



LONDON
HEALTH COMMISSION

Health Equity Profile for London

Sandra Husbands

Kam Ling Chau

February 2008

Summary

This report provides an overview of health inequalities in London. In doing so, it aims to help provide some understanding of the likely impact of the proposed changes in *Healthcare for London: Consulting the Capital* on those groups most at risk of being disadvantaged.

This profile describes both inequalities, such as variations in uptake of childhood immunisations and health inequities, such as poorer access to GP services by people in deprived areas. Health inequalities describe differences of fact, which are not necessarily inequitable, as long as they are based on need, while health inequities are about lack of fairness.

The report focuses on those groups of people, who are most at risk of being disadvantaged, namely the equalities target groups: black, Asian and other minority ethnic groups (BAME); children and young people; people living with disabilities; people from faith groups; lesbian, gay and bisexual people; older people; women; and other vulnerable groups. It has not been possible to present information about each of these groups, since for some there is no routine data collection that would allow this. E.g. there are no data on mortality rates of different ethnic groups, faith groups or lesbian, gay and bisexual people.

An important overall finding from this profile is that data are either not collected routinely or not reported in such a way that the health and experiences of people from different groups can be easily monitored. This presents a significant challenge when trying to ensure that the proposed reconfigurations do not exacerbate existing inequities. A summary of whether some routine data are available regarding equalities groups is provided in Appendix 1.

London is populous and diverse, which presents a challenge when trying to develop a strategy for providing healthcare at the London level. Inequalities in health are prevalent and widespread. Life expectancy in the capital ranges from over 80 years for men and women in Kensington and Chelsea, to around 78 years for women in Newham and only about 74 years for Islington men.

Wide variations exist between boroughs in terms of mortality, primary care provision and birth outcomes, with the most deprived boroughs usually featuring among those areas with the worst indicators. Variations also exist in uptake of preventive services, but these display a more complex pattern, not readily linked to area deprivation.

Overall, the distribution of inequalities is complex – it is not always the same geographical area that fares the worst, nor is it always the most deprived. Spearhead areas tend to fare worst in terms of health outcome, but they are not always the worst for each indicator.

In taking forward the *Healthcare for London* framework it will be important to look at local community equity profiles, taking account of local intelligence, to ensure that health inequalities will be reduced and not increased.

Interpreting the indicators is not simple: it requires insight into the local culture and other local factors.

The key points and implications from this profile are summarised below and at the end of each section.

Background

- Inequalities in health exist between geographical areas and between socioeconomic groups.
- Health inequalities also exist between different age groups, gender groups and ethnic groups.
- The NHS has a significant role to play in reducing health inequalities, through understanding differing needs and through equitable resource allocation.

London's Geography and Population

- London is a very populous and diverse city.
- London is a predominantly young city, with two thirds of residents being 40 years old or younger.

- London is also ethnically and religiously diverse: one third of Londoners is of ethnic minority origin and a significant majority of residents of each borough belongs to a faith group.
- The capital is not uniform and individual boroughs are ethnically diverse to different degrees.
- Migration makes an important contribution to population change in London, but net migration cannot be measured.

Implications

- Targeted interventions will probably be required to ensure that the proposed changes result in services that meet the diverse needs of the diverse population of London.

Inequalities

- Inequalities in health mirror inequalities in general.
- There are both very affluent and very deprived areas and people in London.
- Levels of income deprivation and unemployment vary between boroughs, with unemployment ranging from 7% in Richmond, the most affluent area of London, to 24% in Hackney, one of the most deprived.
- London has 11 of the 70 areas in England that are in the most deprived fifth of areas and that are in the worst fifth of areas for life expectancy and mortality from cardiovascular disease and cancer.
- The equalities target groups, which have historically been disadvantaged or subject to discrimination, tend to have poorer access to health services and worse health outcomes than the general population.
- Life expectancy is highest and all-age, all cause mortality is lowest in affluent Kensington and Chelsea, while highest all-age, all cause mortality occurs in more deprived areas, such as Barking and Dagenham, Islington and Newham.

