the nation – and which towards the end of this era witnessed significant progress in tackling major health issues such as cancer and heart disease. However, in the early twenty first century, we find ourselves confronted with a combination of an ageing population (and the health challenges

associated with this positive social outcome), and a range of health conditions (such as diabetes and obesity) which are shaped by both individual circumstances and lifestyle - and which threaten to pose a major challenge to governments and public service organisations alike. There is also finally now a more extensive recognition amongst the population of both the presence of, and need to address, significant levels of poor mental health and illness.

Although the journey along the evolutionary road of health problems and healthcare provision discussed above has witnessed a general level of improvement in health outcomes, health inequalities remain between different social groups and areas. Even a cursory glance through publications such as *The Grim Reaper's Road Map: An Atlas of Mortality in Britain* by Mary Shaw et al (2008) or *Bankrupt Britain* by Dorling and Thomas (2011) quickly reveals the extent of geographical variations in health, and the extent to which place still shapes the health and life chances of individuals. **The overwhelming evidence on differences between the health outcomes of individuals within different sections of society, and different localities, implies the presence of health inequalities.** But what do we actually mean by this term? Can we simply take the extensive gap in life expectancy between men and women living in, for example, Blackpool as opposed to Kensington and Chelsea as automatic evidence of the presence of an unequal Britain in relation to health?

The concept of inequality implies:

- The presence of a gap between the outcomes of different sets of individuals or localities;
- That the extent of this difference in circumstances is in some way unfair or unacceptable based upon prevailing societal values or expectations.

But once we delve into these two issues, the identification of the presence of inequality becomes more problematic. **How wide does the gap between different sections of society or places have to be in order for us to recognise the need for some form of policy action to address this situation?** We have already identified in Unit B2 that unless we can demonstrate that the size of this gap is a statistically significant one, then we should resist lurching into immediate policy action. In addition, the scale of distribution of scores across groups of individuals or places also varies depending upon which public health issue we are examining. So we cannot automatically equate the existence of a difference of, for example, 10 years, 10%, or 10 cases per 1000 population as immediately signifying the presence of inequalities. Conceptually, we are also faced with a series of problems in defining what we mean by inequality. If we believe the presence of a certain outcome to constitute a form of inequality, then this implies that this current situation is at odds with some form of ideal state of existence.

But the issue that we are then confronted with is **what constitutes a fair or just society?** This is of course a highly contested and fiercely argued debate. For whilst there are those who believe in the pursuit of an equal society which is evidenced by the absence of differences in the circumstances and status of individuals, there are also those who argue that gaps in outcomes between people are acceptable providing there is a guarantee that everyone reaches a minimum standard of existence. Furthermore, there are those who would argue that the presence of differences between individuals acts as an incentive for those at the bottom to strive harder in order to improve their personal circumstances. These different standpoints also reflect the importance of determining whether we are interested in absolute or relative outcomes. If we opt for the former goal, then this implies that we are seeking to arrive at a minimum standard of health outcome (e.g. a guaranteed life expectancy of 65 years, or an acceptable mortality rate across the population in relation to cancer or heart disease). If instead we adopt the position that we are primarily interested in relative outcomes, then we need to determine the size of the gap that is acceptable in terms of differences between individuals or places.

We then need to throw into the mix the extent to which such differences are the product of individual actions, efforts and motivations - or the result of insurmountable structural social and economic barriers in society which they are unable to overcome. Finally, in relation to health outcomes as opposed to say income levels, the situation is further complicated by the reality that differences in life

expectancy, causes of death or conditions such as obesity are partially determined by physiological and genetic factors – and that as such improvements in living standards, healthcare provision and policy interventions will not entirely eradicate differences in health outcomes between certain individuals. The point of the discussion here is not to provide answers to all of these questions because they have, and will continue to be, the source of endless debate. It is, however, important that in surveying and analysing the indicators within your local health profile you bear these issues in mind when determining the extent to which the evidence points to health inequalities amongst your local population.

B4.3 Guide to available data sources and resources on key health outcomes, morbidity and health-related lifestyle and behaviours:

As a result of moves to a more proactive approach to confronting health issues, and the pursuit of evidence-based policy making (See Unit B2), the range of health-related statistics and atlases that focus upon the health characteristics of local populations is extensive. There has always been a concerted effort by the Office for National Statistics to generate health related data arising from generic surveys such as the decennial Census, or specific data relating to specific health conditions (e.g. mortality rates for different forms of cancer). This has also been supplemented by health and healthcare data commissioned and generated by central government departments, specific health and public health related agencies, the NHS at a national/regional/local level, and local councils and social care organisations. Since the mid-1990s however there has been a concerted effort to 'up the game' in terms of the availability of local area statistical resources in order to inform central government policy, and to feed into local health planning policy instruments such as Joint Strategic Needs Assessments (JSNAs). A significant contribution to the burgeoning health evidence base has been undertaken by the Association of Public Health Observatories (APHO) (now part of Public Health England) either on a collective basis, or through the allocation of the remit for specific health issues to individual regional Public Health Observatories (e.g. the North West Public Health Observatory in relation to the creation of Local Alcohol Profiles for England).

Table 4.1 (overleaf) provides a guide to official published data relating to key health outcomes, morbidity, and health-related lifestyles and behaviour. The information contained in this table sets out the aspects covered, the spatial scale at which the data is available, the time frame for the data, whether the data is published in a raw format or has been subjected to any form of analysis, whether the data is available in the form of an interactive map, and finally whether it is possible to download the data from the relevant online source.

Table 4.1 Indicators and resources relating to health outcomes, morbidity and health-related lifestyle and behaviours

| Theme: | Resource: | Aspects explored: | Spatial scale: | Time frame: | Analysis: | Interactive mapping: | Data can be downloaded: |
|---------|--|---|--|---|--|----------------------|-------------------------|
| Generic | Health Profiles | <ul style="list-style-type: none"> • Our community (underlying causes of health outcomes and lifestyles); • Children’s and young people’s health; • Adults’ health and lifestyle; • Disease and poor health; • Life expectancy and cause of death. | <ul style="list-style-type: none"> • England; • County and district level. | 2013 (draws upon latest available contemporary data). | <ul style="list-style-type: none"> • Raw data; • Allows identification of where incidence of specific issues is significantly lower or higher than other local authorities in England. | Yes | Yes. |
| | Local Health | Mapping resource for data contained under themes employed by Health Profiles – but contains wider range of indicators. | <ul style="list-style-type: none"> • England; • County, district, ward and Middle SOA level. | 2013 (draws upon latest available contemporary data). | Raw data | Yes | No. |
| | National General Practice Profiles | <ul style="list-style-type: none"> • Local demographics; • Quality and Outcomes Framework Domains; • Disease prevalence; • Hospital admission rates; • Patient satisfaction. | <ul style="list-style-type: none"> • England; • PCT, CCG and GP Practice level. | 2012 (draws upon latest available contemporary data). | <ul style="list-style-type: none"> • Raw data; • Allows identification of significance of specific issues in comparison to other local authorities in England; • Converts data into charts; • Enables you to explore relationship between different indicators within dataset. | No | Yes |

| Theme: | Resource: | Aspects explored: | Spatial scale: | Time frame: | Analysis: | Interactive mapping: | Data can be downloaded: |
|----------|---|---|--|--|--|----------------------|---|
| Children | Local Authority Child Health Profiles | <ul style="list-style-type: none"> • Infant and child mortality; • Health protection (immunisation); • Child poverty and wider determinants of poor health; • Health improvement (low birth weight, obesity, teenage conceptions, alcohol abuse); • Prevention of ill health (smoking in pregnancy, breastfeeding, hospital admissions due to injury, asthma, mental health, self-harm). | <ul style="list-style-type: none"> • England; • District level. | 2013 (2011 and 2012 also available) | <ul style="list-style-type: none"> • Raw data; • Allows identification of where incidence of specific issues is significantly lower or higher than other local authorities in England. | Yes | Yes – user can download data by theme and specific geography (data can be accessed for PCT areas) |
| | Healthy Schools Profiles | <ul style="list-style-type: none"> • Child poverty; • Obesity and physical activity; • Smoking, alcohol and drug use amongst children; • Immunisation; • Bullying and emotional wellbeing; • Children injured or killed in road traffic accidents; • Hospital admissions for mental health conditions. | <ul style="list-style-type: none"> • England; • Regional and district level. | 2013 - Contemporary (seeks to draw together latest data on range of indicators – but time frame constrained by the original data sources incorporated within resource) | <ul style="list-style-type: none"> • Raw data; • Allows identification of where incidence of specific issues is significantly lower or higher than other local authorities in England. | Yes | Yes via Local Authority Child Health Profiles resource (but not all indicators available). |
| | Infant Mortality Profiles | <ul style="list-style-type: none"> • Infant mortality; • Deprivation; • Socio-demographics; • Teenage conceptions; • Pregnancy and infancy; • Immunisation. | <ul style="list-style-type: none"> • England; • Primary Care Trust. | 2013 - Contemporary (seeks to draw together latest data on range of indicators – but time frame constrained by the original data sources incorporated within resource) | <ul style="list-style-type: none"> • Raw data; • Allows identification of where incidence of specific issues is significantly lower or higher than other local authorities in England. | Yes | Yes via Local Authority Child Health Profiles resource (but not all indicators available). |

(continued overleaf)

| Theme: | Resource: | Aspects explored: | Spatial scale: | Time frame: | Analysis: | Interactive mapping: | Data can be downloaded: |
|--------|---|---|--|---|--|--------------------------------------|--|
| | Breastfeeding profiles | <ul style="list-style-type: none"> Demographics and deprivation; Breastfeeding outcomes; Health outcomes (hospital admissions). | <ul style="list-style-type: none"> England; District level. | Contemporary (seeks to draw together latest data on range of indicators – but time frame constrained by the original data sources incorporated within resource) | <ul style="list-style-type: none"> Raw data; Allows identification of where incidence of specific issues is significantly lower or higher than other local authorities in England. | Yes | Yes via Local Authority Child Health Profiles resource (but not all indicators available). |
| | NHS Atlas of Variation in Children and Young Adults | <ul style="list-style-type: none"> Expenditure; Health promotion and disease prevention; Incidence of specific conditions and illnesses. | <ul style="list-style-type: none"> England; District and Primary Care Trust. | 2007/8 to 2009/10 | Yes | Yes | No |
| | JSNA Navigator – Children and Young People | <ul style="list-style-type: none"> Population (age, sex, ethnicity, population projections, births, infant deaths and child mortality); Children and young people with specific needs (homelessness, special educational needs and disability, teenage pregnancy, NEETs, young offenders); Social and place wellbeing (deprivation and poverty, education and employment, exercise and recreation, crime and disorder); Lifestyle and health improvement (obesity and physical activity, healthy starts, risky behaviours, immunisation); Health and wellbeing status (health at birth, illness, injuries and accidents, development issues, death and end of life); Service utilisation. | <ul style="list-style-type: none"> England; District and Primary Care Trust. | Contemporary (seeks to draw together latest data on range of indicators – but time frame constrained by the original data sources incorporated within resource) | Raw data | Yes via ChiMat Atlas | No |

| Theme: | Resource: | Aspects explored: | Spatial scale: | Time frame: | Analysis: | Interactive mapping: | Data can be downloaded: |
|----------|---|---|---|-----------------------------|---|---|---|
| | Animated Map of Fertility for England and Wales | Total fertility rate | <ul style="list-style-type: none"> England and Wales; District level. | 1982-2010 | Raw data | Yes (but animation of time series data) | No |
| | Animated Map of Mortality for England and Wales | Mortality rates by gender | <ul style="list-style-type: none"> England and Wales; District level. | 2001-2010 | Raw data | Yes (but animation of time series data) | No |
| | Animated Map of Life Expectancy for England and Wales | Life expectancy by gender | <ul style="list-style-type: none"> England and Wales; District level. | 1991-2010 | Raw data | Yes (but animation of time series data) | No |
| | Disease Prevalence Models | Provides estimates of prevalence of following diseases by age, ethnicity and gender: <ul style="list-style-type: none"> Cardiovascular disease; Chronic kidney disease; Chronic obstructive pulmonary disease; Coronary heart disease; Diabetes Hypertension Stroke. | <ul style="list-style-type: none"> England and Wales; District level, primary care trust and GP practice level. | 2011 | Raw data | No | Yes |
| Diabetes | Diabetes Community Health Profiles | <ul style="list-style-type: none"> Demographic characteristics of population; Deprivation; Incidence of diabetes; Care and treatment of diabetes; Prevalence of diabetes related complications Provision of, and spending on, diabetes care. | <ul style="list-style-type: none"> England; PCTs. | 2008/9 to 2010/11 | <ul style="list-style-type: none"> Raw data; PCTs clustered on basis of diabetes profile. | No. | No. |
| | Diabetes Prevalence Model | <ul style="list-style-type: none"> Prevalence and predicted levels of diabetes; Impact of obesity on prevalence of diabetes. | <ul style="list-style-type: none"> England; Districts | 2012 (estimates up to 2030) | Raw data | No. | Yes – enables user to refine estimates based upon deprivation levels and ethnicity. |

| Theme: | Resource: | Aspects explored: | Spatial scale: | Time frame: | Analysis: | Interactive mapping: | Data can be downloaded: |
|--------------|---|--|--|---|--|----------------------|-------------------------|
| Older People | Older People's Health and Wellbeing Atlas | <p>Extensive range of indicators relating to older people's health and wellbeing divided into following themes:</p> <ul style="list-style-type: none"> • Age and gender profile of elderly population; • Public health outcomes – life expectancy, disability, injuries, excess winter deaths, etc.; • Hospital stays; • Deaths and cause of death; • Sensory impairment; • Social care. | <ul style="list-style-type: none"> • England; • Districts | 2011 | <ul style="list-style-type: none"> • Raw data; • Allows identification of where incidence of specific issues is significantly lower or higher than other local authorities in England. | Yes | Yes |
| End of Life | End of Life Care Profiles | <ul style="list-style-type: none"> • Population; • Deaths, place of death; • Cause of death; • Deaths in hospital; • Social care and care homes; • Expenditure. | <ul style="list-style-type: none"> • England; • Districts and PCTs. | 2012 | <ul style="list-style-type: none"> • Raw data; • Allows identification of where incidence of specific issues is significantly lower or higher than other local authorities in England. | Yes | Yes |
| Cancer | Skin Cancer Profiles | <ul style="list-style-type: none"> • Incidence of, and mortality from, skin cancer; • Contributory factors; • General health of population. | <ul style="list-style-type: none"> • England; • Districts and PCTs. | 2009 | <ul style="list-style-type: none"> • Raw data; • Allows identification of where incidence of specific issues is significantly lower or higher than other local authorities in England. | Yes | Yes |
| | Cancer e-Atlas | Incidence and mortality statistics, and survival estimates, by cancer type | <ul style="list-style-type: none"> • United Kingdom; • PCTs and cancer networks. | <ul style="list-style-type: none"> • 2006-8 (incidence) • 2007-2009 (mortality); • 2008 (survival estimates) | <ul style="list-style-type: none"> • Raw data; • Allows identification of where incidence of specific issues is significantly lower or higher than other local areas in England. | Yes | Yes |
| | General Practice Profiles for Cancer | <ul style="list-style-type: none"> • Demographic characteristics; • Cancer screening; • Cancer waiting times; • Presentation and diagnostics. | <ul style="list-style-type: none"> • England; • CCG and GP Practice. | 2011/12 for most indicators | <ul style="list-style-type: none"> • Raw data; • Allows identification of significance of scores compared to other localities | Yes | Yes |

| Theme: | Resource: | Aspects explored: | Spatial scale: | Time frame: | Analysis: | Interactive mapping: | Data can be downloaded: |
|---------------|--|--|---|---------------------------------|--|----------------------|-------------------------|
| Mental Health | Community Mental Health Profiles | <ul style="list-style-type: none"> • Wider determinants of health; • Risk factors; • Levels of mental health and illness; • Treatment; • Outcomes. | Upper tier authorities in England | Latest available (2010 onwards) | <ul style="list-style-type: none"> • Raw data; • Allows identification of where incidence of specific issues is significantly lower or higher than other local areas in England. | No – static maps | No. |
| Alcohol | Local Alcohol Profiles for England | <ul style="list-style-type: none"> • Alcohol related forms of mortality and morbidity; • Alcohol related hospital admissions; • Alcohol related criminal offences; • Binge drinking estimates; • Treatment. | Local authority and primary care trusts | Latest available | <ul style="list-style-type: none"> • Raw data; • Allows identification of where incidence of specific issues is significantly lower or higher than other local areas in England. | Yes | Yes |
| Obesity | See Community Health Profiles | | | | | | |
| Sexual Health | Sexual Health Balanced Scorecard | <ul style="list-style-type: none"> • Teenage conceptions; • Incidence of sexually transmitted diseases. | Local authority and primary care trusts | Latest available | <ul style="list-style-type: none"> • Raw data; • Allows identification of where incidence of specific issues is significantly lower or higher than other local areas in England. | Yes | Yes |

| Theme: | Resource: | Aspects explored: | Spatial scale: | Time frame: | Analysis: | Interactive mapping: | Data can be downloaded: |
|---------------------|---|--|---|--|--|----------------------|-------------------------|
| Smoking | Local Tobacco Control Profiles for England | Smoking related forms of mortality and morbidity; | District level | Latest available (but years vary depending upon indicator) | <ul style="list-style-type: none"> Raw data; Allows identification of where incidence of specific issues is significantly lower or higher than other local areas in England. | Yes | Yes |
| Teenage Pregnancy | Teenage Pregnancy Atlases | <ul style="list-style-type: none"> Teenage conceptions and abortion rates; Socio-economic and educational backgrounds. | County, district and ward level | 2008-2010 | <ul style="list-style-type: none"> Raw data; Allows identification of where incidence of specific issues is significantly lower or higher than other local areas in England. | Yes | Yes |
| Health inequalities | Health Inequality Indicators for Local Authorities and Primary Care Organisations | <ul style="list-style-type: none"> Slope index of inequality; Life expectancy at birth; Deprivation. | Local authority and primary care trust. | 2006-2010 | <ul style="list-style-type: none"> Raw data; Allows identification of where incidence of specific issues is significantly lower or higher than other local areas in England. | Yes | Yes |

| Theme: | Resource: | Aspects explored: | Spatial scale: | Time frame: | Analysis: | Interactive mapping: | Data can be downloaded: |
|---------------------------------|--|---|----------------|-------------|--|----------------------|-------------------------|
| Health inequalities (continued) | Marmot Indicators for Local Authorities in England | <ul style="list-style-type: none"> • Male and female life expectancy • Slope indices of inequality (SII) for male and female life expectancy • Slope indices of inequality (SII) for male and female disability-free life expectancy • Children achieving a good level of development at age 5 • Young people who are not in education, employment or training (NEET) • People in households in receipt of means-tested benefits • Slope index of inequality for people in households in receipt of means-tested benefits. | District | 2012 | <ul style="list-style-type: none"> • Raw data; • Allows identification of where incidence of specific issues is significantly lower or higher than other local areas in England. | Yes | No |

Issues you should have understood:

- Aspects of key health outcomes, morbidity and health-related lifestyles and behaviour to include within your public health profile;
- The concept of health inequalities, and the issues surrounding its measurement.

Other components of the toolkit which are related to this Unit:

- Units A2 and A3 Individual and wider determinants of health

B5 Identifying population and socio-demographic characteristics, the nature of your locality – and the structure of your local economy

Key words: Population characteristics, social demography, social and economic barriers

B5.1 Introduction:

Now that you have populated the first part of your local public health profile with details relating to health outcomes within your locality, the next task is to start to explore some of the underlying factors that might explain the presence or absence of health inequalities within your local authority area. The first broad set of issues you need to consider and measures relate to the 'people poverty' component of your local public health environment. This Unit (along with Unit B7 on aspects of social capital and social well-being) is designed to help you

Issues explored:

- Key issues in relation to population characteristics and social demography;
- How these can relate to health outcomes and the presence of health inequalities.

identify the issues relating to aspects of the socio-demographic characteristics that maybe linked to negative health outcomes and the presence of health inequalities. The Unit then provides you with a guide to the official data and mapping resources that can enable you to identify key features of your population and its social make-up.

B5.2 Health outcomes and the relationship with population and social demographic characteristics

The link between individual characteristics, negative health outcomes and the experience of health inequalities has been demonstrated consistently over time by an extensive body of literature (e.g. Wilkinson, 1997; Davey Smith et al, 2002; Marmot, 2005; Graham, 2009). This relationship between social demography and health remains whether you confine your focus onto age (e.g. Chandola et al, 2007), social class (e.g. McFadden et al, 2009), ethnicity (e.g. Smith et al, 2009), or gender (e.g. Malmusi et al, 2012).