Implications

- Local factors, both area factors and individual factors, must be considered when implementing the *Healthcare for London* proposals in any given area.

Primary care and polyclinics

- There is marked variation in several aspects of access to primary care services across London boroughs.
- Some boroughs are currently under-doctored, i.e. there are fewer GPs per weighted population than the England average.
- There is variation in PCT performance on providing GP access within 48 hours of requesting an appointment, ranging from less than 70% in Tower Hamlets to over 90% in Kingston.
- 7 PCTs appear to have a significant resident population (more than 10,000), who are not registered with a GP. This could represent a significant problem with access to primary care, but needs to be looked into further for full understanding.
- Primary care quality is even more variable than access, as measured by potentially avoidable emergency hospital admissions. These vary from just over 100 per 100,000 population in Kensington and Chelsea to around 300 per 100,000 population in Ealing.

Implications

- Reorganisation of primary care services needs to take into account the potential difficulty of recruiting GPs into certain areas.
- Making it easier to register with a practice or making provision for unregistered populations to receive adequate services will also be important.

Preventive Health Care

- There is variation in access to and uptake of preventive services, which could be explained in part by different health seeking behaviours of different groups, but also in part by inability of services to reach certain groups.
- London shows variation in access to and effectiveness of smoking cessation services.
- Variation in access occurs by age and by borough. The worst access/poorest uptake of smoking cessation services is among those under 18 years, while 18 to 34 year-olds have the highest uptake.

- In Ealing nearly 80% of those smokers, who set a quit date with smoking cessation services remained quit at four weeks. Whereas, in Croydon only 40% were converted to four week quitters.
- There are variations in uptake of childhood immunisations at all ages and across boroughs. The picture is complex, with coverage differing between individual vaccines and no clear relationship to deprivation or affluence.
- Variations in uptake of flu vaccine by older people are less than for childhood immunisations.

Implications

- Understanding local factors and more precisely targeting preventive interventions could help improve their uptake and effectiveness.

Maternity

- High proportions of sole registered births, teen pregnancies and low birth weight occur in some of the most deprived London boroughs.
- Low birth weight shows marked variation across London with rates almost doubling from the lowest, in Richmond, to the highest, in Southwark.
- The infant mortality rate is 3-4 times higher in the areas with the highest rates than in the areas with the least infant deaths.
- Early booking is essential for good antenatal care. The proportion of women booking before 12 weeks of pregnancy varies markedly between boroughs. Late booking does not appear to be associated with deprivation – being far less common in Tower Hamlets, with over 60% booking early, than in Kingston upon Thames, where less than 10% of mothers book before 12 weeks of pregnancy.

Implications

- To ensure the best outcomes, there might be more need for specialised obstetric units – or at least ready access to them – in the most deprived areas, with higher rates of risk factors for poor neonatal outcomes.

Stroke

- Stroke is a major cause of death and disability, contributing to the gap in CVD mortality between the spearhead areas and the country as a whole.
- There are ethnic variations in prevalence of hypertension and occurrence of strokes. The incidence of stroke is 60% higher in black people than in white.
- Stroke is primarily a disease of older people – 75% of strokes occur in those over 65 years.
- Despite its importance as a risk factor for CVD, hypertension is poorly managed, with only 15-18% of people being adequately treated.
- There is probably some under-recording of stroke in GP registers, meaning that opportunities for secondary prevention are being missed.
- Rates of both stroke and hypertension are lower across London than the England average, probably as a result of London's relatively young population.
- No routine dataset exists to enable us to determine what proportion of people who have had strokes were treated in specialist stroke units.

Implications

- Stroke prevention requires increased case finding for hypertension and better treatment.
- Recording of stroke in disease registers needs to improve, to enable more targeted secondary prevention.
- A single, national definition of a stroke unit and routine data collection are necessary to allow proper comparisons of treatment outcomes.