So given this evidence, what aspects of the make-up of your local population do you need to incorporate within your profile? The essential issues that you need to consider can be broken down into the following components:

- General structure of the population (i.e. population levels and characteristics of population change and location);
- Physical characteristics (e.g. age, ethnicity, sex, disability);
- Ascribed or self-determined characteristics (e.g. social class, gender, religion);
- Household structures (i.e. household formation and relationships);
- Population homogeneity and diversity.

In order to understand the importance of each of these components we need to explore in more detail the link between specific population and socio-demographic characteristics, and health outcomes and inequalities:

Population structure and location

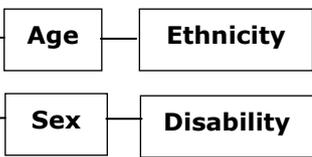
Population change (natural arising from births and deaths) plus internal and external migration levels.

Population change is a relatively slow phenomenon. However, migration, increases in employment opportunities, or improvements in infrastructure can result in more rapid forms of population change that can place significant demands upon health (and other public) services.

Population distribution (population density and sparsity).

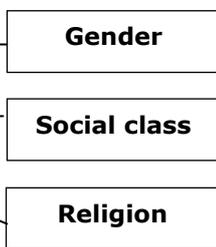
Population density is often used as a proxy for measuring the urban nature of localities which can be associated with a range of health problems arising from overcrowding, pollution, lack of access to green spaces and lower levels of mental wellbeing. Higher levels of population sparsity (which is a better mechanism for identifying the rural nature of localities) can lead to access issues both in relation to healthcare provision, and essential services which can impact upon quality of life, social mobility and opportunities.

Physical characteristics



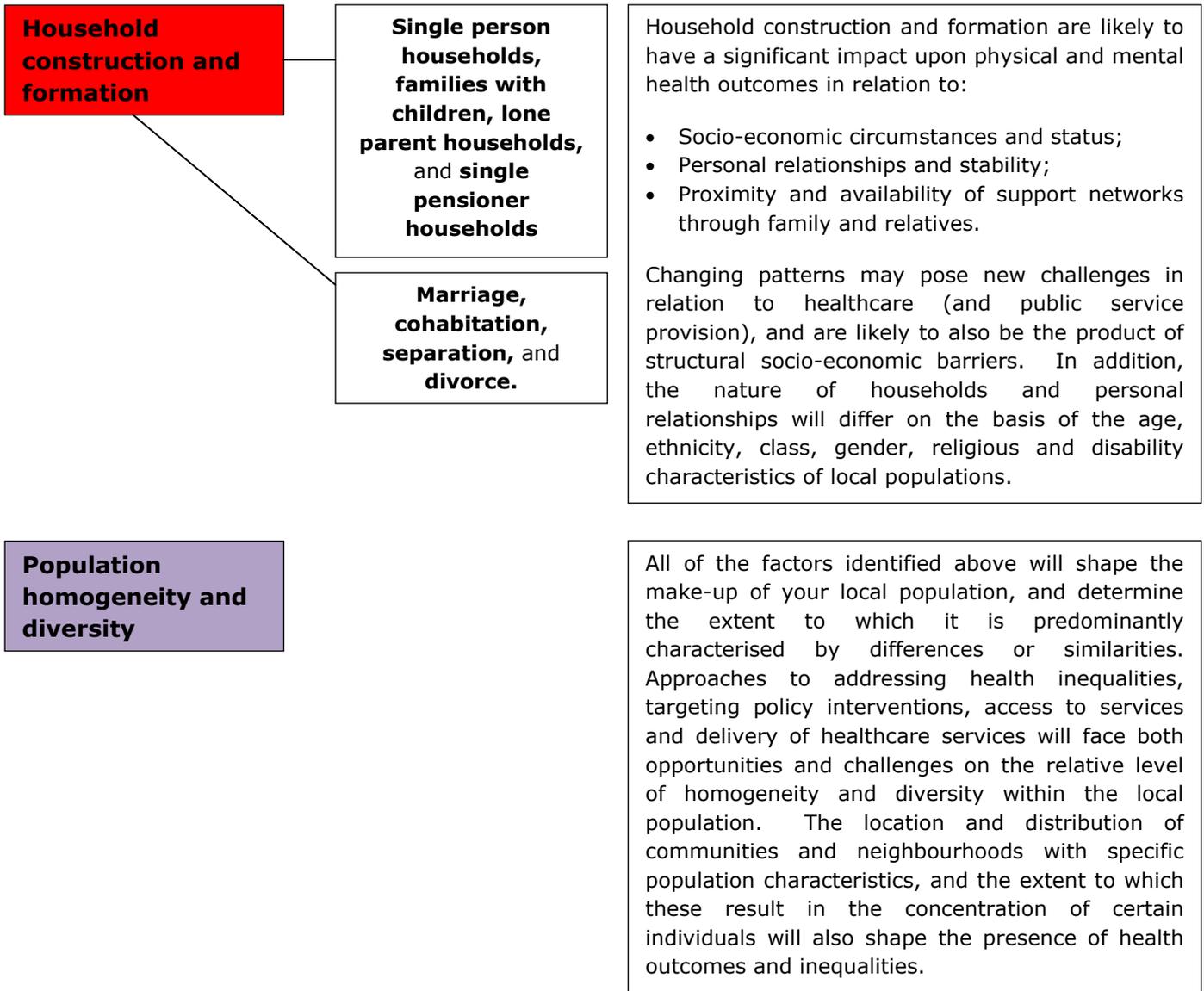
There are both specific health conditions, and levels of demand on healthcare services, posed by different age groups (with much higher levels of utilisation by children and the elderly). Certain health outcomes and conditions are more prevalent amongst certain sections of the population on the basis of both ethnicity and sex. Higher levels of ethnic minority populations may also result in service delivery issues in relation to language and culture. Attitudes towards healthcare utilisation, and personal health and wellbeing, may also vary between different ethnic groups. Structural barriers arising in relation to age, ethnicity, sex, and disability may also impact upon income levels, educational and employment opportunities, social status, public service utilisation, participation in local decision-making which impact upon the physical and mental wellbeing of individuals.

Ascribed characteristics



Raises similar issues to those pertaining to physical characteristics of local populations in terms of:

- levels of demand on, and utilisation of healthcare services;
- attitudes towards healthcare utilisation and personal health and wellbeing may also vary on the basis of gender, class or religion;
- structural barriers identified above are also faced by individuals of different genders, class, and religion.



B5.3 Guide to available data sources and resources on population structures and characteristics – and the socio-economic circumstances and opportunities they face:

Table 5.1 (overleaf) provides a guide to official published data relating to the population characteristics of local areas in terms of the components of local populations identified in the discussion above. As well as drawing upon the primary sources relating to the population such as the Census, ‘population’ based classifications of localities have also been included within this table. Furthermore, sources of data relating to the structure and sustainability of local economies which both reflects and determines the socio-economic barriers, opportunities and degrees of social and geographical mobility experienced by different population segments are also included. More specific discussion of both the nature of deprivation /exclusion arising from (and contributing to) poor health outcomes and health inequalities (and where data can be obtained on this) are provided in Unit B6.

Table 5.1 Population, socio-demographic and local economic data and indicators:

| Theme: | Resource: | Aspects explored: | Spatial scale: | Time frame: | Analysis: | Interactive mapping: | Data can be downloaded: |
|--|---|---|--|---------------------------------------|---|--|-------------------------|
| Population structure and socio-demographic characteristics of local areas. | Census (ONS) via Neighbourhood Statistics | <p>Extensive coverage of wide range of population and socio-demographic characteristics. Using the Key Statistics option will deliver information on:</p> <ul style="list-style-type: none"> • Age structure; • Country of birth; • Dwellings, household spaces and accommodation types; • Ethnicity; • Household composition; • Housing amenities; • Living arrangements; • Lone parent households; • Marital and civil partnership status; • National identity; • Social class; • Qualifications; • Religion; • Tenure; • Usual resident population. <p>Using the 'Quick Statistics' option reveals a greater number of datasets relating to various aspects of the population. Availability of specific data is dependent upon the spatial scale at which the data is required.</p> | <ul style="list-style-type: none"> • England and Wales; • Local authority, ward, Census Output Areas, Lower SOAs, Middle SOAs, primary care organisations, health authorities, education authorities, parliamentary constituency, and parish | 2011 (2001 results available as well) | Raw data and percentage/rate figures. Provides comparative data on district, region and country (but this is dependent upon spatial scale at which data is accessed). | Has facility to map specific indicators built into Neighbourhood Statistics resource | Yes |

(continued overleaf)

| Theme: | Resource: | Aspects explored: | Spatial scale: | Time frame: | Analysis: | Interactive mapping: | Data can be downloaded: |
|--|--|---|---|---|---|--|-------------------------|
| Urban and rural classifications of localities | Rural/Urban Definition (ONS/DEFRA) | Classification of sub-local authority areas based upon level of sparsity within following settlement classifications: <ul style="list-style-type: none"> • Urban (population over 10,000); • Town and Fringe; • Village; • Hamlet and Isolated Dwellings. | <ul style="list-style-type: none"> • England and Wales; • Census Output Areas, Lower SOAs, Middle SOAs. | As at 2005 | Raw data | Static map within associated publication | Yes |
| | | Classification of local authority areas based upon population size and distribution across types of settlements. Local authorities classified on basis of: <ul style="list-style-type: none"> • Major Urban; • Large Urban; • Other Urban; • Significant Rural; • Rural 50; • Rural 80. | <ul style="list-style-type: none"> • England and Wales; • District. | Originally created in 2005 – updated to take account of local government reorganisation in 2009 | Raw data | Static map within associated publication | Yes |
| Socio-demographic, economic, deprivation and resource based comparison | Nearest neighbour model (CIPFA) | <ul style="list-style-type: none"> • Population, population density and sparsity, daytime population; • Age structure; • Working age population; • Unemployment; • Offices and shops; • Housing conditions; • Health; • Local tax base; • Deprivation. | <ul style="list-style-type: none"> • England, Scotland and Wales; • County and district level. | Contemporary (seeks to draw together latest data on range of indicators – but time frame constrained by the original data sources incorporated within resource) | <ul style="list-style-type: none"> • Identification of closest fifteen or thirty local authority comparator areas; • Allows user to restrict comparison to specific type of local authority area. | No | No |

| Theme: | Resource: | Aspects explored: | Spatial scale: | Time frame: | Analysis: | Interactive mapping: | Data can be downloaded: |
|---|--|---|---|---|---|---|-------------------------|
| Socio-demographic and economic comparison (continued) | National Statistics Area Classifications (ONS) | <p>Classification of local authority areas based upon socio-demographic and economic characteristics of local population and local area. Classifies local authority districts into different locality types within Supergroups (eight types of locality), Groups (fourteen types of locality) and Subgroups (twenty-five types of locality). Subgroup classification of local areas based upon following classes (and subclasses):</p> <ul style="list-style-type: none"> • Regional Centres; • Centres with Industry (A and B); • Thriving London Periphery (A and B); • London Suburbs (A and B); • London Centre (A and B); • London Cosmopolitan (A and B); • Prospering Smaller Towns (A,B and C); • New and Growing Towns; • Prospering Southern England; • Coastal and Countryside (A, B and C); • Industrial Hinterlands (A and B); • Manufacturing Towns (A and B); • Northern Ireland Countryside. | <ul style="list-style-type: none"> • United Kingdom; • District, ward and Output Area level; • Primary Care Organisations. | 2001 – update currently in development to take account of 2011 Census | <ul style="list-style-type: none"> • Identification of local areas that fall within same local area class; • Also enables user to identify corresponding local authority areas (akin to CIPFA Nearest Neighbour Model – but only identifies five closest localities). | <ul style="list-style-type: none"> • No – static maps available from ONS website; • Area classifications contained within many other official statistical resources and tools as filter mechanism to enable user to focus on specific locality types. | Yes |

| Theme: | Resource: | Aspects explored: | Spatial scale: | Time frame: | Analysis: | Interactive mapping: | Data can be downloaded: |
|---|---|---|--|---|---|--|---|
| Local economy and labour market characteristics | NOMIS Official Labour Market Statistics | <ul style="list-style-type: none"> Resident population; Employment and unemployment; Economic activity and inactivity; Employment by occupation; Qualifications; Earnings by residence and workplace; JSA claimants; Job density and employment by sector of economy. | <ul style="list-style-type: none"> England, Scotland and Wales; Local authority, ward, LEAs. | Various – contemporary data (2012-13) for most indicators. Employment by sector 2008. | <ul style="list-style-type: none"> Time series analysis; Allows for user comparison across local areas by region. | Yes – via Neighbourhood Statistics | Yes – enables user to create wide variety of bespoke datasets on basis of theme, geography and timeframe; Much of the data presented within the profiles is drawn from various labour force/benefits/employment datasets and surveys. These can be accessed via the NOMIS website – and many of the indicators can also be found on the Neighbourhood Statistics website. |

Issues you should have understood:

- Aspects of key population and socio-demographic characteristics;
- The range of official data sources that exist in relation to population structure, area classification and the characteristics of local economies.

Other components of the toolkit which are related to this Unit:

- Unit B6 Social deprivation and social exclusion;
- Unit B7 Social capital and social wellbeing.

References:

- Chandola, D. et al (2007) 'Social inequalities in self-reported health in early old age: follow-up of prospective cohort study', *British Medical Journal*, 334(990);
- Davey Smith, G. et al (2002) 'Health inequalities in Britain: Continuing increases up to the end of the 20th century', *Journal of Epidemiology and Community Health*. 56(6), pp. 434-435;
- Graham, H. (2009) *Understanding Health Inequalities*. London: McGraw-Hill;
- Malmusi, D. et al (2012) 'Perception or real illness? How chronic conditions contribute to gender inequalities in self-rated health', *Journal of European Public Health*, 22(6), pp. 781-786;
- Marmot, M. (2005) 'Social determinants of health inequalities'. *The Lancet*, 365 (9464), pp. pp. 1109-1124;
- McFadden, E. et al (2009) 'Does the association between self-rated health and mortality vary by social class?' *Social Science and Medicine*, 68(2), pp. 275-280;
- Smith, N. et al (2009) 'Intergenerational continuities of ethnic inequalities in general health in England', *Journal of Epidemiology and Community Health*. 63(3), pp. 253-258;

Wilkinson, R. (1997) 'Socioeconomic determinants of health. Health inequalities: relative or absolute material standards?', *British Medical Journal*, 314(7080), pp. 591-595.

B6 Identifying levels of deprivation and exclusion within your local authority area

Key words: Deprivation and health outcomes, absolute poverty, relative poverty, social exclusion, official measures of deprivation

B6.1 Introduction

There is unsurprisingly a very strong link between health outcomes/inequalities/lifestyles and levels of deprivation (e.g. Black et al, 1980; Acheson, 1998; Curtis et al, 2004; Shaw et al, 2008; Marmot Review, 2010). Whether we examine life expectancy (Woods, et al, 2005), infant mortality (Congdon and Southall, 2005), causes of death such as cancer and heart disease (Gartner et al, 2011), teenage pregnancy (McCulloch, 2001), alcohol and drug abuse (Boardman et al, 2011), smoking (Duncan, et al, 1999), obesity or lack of physical activity (Brunner et al, 2010), the relationship between deprivation and health outcomes remains a clear one. There is also now a growing recognition that social exclusion can also have a significant impact upon the health and wellbeing of individuals (e.g. Byrne, 2005; Bonell et al, 2007; Morgan et al, 2007).

Issues explored:

- What do we mean by deprivation and exclusion?
- Understanding the difference between absolute and relative deprivation
- How is deprivation officially measured in England?
- Where can I find data on levels of deprivation within my local authority area?

Unfortunately understanding the nature of social deprivation and exclusion, and how to capture the scale and different dimensions of deprivation/exclusion present within specific local populations and areas, is not without its problems (e.g. Doyal and Gough, 1991; Cummins et al, 2005; Spicker, 2007). This is because seeking a definition of, and approach to measuring, deprivation that is universally accepted and applicable in relation to different localities and populations, has proved an elusive goal. The aim of this Unit therefore is to introduce you to the key issues concerning the nature and measurement of deprivation/exclusion in order that you have a more developed appreciation of the nature of these concepts – and the problems that surround their measurement. The Unit also introduces the current official approach to measuring deprivation in England: the English Indices of Deprivation 2010 – and identifies where you can obtain data about levels of deprivation and exclusion within your local authority area.

B6.2 What do we mean by deprivation and exclusion?

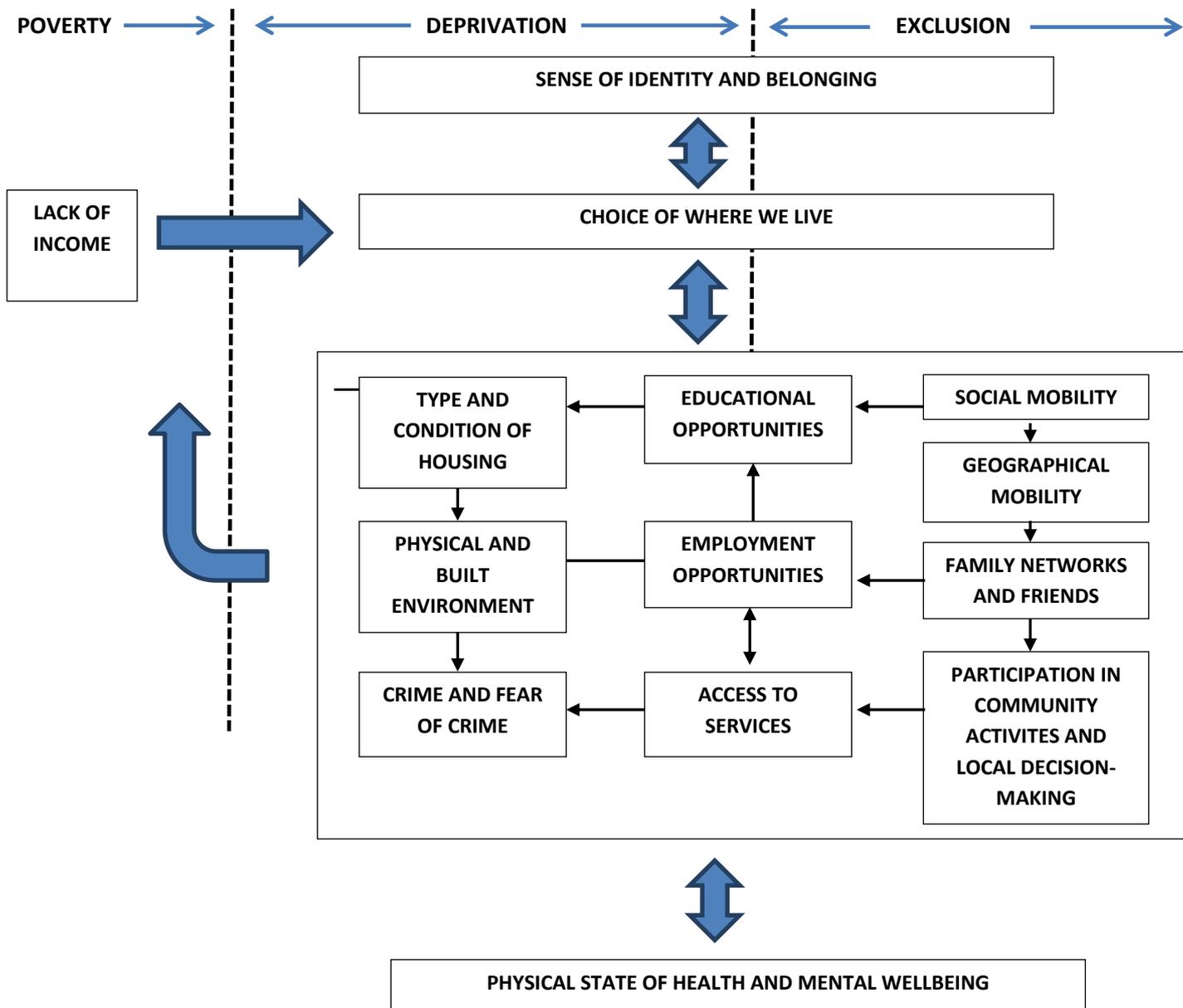
You probably think that you are familiar with the concepts of poverty, deprivation and exclusion – and have a fairly clear idea what they each mean. However, one of the major problems that we face in getting to grips with the circumstances which each of these terms refers to is that they are often used interchangeably by Governments, policy-makers and the media. In some senses, 'deprivation' and 'exclusion' can be used as umbrella terms which cover a range of adverse circumstances, whereas 'poverty' refers to a specific form of deprivation. It is also possible to view these concepts as sitting on a continuum that represents the evolution of the Welfare State and the responses of the State to an array of social problems. The enlightened Victorians concern with 'the Poor' evolved into a wider concern with aspects of deprivation (such as housing, health or education) during the largest part of the Twentieth Century. In contrast, 'exclusion' is the relatively new kid on the block in terms of thinking about social problems and social relations, and our approach to tackling social issues within

the United Kingdom – and in turn has paved the way for the current concern with issues surrounding social wellbeing (see Unit B7).