Conclusion

This report provides an overview of health inequalities in London. In doing so, it helps provide some understanding of the likely impact of the *Healthcare for London* proposed changes on those groups most at risk of being disadvantaged. The report describes inequalities in health and in access to health services in London, using specific indicators of determinants of health and access to health care.

Health inequalities exist across all the areas of health and health care considered here: primary care and preventive services, maternity care and stroke care. The

pattern of inequalities is complex. To understand it fully we would need to take a more detailed look at inequalities in local areas and make use of local intelligence about the culture of the people and the services.

In taking forward the *Healthcare for London* framework, it will be important to use local community equity profiles to ensure the best outcome for equalities groups in local areas.

1. Purpose

This report is prepared by the London Health Observatory (LHO), providing a baseline profile, to support the health inequalities/ equalities impact assessment of the *Healthcare for London: Consulting the Capital* framework. The report aims to describe inequalities in health and in access to health services in London, using specific indicators of determinants of health and access to health care. It is not comprehensive, but provides an overview of health and health services in London, with particular reference to *Healthcare for London* proposals and their potential impacts on equalities target groups and people living in the most deprived areas of London.

The impact assessment has two major themes:

1. reducing health inequalities;
2. reducing negative impacts and promoting positive impacts for equalities target groups;

and it focuses on the potential impacts of the proposed changes to primary care, maternity and stroke services. The baseline profile, therefore, concentrates on known, existing inequalities in relation to these three areas.

2. Background

Health inequalities are differences in health experience and outcomes between different population groups, defined by age, sex, ethnicity, socio-economic status and geography, etc. Health inequities are differences in the distribution of resources or services across populations, or differences between groups in service utilisation, which do not reflect the different health needs of those groups. Health inequalities describe differences of fact, which are not necessarily inequitable, as long as they are based on need. On the other hand, health inequities are about fairness – should this difference exist and if not, what can be done about it?

In seeking to address health inequalities, it is usually assumed that this will also overcome health inequities. This profile describes both inequalities, such as variations in uptake of childhood immunisations and health inequities, such as poorer access to GP services by people in deprived areas.

The link between deprivation and poor health is well established. That is, those who are most socio-economically deprived have higher mortality and higher rates of illness and disease than those who are most well-off in society¹. Most common causes of long-term illness and disability display a socio-economic gradient, with the highest rates occurring in people in manual occupations.

Not only is ill health unevenly distributed across the social classes, but the determinants of health are also. For instance, both men and women in social class V are nearly four times more likely to smoke than those in social class I, and are also much more likely to eat diets that are high in fat and low in fibre². Also, mortality rates are higher in the most deprived areas than in the least deprived. Both absolute and relative material deprivation are thought to play a significant role in determining health.

¹ 1. *Inequalities in health: the Black Report*, 1982, eds. P. Townsend and N. Davidson. Penguin

2. *The Health Divide: inequalities in health in the 1980s*, 1987, M. Whitehead. Health Education Authority

3. *Report of the independent inquiry into inequalities in health*, 1998, D. Acheson. The Stationery Office, London.

² Source: Cancer Research Campaign

The determinants of health are multi-layered and interact with each other: material and social circumstances, as well as behaviour all work together to affect health. Access to health services and provision of high quality care are thought to play a relatively minor role in generating good health, however, the NHS has a significant role to play in working to reduce health inequalities.

Benzeval, Judge and Whitehead³ have argued that the NHS has three key obligations:

1. to ensure that resources are distributed between areas in proportion to their relative needs;
2. to respond appropriately to the health care needs of different social groups;
3. to take the lead in encouraging a wider and more strategic approach to developing healthy public policies.

Tackling health inequalities is one of the main reasons for changing services given in the *Healthcare for London* consultation document. With this in mind, and taking note of Benzeval, Judge and Whitehead's argument, using primarily routinely-collected data, this equity profile describes the distribution between areas of certain health resources relevant to the strategy and some of the differing healthcare needs of different groups.