So the first thing we need to do is to achieve some clarification:

| | |
|--------------------|--|
| POVERTY | <p>Often used as a generic phrase to represent numerous individual circumstances, 'poverty' in a strict sense actually refers to a specific form of deprivation: lack of money. Addressing low incomes, and equipping individuals with the means of securing higher incomes (and hence securing better housing or education for their children), therefore represents the policy responses that stem from this conception of deprivation.</p> |
| DEPRIVATION | <p>Deprivation refers to a range of circumstances that both stem from, and contribute to, levels of poverty. In a narrow sense, deprivation concerns the basic essentials of life which all individuals and households need to survive. All of us require a permanent form of access to shelter and decent housing conditions. We need to enjoy good physical and mental health. We need to be able to attain a level of education and skills that will enable us to participate in the labour market – and access to forms of employment which offer us stable and acceptable income levels, and which promote rather than reduce our physical and mental wellbeing. We need also to be free of the physical and mental harm that is brought about by either being victims of crime, or living in fear of crime. Finally, we need to live and work in physical and built environments that promote our wellbeing, and which do not impact upon our physical health (e.g. pollution) or mental welfare (e.g. lack of access to green spaces).</p> |
| EXCLUSION | <p>Whereas deprivation focuses our attention in a broadly material sense onto issues such as homelessness, unemployment, poor health, crime, etc., exclusion is concerned with the problems individuals experience as a result of being prevented from participating in the social relationships, networks, interactions and opportunities that the majority of us take for granted. Exclusion therefore covers all aspects of discrimination on the grounds of gender, ethnicity, disability, age, sexuality, religion or any other form of self-identity or value system. It also refers to levels of social and geographical mobility, and access to the means or instruments of social opportunity. Furthermore, it removes our focus upon material deprivation, and our conception of poverty/deprivation as an 'urban' problem. It helps us to identify the forms of exclusion experienced by, for example, rural communities where the cause of the problem is 'distance' and the relative lack of access to essential services and opportunities. Peoples' lack of physical and mental wellbeing can also arise as a result of the lack of support networks and interactions arising from positive and stable family relationships, and the absence of a network of friends. Finally, exclusion can stem from a lack of participation in community events or poor levels of community spirit, as well as opportunities to influence local decisions that affect the communities we live in and to participate in community driven responses to social problems.</p> |

Although the discussion above attempts to distinguish the difference between these concepts, in reality 'poverty', 'deprivation' and 'exclusion' are clearly inter-related circumstances that can have both a profound, and mutually re-enforcing, impact upon one another. If we start to think about how specific forms of poverty, deprivation and exclusion impact upon our physical and mental health, we can also quickly identify both their overlapping and re-enforcing nature:



Furthermore, governments and policy-makers have now started to recognise that individuals and households rarely suffer from a single form of deprivation or exclusion that requires a single intervention or remedy.



B6.3 Understanding the difference between absolute and relative deprivation

When governments started to tackle issues such as poor health in the late nineteenth century, the situation that many individuals found themselves in was one of abject poverty and deprivation. The primary role of the welfare state was therefore to tackle extreme forms of poverty and deprivation, and to improve the life chances of those inhabiting the lowest rungs in society. Government intervention was therefore premised upon the concept of:

ABSOLUTE DEPRIVATION

There is a minimum level or standard of living below which individuals should not have to exist. The role of the state is therefore to raise people above a minimum threshold of existence, or to try and guarantee a certain level of attainment or outcome. The minimum wage, benefits, the introduction of state pensions, compulsory education, and council housing are all examples of policy initiatives and measures that are based upon the concept of absolute deprivation.

Absolute deprivation is, however, a difficult idea to put into practice because arriving at a common and accepted understanding of what constitutes a minimum level of existence is a difficult and often contentious issue. All of us would readily agree that everyone needs a form of physical shelter, a basic level of education, a minimum income, and a form of sustainable employment. But precisely how much of each of these is required is clearly open to conjecture. For example, in relation to income levels and minimum wages, welfare benefits and state pensions, these all need to keep abreast of changing levels in prosperity. If we turn to education, the compulsory level of education has had to move from primary through to further education over time in recognition of the changing expectations of the labour market in relation to the minimum level of education and skills that employers now require. A further complication is the presumption that any minimum level is suitability fit for purpose in relation to all elements of the population and all areas of the country. Thus there is an argument that just as the London allowance in pay recognises the higher cost of living in the Capital, forms of income guarantee and benefit levels should also reflect variations in the cost of living in different parts of the country. But by how much benefit levels should differ between Newham and Newcastle is an issue that is likely to provoke considerable debate between residents in these respective boroughs.

Although poverty and deprivation still remain a significant issue today, by the 1960s substantial progress had been made in tackling chronic poverty, unemployment, housing and poor health in the United Kingdom. Academics such as Peter Townsend now pointed to two further problems that remained with the concept of absolute deprivation:

RISE IN SOCIAL EXPECTATIONS

General improvements in living standards have resulted in many luxury or non-essential items becoming the norm e.g. owning your own home, owning a car, going abroad on holiday, or having digital television and broadband. In cash terms, these items might still be defined as 'luxury' goods but media portrayals of normal 'family life' have converted them into 'essentials'.

GROWING LEVELS OF INEQUALITY

Unfortunately whilst basic standards of living have risen, the gap between rich and poor individuals/areas has not (see for example Wilkinson and Pickett, 2010; Dorling, 2012). This brings into question whether gaps in income levels, educational opportunities, or health outcomes are acceptable - and whether the state should promote equality of opportunity (i.e. everyone has an equal opportunity to succeed or achieve) or equality of outcome (i.e. everyone should have equal levels of income or life expectancy).

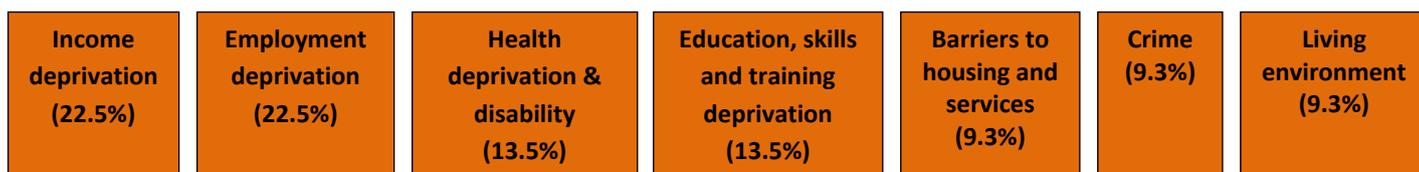
The important point to understand here is that changing social expectations, and rising levels of inequality, suggest that as well as paying attention to absolute levels of deprivation we should also consider **relative levels of deprivation** amongst households and areas. We therefore not only need to think about individuals who lack something essential based upon a minimum standard, but also those individuals who lack an amount of a material (e.g. housing) and non-material items (e.g. engagement in social networks) relative to other groups within society.

B6.4 How is deprivation officially measured in England?

The current approach to officially measuring deprivation at the local (and sub local) authority level in England is the Department for Communities and Local Government’s English Indices of Deprivation 2010 (EID2010)². Over the last twenty five years, there have been various attempts to develop official measures of deprivation for local areas in England (e.g. Index of Local Conditions, 1991; Index of Local Deprivation, 1998; Indices of Deprivation 2000, English Indices of Deprivation, 2004; English Indices of Deprivation, 2007). These various indexes of deprivation have evolved to take account of:

- changes in local authority boundaries;
- the increasing availability and improved reliability of data (for example a crime domain was only added in 2007 following the standardisation of the recording of official crime statistics by police forces across England and Wales);
- the replacement of wards and census enumeration districts with local super output areas (LSOAs) as the preferred smallest area unit of measurement (see Unit B3),
- changes in the understanding of (and weighting given to) different aspects of deprivation, including the recognition of the multiple nature and causes of deprivation.

The Indices of Deprivation 2000 marked a significant departure from previous deprivation measures in seeking to aggregate previously stand-alone indicators into a series of domains representing specific dimensions of deprivation. The EID2010 (which employs predominantly the same methodology as the 2004 and 2007 indices) has continued the approach of identifying separate components of multiple deprivation, and is based upon the following seven (differently weighted) domains (and sub-domains):



In addition to these seven domains, the indicators and data employed to generate the indices of deprivation have also been utilised to create two distinct further indexes: ‘deprivation affecting children’ and ‘deprivation affecting older people’.

As with previous official measures of deprivation, the EID2010 represents a *relative* rather than an *absolute* measure of deprivation at the local level. The scale of deprivation recorded within each locality represents the need for central government resources relative to all other areas in England rather than based upon occupying a position above or below a minimum threshold of income, employment, health, educational performance, crime, etc. Each of the 32,844 LSOAs in England has been placed in ranked order (with ‘1’ representing the most deprived LSOA) for each domain. Given

² Northern Ireland, Scotland and Wales all have their own alternative official approach to measuring local area deprivation.

the relatively small physical area and population size of an LSOA, the EID2010 enables local authorities and other public service organisations to identify hotspots of specific forms of deprivation within specific neighbourhoods. This also enables local policy-makers to identify the extent of inequalities within different parts of their local authority area, and to establish whether specific neighbourhoods face a specific issue (e.g. low incomes, lack of stable access to employment, high crime levels) or whether multiple forms of deprivation are present within a locality.

In addition to the measures of deprivation provided at the LSOA, the EID2010 also provides a summary version of the index at the all local authority level. This index is constructed using a similar methodology that involves combining a series of indicators in order to arrive at an overall score in relation to a specific aspect of deprivation. Local authorities at the district level are ranked out of 326 (with '1' representing the most deprived local authority area). Unlike the LSOA version of the indices which provides information on seven domains of specific types of deprivation, the local authority summary level version provides information on the following aspects of un-weighted deprivation:



The extent of deprivation score identifies the proportion of a local authority's population that is living in the most deprived LSOAs, whilst the local concentration of deprivation indicator identifies hotspots based upon the proportion of the district population living within specific LSOAs. The 'Average of LSOA scores' uses the ranked position of local authorities in order to identify the most deprived local authority area in England.

B6.5 Guide to available data sources and resources on deprivation and exclusion:

Table 6.1 (overleaf) provides a guide to the official published data relating to deprivation and exclusion, setting out the aspects covered, the spatial scale at which the data is available, the time frame for the data, whether the data is published in a raw format or has been subjected to any form of analysis, whether the data is available in the form of an interactive map, and finally whether it is possible to download the data from the relevant online source.

Table 6.1 Social deprivation and social exclusion data and indicators:

| Theme: | Resource: | Aspects explored: | Spatial scale: | Time frame: | Analysis: | Interactive mapping: | Data can be downloaded: |
|-------------|--|---|--|-------------|---|--|--|
| Deprivation | English Indices of Deprivation 2010 | <ul style="list-style-type: none"> Overall levels of deprivation; Income and employment deprivation; Extent and local concentration of deprivation. | <ul style="list-style-type: none"> England; District and county level | 2010 | <ul style="list-style-type: none"> Raw data; Relative levels of deprivation based upon ranking of local authority districts and Lower SOAs. | Yes – via Neighbourhood Statistics or via Atlas of the Indices of Deprivation 2010 for England (enables user to map deprivation at Lower SOA level). | Free access to online data downloads via DLCC website and Neighbourhood Statistics |
| | | <ul style="list-style-type: none"> Income; Employment; Health and disability; Education, skills and training; Barriers to housing and services; Crime; Living environment; Children and older people. | <ul style="list-style-type: none"> England; Lower SOA | 2010 | <ul style="list-style-type: none"> Raw data; Relative levels of deprivation based upon ranking of Lower SOAs. | Yes – via Neighbourhood Statistics | Free access to online data downloads via DLCC website and Neighbourhood Statistics |
| | English Index of Multiple Deprivation 2007 (preceded by English Indices of Deprivation 2004) | <ul style="list-style-type: none"> Overall levels of deprivation; Income and employment deprivation; Extent and local concentration of deprivation. | <ul style="list-style-type: none"> England; District and county level. | 2007 (2004) | <ul style="list-style-type: none"> Raw data; Relative levels of deprivation based upon ranking of Lower SOAs. | Yes – via Neighbourhood Statistics | Free access to online data downloads via DLCC website and Neighbourhood Statistics |
| | | <ul style="list-style-type: none"> Income; Employment; Health and disability; Education, skills and training; Barriers to housing and services; Crime; Living environment; Children and older people. | <ul style="list-style-type: none"> England; Lower SOA | 2007 (2004) | <ul style="list-style-type: none"> Raw data; Relative levels of deprivation based upon ranking of Lower SOAs. | Yes – via Neighbourhood Statistics | Free access to online data downloads via DLCC website and Neighbourhood Statistics |

| Theme: | Resource: | Aspects explored: | Spatial scale: | Time frame: | Analysis: | Interactive mapping: | Data can be downloaded: |
|---------------|---|--|--|-------------|---|--|-------------------------|
| Child poverty | Campaign to end Child Poverty | <ul style="list-style-type: none"> Overall level of child poverty | <ul style="list-style-type: none"> United Kingdom; District. | 2011 | <ul style="list-style-type: none"> Raw data. | No – static maps in associated publication | No |
| | HRMC Child Poverty Statistics | <ul style="list-style-type: none"> Overall level of child poverty based upon households in receipt of benefits – broken down by household type and number of children | <ul style="list-style-type: none"> United Kingdom; Region, county, district, wards, lower SOAs, parliamentary constituencies | 2010 | <ul style="list-style-type: none"> Raw data. | Yes (via Guardian Datablog) | Yes |

Issues you should have understood:

- The concepts of, and difference, between poverty, deprivation and exclusion;
- The difference between absolute and relative conceptions of deprivation;
- The potential problems surrounding the measurement of deprivation;
- Official approaches to the measurement of deprivation within England.

Other components of the toolkit which are related to this Unit:

- Unit B7 Social capital and social wellbeing.

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B7 Social capital and social well-being

Key words: Social capital, social networks, community cohesion, social well-being and happiness

B7.1 Introduction:

In Unit A3 on place poverty and neighbourhood effects we saw the importance that community spirit and social networks can play not only in terms of delivering sustainable communities and social cohesion, but also in relation to addressing specific aspects of deprivation and health outcomes. Social capital and social cohesion were embraced as key policy drivers by governments and policy-makers alike from the late 1990s (Forrest and Kearns, 2001; Levitas, 2005; Millie, 2009). However, transforming this concern into concrete policy action was initially thwarted by methodological issues surrounding the conceptualisation and measurement of social capital (Narayan and Cassidy, 2001; Harpham et al, 2002; Van Deth 2003).

The absence of local level data relating to specific elements of social capital also meant that it was difficult for local public services organisations to harness the power of social capital because they had no clear means of identifying the level or nature of social capital within specific neighbourhoods within their locality. As will become clear from the content of this Unit, a series of initiatives were put into place in order to generate local level measures of social capital which could inform national, regional and local policy-making. From a contemporary policy perspective, however, social capital has now become a slightly passé term. Governments and academics alike have now started to turn their attention to a concern with issues surrounding social wellbeing and happiness (Jordan, 2008; Layard, 2011) – and as a result organisations such as the ONS have responded through the development of new indicators and datasets which focus upon these issues (social capital's presence on the ONS website now appears as a subset of 'Societal Wellbeing' under 'People and places'). It is worth noting however that the current Coalition Government's Big Society project, whilst focusing upon aspects of philanthropy and being employed as a mechanism for public service reform, does in terms of its concern with community empowerment and voluntarism embrace many aspects of the social capital agenda (Blond, 2010; Jordan, 2010). Indeed, given the current emphasis upon citizen empowerment and participation in local decision-making, social capital is still alive and well albeit in a different guise.

The aim of this Unit therefore is to:

- Explore the dimensions of social capital that you need to try and capture within your local neighbourhoods;
- Introduce you to data sources containing local level indicators that reflect elements of social capital;
- Bring you up to date with the development of measures of social well-being and happiness at the local level.

B7.2 What aspects of social capital and social well-being should you try to measure?

Social Capital

Social capital is, in essence, concerned with the extent to which the levels of social cohesion, social interaction and civic engagement amongst local residents, and the ensuing scale and nature of community activities and participation, give rise to the sense of identity/belonging, community spirit and support networks that empower local residents to tackle problems within their neighbourhood - and participate in decisions affecting their local area. To this end, measuring the level of social capital

Issues explored:

- Introduction to social capital and social-wellbeing;
- What aspects of social capital and social well-being should you try to measure?
- Guide to data and mapping resources relating to social capital and social-wellbeing.

within a local area requires us to capture aspects of three essential components of social cohesion and social capital:



Each of the above core elements contain different dimensions of social capital, and it is important to recognise not only the need to capture all of these facets of social capital, but to also appreciate the different levels exhibited by, and importance attached to, these components amongst different individuals, communities and neighbourhoods. Table 7.1 (below) seeks to identify the key aspects of each of the core elements of social capital that it is necessary to consider when attempting to gauge the level of community support, spirit and empowerment within different neighbourhoods within your locality.

Table 7.1: Elements and dimensions of social capital and social cohesion

| Element of social capital/social cohesion: | Dimensions: |
|---|---|
| Identity and sense of belonging to the neighbourhood | <ul style="list-style-type: none"> • Feeling of belonging and connection with local neighbourhood; • Satisfaction with local neighbourhood in terms of the quality of life and opportunities that it provides; • Levels of trust amongst individuals from different backgrounds; • Levels of respect for alternative lifestyles and value systems; • Feeling of safety; • Access to, and quality of, local services. |
| Civic engagement and empowerment | <ul style="list-style-type: none"> • Participation in elections (e.g. parliamentary, local, and police and crime commissioner elections); • Opportunities to participate in local decision-making and community forums (e.g. community meetings, participatory budgeting schemes); • Sense of belief in ability to influence local decisions affecting their neighbourhood; • Extent to which local residents feel their views are being taken into account by local public service organisations; • Membership of local organisations; • Participation in local community schemes (e.g. neighbourhood watch, neighbourhood renewal). |
| Social networks and participation in community activities | <ul style="list-style-type: none"> • Social networks and support from family, relatives and neighbours. • Levels of volunteering; • Participation in (or running) youth clubs and movements; • Participation in (or running) in community based sports teams; • Participation in local women’s organisations; • Attendance at local churches or religious institutions; • Participation in environmental or wildlife projects (e.g. community gardens, local food schemes). |

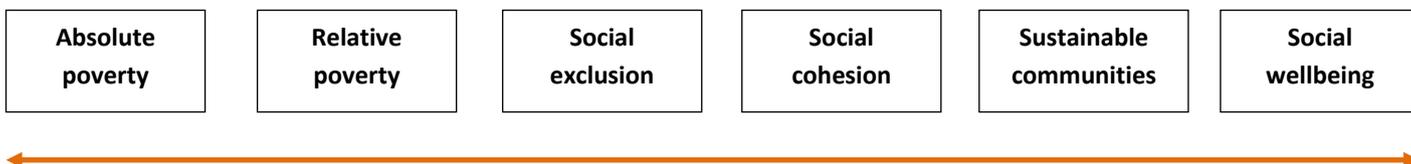
Social Well-being and Happiness

The shift away from a narrower focus on social capital towards a concern with wellbeing and happiness arguably reflects an increasing concern with the widening gap between rich and poor individuals and places (most elegantly articulated by Richard Wilkinson and Kate Pickett in *The Spirit Level* [2010] and Danny Dorling’s book on *Injustice* (2011). Equally it has been driven by a concern to move away from an evaluation of quality of life and societal wellbeing that is predicated primarily upon indicators of economic output and personal wealth – or as Robert Kennedy succinctly put it, “Gross National Product measures everything, except that which makes life worthwhile”. The essence of the concern with social wellbeing is encapsulated in the following responses to the consultation exercise undertaken with stakeholder organisations and the general public by the ONS in the development of their national indicators of wellbeing (see C5.3 below):

- ‘I think wellbeing is related to having a fairer distribution of wealth, greater social mobility and being able to slow the pace of life’;
- ‘National wellbeing is not just a case of economic or health success, or even the environment. Wellbeing is a measure of every sphere of life’;
- ‘It’s long overdue that we start to understand quality of life that may not, for some people, be based on material wealth or possessions’
- ‘Work life balance, more free time to relax, enjoy, think and create’
- Happiness has to be about more than finance, it has to look at wider social issues and what enriches life’
- Having family around brings esteem, value, hope and love, and being healthy enables us to do good’