The equity profile focuses on the following dimensions of inequality:

- age
- gender
- geography
- ethnicity
- deprivation

Other dimensions of inequality, which must be considered are sexual orientation, and disability. However, there is a dearth of reliable or comprehensive information about these groups. Where possible, relevant data or study results have been included in the report.

³ M. Benzeval, K. Judge and M. Whitehead, 1995, in *Tackling Inequalities in health: an agenda for action*. King's Fund.

Key Points

- Inequalities in health exist between geographical areas and between socioeconomic groups.
- Health inequalities also exist between different age groups, gender groups and ethnic groups.
- The NHS has a significant role to play in reducing health inequalities, through understanding differing needs and through equitable resource allocation.

3. London's Geography and Population

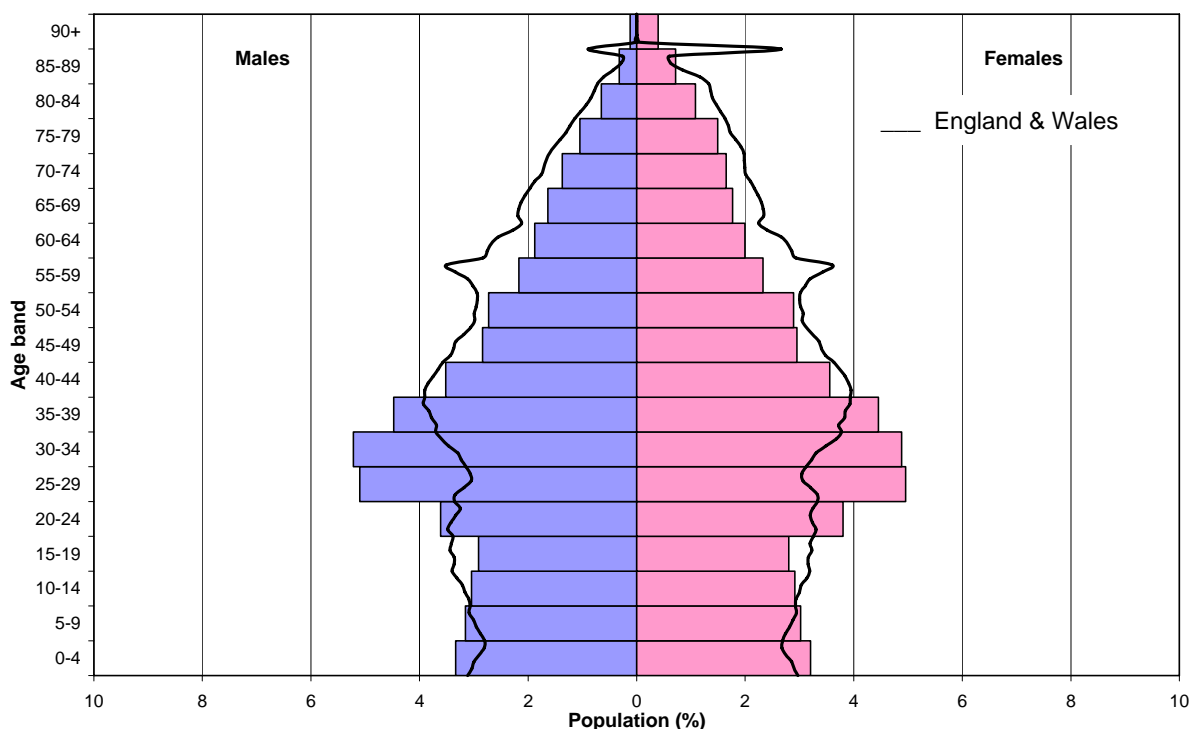
There are over 7.5 million people living in London, in 33 local authority areas, served by 31 primary care trusts.

3.1 Age Structure

Compared to England and Wales, the London population has a relatively young age structure, with 62% of residents being 40 years old or younger (53% for England and Wales), and only 8.5% of Londoners being over 70 (compared to 11.6% for E&W).