(Source: ONS, 2011)

Social wellbeing is therefore in essence the latest development in a journey along a continuum that has seen governments and policy-makers recognise the need to move away from a narrow (but important) concern with poverty and deprivation towards a holistic conception of societal welfare:



However, although social wellbeing can be understood as the latest stage along an evolutionary thought process in terms of policy thinking and government action, it is necessary to recognise that it more accurately represents an umbrella term that reflects an array of issues and concerns:

Social Wellbeing:

| | | | | |
|---|------------------------------------|--------------------------------|-----------------------------------|-------------------|
| EQUALITY | SOCIAL JUSTICE | SOCIAL INCLUSION | SOLIDARITY | ENGAGEMENT |
| EMPOWERMENT | MATERIAL WELLBEING | MENTAL WELLBEING | PERSONAL RELATIONSHIPS | |
| COMMUNITY RELATIONS | SOCIAL NETWORKS AND SUPPORT | | FREEDOM FROM FEAR AND RISK | |
| ACCESS TO LOCAL SERVICES AND AMENITIES | | ENVIRONMENTAL RESOURCES | QUALITY OF LIFE | |

B7.3 Guide to available data sources and resources:

A detailed guide to resources containing data at the local authority level on social capital and social well-being in terms of their scope, timeframe, spatial scale, level of analysis, mapping and data downloading characteristics is provided in Table 7.2 (below). The following sections provide a brief commentary on issues surrounding the measurement of social capital and social wellbeing.

Social Capital

In the United Kingdom, the idea of drawing upon existing data sources and surveys to generate social capital databases to inform policy-making was adopted by the ONS in their Social Capital Project in the early 2000s. This initiative sought to realise a bank of questions relating to specific aspects of social capital from existing official surveys that would enable users to identify relevant data sources and cross check methodological approaches to the development of questions designed to transform abstract concepts such as 'identity' or 'belonging' into concrete data outputs (Ruston and Akinrodoye, 2002). This initially resulted in the construction of the Social Capital Question Bank, which was then subsequently reframed in the form of the Social Capital Harmonised Question Set (SCHQS).

There are a range of surveys utilised within the SCHQS that contain information relating to different aspects of social capital:

- [British Social Attitudes Survey](#) (National Centre for Social Research);
- [Citizenship Survey](#) (formerly the Home Office Citizenship Survey) (Department for Communities and Local Government);
- [Crime Survey for England and Wales](#) (formerly the British Crime Survey) (ONS);
- [Community Life Survey](#) (Cabinet Office);
- [English Housing Survey](#) (Department for Communities and Local Government);
- [Families and Children Survey](#) (FACS) (formerly the [Survey of Low Income Households](#)) (National Centre for Social Research);
- [General Lifestyle Survey](#) (formerly the General Household Survey);
- [Health Education Monitoring Survey](#) (discontinued);
- [Health Survey for England](#) (Public Health England);
- [Offending Crime and Justice Survey](#) (National Centre for Social Research);
- [Poverty and Social Exclusion of Britain Survey](#) (discontinued);
- [UK Time Use Survey](#) (Economic and Social Data Service).

(Sources: original list taken from Ruston and Akinrodoye, 2002 [updated by toolkit authors]; Hall, 2011)

A quick glance at the above list identifies resources that simply contain data pertaining to social capital (e.g. English Housing Survey) as opposed to surveys such as the Citizenship Survey that are (or were) specifically designed to measure aspects of social capital including identity, belonging, participation, empowerment, etc. The two main problems concerning the resources listed above are:

1. The discontinuation of a substantial number of these surveys (indeed the timescale covered by some of the surveys reveals the extent to which social capital formed a 'zeitgeist' relating to a specific time period of methodological and empirical endeavour);
2. The presentation and dissemination of results that are broken down by socio-demographic characteristics such as age, gender, ethnicity or household type as opposed to local authority areas (a consequence of the adopted methodological scope and sampling frame employed to generate the data and results within each survey).

For individuals and organisations attempting to develop contemporary social capital profiles of local authorities (or the neighbourhoods contained within them) the only relevant surveys are those set out in Table 7.2 (below). However, the primary problem with many of these datasets (apart from the time frame) is the online accessibility of the data in terms of quickly generating usable data that can be

inputted into the social capital component of a local public health profile. In this context, the reality is that there is a distinct paucity of available published surveys or resources that can be utilised to construct contemporary accounts of levels of social capital within English local authority areas. The one resource that does provide some relatively recent data on aspects of social capital is the 2008 [Place Survey](#) commissioned by the Audit Commission.

Social Wellbeing and Happiness

If the methodological issues surrounding the development of social capital indicators are problematic, the conceptual and empirical problems concerning the measurement of social wellbeing and happiness are equally difficult to resolve. Primarily this is because arguably how individuals are feeling in terms of their own wellbeing is a much more personal and subjective state of mind. In addition, your level of happiness is likely to be subject to a considerable degree of on-going undulation as a result of individual circumstances and life impacting personal events. Furthermore, the more recent adoption of citizen social wellbeing and happiness by governments and policy-makers as a legitimate issue for concern means that the development of the underpinning methodology and generation of subsequent datasets is still in the infancy stage of development.

Currently the only official attempt in the United Kingdom to measure social wellbeing and happiness is the development of [national wellbeing indicators](#) by the ONS. This is very much a work in progress, and the first official results arising from this project were only published in 2012. The social wellbeing framework employed by the ONS has sought to focus upon the following issues:

| Aspect of wellbeing: | Issues explored: |
|-----------------------------|--|
| Individual wellbeing | Overall life satisfaction, worthwhileness and happiness – and freedom from anxiety. |
| Our relationships | Satisfaction with family, social life and support networks from friends, relatives and neighbours. |
| Health | Life expectancy, long-term illness or disability, satisfaction with health, mental health. |
| What we do | Unemployment, job satisfaction, amount and use of leisure time, levels of volunteering. |
| Where we live | Crime and fear of crime levels, access to green spaces, sense of belonging. |
| Personal finance | Income levels, struggling to get by financially, and satisfied with financial circumstances. |
| Education and skills | Qualifications and no qualifications, and value of human capital. |
| Economy | Inflation rate, public sector debt, national income per head and household income. |
| Governance | Trust in government and parliament, participation rates in elections. |
| Natural environment | Energy use, environmentally protected areas, air pollution and greenhouse gas emissions. |

(source: ONS, 2013)

Most of the data generated by ONS’s national wellbeing project is only available at the United Kingdom, national or regional level. Datasets have however been generated in relation to a limited number of social wellbeing indicators at the local level. However, these [local UK experimental subjective wellbeing estimates](#) are only available at the upper tier authority level (i.e. London Boroughs, Metropolitan Districts, Unitary authorities and county councils).

Table 7.2 Social capital and social wellbeing data and mapping resources:

| Theme: | Resource: | Aspects explored: | Spatial scale: | Time frame: | Analysis: | Interactive mapping: | Data can be downloaded: |
|------------------------------------|---|--|---|---------------------|--|----------------------|--|
| Social capital and social cohesion | British Household Panel Survey (Institute for Social and Economic Research, University of Essex) | <ul style="list-style-type: none"> • Neighbourhoods; • Reciprocity; • Participation; • Trust. | <ul style="list-style-type: none"> • England, Scotland and Wales; • District. | Annual (since 1991) | <ul style="list-style-type: none"> • Raw data. | No | Yes |
| | Citizen Audit Questionnaire | <ul style="list-style-type: none"> • Attachment to local area; • Satisfaction; • Trust; • Participation. | <ul style="list-style-type: none"> • England, Scotland and Wales; • District. | September 2000,2001 | <ul style="list-style-type: none"> • Raw data. | No | Yes |
| | Youth Lifestyles Survey (National Centre for Social Research) | <ul style="list-style-type: none"> • Participation; • Socialisation. | <ul style="list-style-type: none"> • England and Wales; • District. | 1992/93 and 1998/99 | <ul style="list-style-type: none"> • Raw data. | No | Yes |
| | Place Survey (Audit Commission) | <ul style="list-style-type: none"> • Cohesion amongst people from different backgrounds; • Sense of belonging to immediate neighbourhood; • Satisfaction with local area; • Participation and influence in local decision-making; • Volunteering. | <ul style="list-style-type: none"> • England; • District. | 2008 | <ul style="list-style-type: none"> • Raw data. | No | Yes |
| Social wellbeing and happiness | Local UK experimental subjective wellbeing estimates via National wellbeing measures (ONS) | <ul style="list-style-type: none"> • Satisfaction; • Worthwhileness; • Happiness; • Anxiety. | <ul style="list-style-type: none"> • United Kingdom; • District. | 2012 | <ul style="list-style-type: none"> • Raw data; • Each aspect is measured on a 10 point scale which divides the responses into a 'low' category (i.e. a score of 0-6) and 'high' category (i.e. a score of 7-10) (for the anxiety measure 'low' constitutes a score of 3 or under, with 'high' representing a score of between 4-10). | Yes | (via Guardian Datablog) |

B7.4 Issues to consider when using these resources – and further action at the local level that may be required:

Throughout this unit it should have become apparent to the reader that aspects of identity, belonging, engagement, participation, wellbeing and happiness are abstract and subjective concepts which have an intuitive link to the presence of social problems within neighbourhoods – but which are difficult to operationalize and transform into valid and reliable measures and indicators. Whilst these issues have enjoyed a degree of political currency in one form or other under both New Labour and the Coalition governments, the shifting political focus and language employed has been mirrored by a concerted, but fragmented, focus in terms of generating comparable and sustainable datasets at the local level. Any form of social research and measurement that seeks to elicit opinions from citizens that are subject to variable interpretation, and local contextual and personal factors, is problematic – and social capital, social cohesion and social wellbeing are all concepts that fall firmly within this bracket. Establishing precisely what individual citizens are trying to articulate in relation to aspects of social inclusion, civic engagement and empowerment – and how this links to the presence of poor health outcomes and inequalities within a specific neighbourhood is therefore open to conjecture.