Figure 3.1 shows the population pyramid for London, compared to England and Wales. It can be seen quite clearly that the proportions in the 20 to 40-year old age groups are far larger in London than the England and Wales average. Conversely, there are peaks in the 55 – 60 and 85+ age groups in England and Wales, which are not mirrored in the London population.

Figure 3.1: London Population Pyramid, 2006



Data source: .2006 GLA Round Demographic Projections – RLP High

3.2 Ethnic Diversity

London is the most ethnically diverse region of the UK. In 2001/02 people from minority ethnic groups, i.e. not white, made up about 9% of the England population. 48% of all UK minority ethnic people lived in London.⁴ Although the majority of Londoners is still white, people from black, Asian or other minority ethnic (BAME) backgrounds make up a significant proportion, around 33%, of the capital's population.

Table 3.1 shows the most recent projections (estimates) of London's ethnic populations. The figures are based on the Office for National Statistics (ONS) mid-year population estimates and calculated by the Greater London Authority Data Management and Analysis Group (DMAG), taking into account particular knowledge about borough-level migration trends in London. DMAG produces two sets of projections – RLP high and RLP low. The ethnic population projections presented here, are based on the RLP high projections.

Table 3.1: Ethnic population projections for London 2006 (RLP High)

	Total number	Proportion (%)
White	5108100	67.46
Black Caribbean	363400	4.8
Black African	456800	6.03
Black other	194200	2.56
Indian	501000	6.62
Pakistani	172100	2.27
Bangladeshi	179200	2.37
Other Asian	233700	3.09
Chinese	101300	1.34
Other	262200	3.46
All BAME	2463900	32.54

Source: GLA data management and analysis group (DMAG). © Greater London Authority

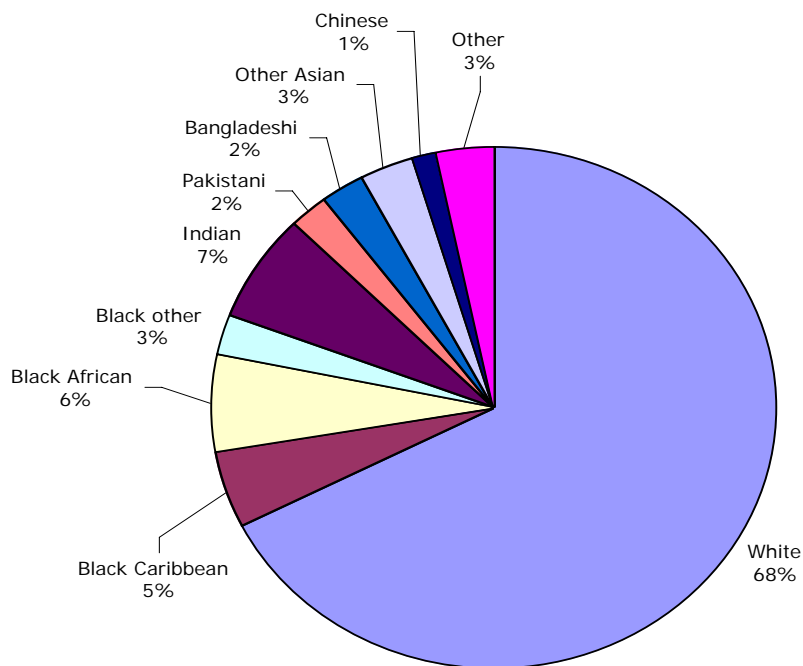
⁴ Social Focus in Brief: Ethnicity 2002. Editor: Amanda White. London: Office for National Statistics

The ethnic categories used for this analysis are aggregations of the 16 Census/Office for National Statistics categories, allowing for robust statistical analysis and disclosure control. The Census 16 already aggregates some smaller ethnic groups, which are further aggregated here and so some diversity is lost.

Roughly one third of Londoners has their origin in a BAME community and more than 300