In terms of 'people' orientated as opposed to 'place' based explanations of health (and other social) problems, it is also worth bearing in mind that there is not an automatic relationship between levels of social capital and social wellbeing within specific localities. This is in part because many of the questions concerned with social capital require the respondent to reflect on their neighbourhood, and their external interactions with other citizens (i.e. experiential factors associated with place). In contrast, indicators relating to social wellbeing and happiness are often seeking the respondent to articulate internal emotions in relation to their circumstances (e.g. sense of worthwhileness or levels of anxiety) (i.e. people-based). Given the absence of readily accessible and user-friendly indicators of social capital, cohesion and wellbeing at the local level in England, local authorities and other public health stakeholder organisations will need to consider how they capture levels of community spirit, engagement and empowerment within their own local communities.

Issues you should have understood:

- How a focus on social capital and social wellbeing takes us beyond debates surrounding poverty and deprivation;
- The methodological problems surrounding the measurement of social capital and social wellbeing.
- The limitations of the existing datasets in terms of creating substantive social capital and social wellbeing profiles for your local area.

Other components of the toolkit which are related to this Unit:

- Unit B6 Social deprivation and social exclusion.

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Further Resources:

There are a number of useful websites that focus upon aspects of social capital, social cohesion and social wellbeing. In some instances these are a repository for a range of resources concerning aspects relating to both discussions, latest findings or methodological issues. In other instances, the website reports latest research findings or thought pieces.

- [National accounts of wellbeing \(New Economics Foundation\)](#)
- [New Economics Foundation pages on wellbeing](#)
- [ONS guide to measuring social capital](#)
- [ONS national wellbeing measures and results](#)
- [Social Capital Gateway](#)
- [World Bank resources on Social Capital](#)

B8 Using your local public health profile to inform your decision-making

Key words: Comparing health outcomes and identifying significant causes for policy interventions; developing a holistic approach to decision-making and understanding your local public health environment.

B8. 1 Introduction:

Having constructed your local public health profile, you are now in a position to use it as a policy tool, and to integrate it within your decision-making systems and those of the partnership organisations that you work with. The data contained within the profile will of course not in itself identify precisely what course of action your local authority needs to take in responding to the presence of negative health outcomes, or in seeking to tackle the underlying causes of health inequalities within your locality. This final unit within the toolkit therefore seeks to provide some advice and guidance on how to use your public health profile as an effective policy tool for shaping strategic thinking and setting policy priorities for those local stakeholders charged with responding to public health issues at the local level.

Issues explored:

- Using your public health profile to identify policy priorities;
- Integrating your public health profile into other decision-making frameworks in order to develop a holistic approach to understanding your local public health environment.

B8. 2 Using the public health profile to identify key policy priorities

Having collected and entered the data for the range of indicators contained within your public health profile, you are now in a position to start to use it to inform your decision-making and policy actions. The **first stage of this process is to identify how your area is performing in terms of health outcomes with other localities**. But who should you compare your locality with? You might choose at the outset to use national figures either in relation to England or the United Kingdom as a whole. As we have seen earlier in the toolkit, this is a common approach that has been employed in resources such as the Community Health Profiles. Using the national benchmark as the basis for demands for more resources might also stand your authority in good stead since it is likely to be one of the headline indicators employed by central government departments or agencies in determining resource allocation to local areas. However, using the national figure as the only source of comparison might not provide you with sufficient insight into how your area is really performing when compared to other localities. If for example, your authority is responsible for a locality that is significantly different from the majority of the country in terms of its location, function, physical character, population, or local economy then it probably will come as no surprise to discover that your life expectancy levels, or death rates for specific diseases, are much higher or lower than the national figure. If you wish to take account of the socio-economic context in which your authority is operating, then **it may be more illuminating to compare health outcomes in your locality with those of a similar type of area**. You can use a form of area classification based upon socio-demographic and economic variables (such as CIPFA's Nearest Neighbour Model) to identify similar localities to your own. If your locality is performing much better or worse on key public health indicators to those of comparator areas, then this might indicate that when compared to authorities facing similar operational contexts, your authority (and its partner organisations) have reason for even more concern in light of the evidence contained within your local public health profile.

Once you have identified the appropriate comparator benchmark for evaluating your local public health outcomes, the next stage is to identify **whether you are performing significantly better or worse than other localities**. Even if the gap in values between the score for your locality and that of the comparator locality appears quite large, you should only take notice of this indicator if the difference in values is a significant one. It is equally important that you also recognise that the distribution of values from the minimum to the maximum score across all local authority areas will vary from one public health indicator to another. The distribution of values for life expectancy across localities will not be the same as those for infant mortality, death rates from cancer, or teenage pregnancy. This is because in relation to some public health issues, the vast majority of localities will register low scores for a specific health outcome – and the significantly higher incidences of a specific issue will be concentrated in a small group of local authorities at the top end of the distribution of values. You therefore need to avoid falling into the trap of taking the presence of a very large difference between your authority's score and that of other localities as being an automatic indication that urgent policy action is required. Equally, it is important not to automatically dismiss a small difference in scores between your district and those of other areas as a situation which does not warrant some form of intervention. Finally, there is also the danger of only concentrating upon those indicators where your locality is performing significantly worse than other local areas. Even in some of the most deprived areas of England, it is rare to find that the picture is all doom and gloom. Whilst the majority of indicators might highlight the scale of the health problems that local public health agencies are facing, there are often pockets of positive outcomes which can act as building blocks for tackling related public health issues. It is equally important for your locality to ensure that the positive public health outcomes remain so over time – and where there is a decline on a public health issue in which your locality has been previously performing well, then this may constitute cause for as much concern.

In evaluating the picture painted by your local public health profile, you should be able to arrive at a position where you have identified key policy priorities in relation to:

- key headline indicators which provide a useful barometer of the general level of public health well-being of your local population;
- those indicators that focus upon specific aspects of morbidity and mortality;
- the components of your profile that focus upon the underlying 'people' and 'place' orientated causes of poor health outcomes and the presence of health inequalities.

Having identified these priorities, there are some other issues that you now need to consider. So far we have used the public health profile to identify policy priorities based upon significant differences between your locality and other areas. However, we have yet to **take account of the dynamic nature of local public health environments**, and the often rapidly changing nature of the impact of a wide range of socio-economic factors that shape health outcomes. Most of the indicators contained within your profile will have drawn upon sources of data that provide static rather than dynamic snapshots of specific public health issues over time. It is therefore important that you recognise the need to treat the public health profile that you have created as a living document. It may have taken considerable effort and resources to construct your public health profile within the first instance – but it is necessary to recognise that it is important to regularly update the information and create new versions of the profile. This is not only to take account of the availability of new resources and more up to date statistical information, but also to recognise that whilst certain health outcomes (and their underlying causes) take a considerable amount of time to change significantly in terms of their scope and scale, other public health issues can transform themselves into problems that merit urgent action very rapidly.

Your public health profile should also be treated as one possible source of information that suggests the need for delivering services or undertaking policy interventions within specific segments of the population or neighbourhoods. It is however only one piece of evidence. You should not treat it as a replacement for other internal and external sources of data and information that you have at your

disposal. It should thus **be seen as a complimentary piece of evidence** to be used alongside other policy tools such as Joint Strategic Needs Assessments – and as a benchmarking device against which you can check the policy issues that are emerging from other sources of evidence. Finally, in using the evidence contained within your profile you should also judge any conclusions that are emerging from the data in light of your professional expertise and your working knowledge of communities and neighbourhoods within your local authority area. Data does not speak for itself. It requires interpretation, and being placed within the context of professional and operational knowledge. Evidence-based policy-making is about seeking to arrive at policy decisions on the basis of concrete facts rather than value judgements. But this does not mean that there is no place for personal and professional intuition in terms of seeking to understand what the data is really saying to you.

B8.3 Using the public health profile as a holistic decision-making tool

Although New Labour's time in office has come and gone for the moment, the legacy of their Modernising Government agenda continues to shape how local public service organisations should seek to respond to local issues – and operate as the source of strategic advice and guidance as well as directly delivering policy initiatives and services. A key feature of Modernising Government was the attempt to improve the way in which government and public service organisations approached the identification of policy problems, and how to subsequently take decisions and enact effective policy interventions. The Better Policy-Making agenda was the culmination of attempts to implement a more professional form of policy and decision-making. A key feature of this approach was the following **nine steps to better policy-making**:

1. Forward looking;
2. Outward looking;
3. Innovative, flexible and creative;
4. Evidence-based;
5. Inclusive;
6. Joined-up;
7. Review;
8. Evaluation;
9. Learns lessons.

As a framework for shaping how local public service organisations respond to policy problems, this still represents a valid operational framework for guiding both local decision-making and evaluating the fitness for purpose of organisational structures, policy-making forums, partnership arrangements, etc. The public health profile that you have created for your locality can act as a mechanism for enabling the delivery of this approach to decision-making. It also has a number of these characteristics already built within its design i.e. evidence-based and joined-up (in terms of linking health outcomes and the underlying people and place based catalysts for the presence of health inequalities). It can be transformed into a forward-looking policy tool with the addition of dynamic data that seeks to measure changes in public health outcomes overtime (see above).

However, **to deliver on some other components of the better policy-making framework, the public health profile needs to be either extended, or incorporated within other policy decision-making frameworks.** In essence your public health profile in its current form is a policy tool that focuses on the 'demand' side aspect of your local public health environment. It is a mechanism for identifying the nature and scale of negative public health outcomes, and the range of underlying socio-economic causes that may also merit some form of intervention. It cannot however deliver a comprehensive overview of your local public health environment without the addition of specific information relating to the resources at your disposal, details of policy initiatives that are currently being implemented or those that are pencilled in for delivering within the near future.

Equally, it needs to be supplemented with data and information relating to the impact of initiatives and interventions to complete the 'supply' side of the policy and operational framework. The addition of these components will achieve the necessary link between the identification of policy priorities, the resources available to respond to these issues, the policy interventions in place to tackle the identified issues, and the evaluation of the impact of these initiatives in terms of reducing negative health outcomes and inequalities. Evaluation, review and monitoring need to be built into decision-making frameworks from the outset of the identification of policy issues – rather than simply as an add-on which is only put in place when there is an internal or external demand for a demonstration of the effectiveness of your authority (and its partner organisations) in terms of tackling public health issues and making appropriate use of resources. The last of the nine steps to better policy-making is the ability for organisations to 'learn lessons'. This is an aspect of policy-making that it appears is often difficult for public service organisations to achieve. The emergence of significant policy failures that have occurred for the very same reasons that caused previous poor policy interventions is unfortunately a recurring theme within the history of public policy. It is therefore vital that you regard your public health profile not simply as a vehicle for integrating the collection and recording of data. It needs to be a policy document that is at the centre of a continual process of strategic and operational reflection:

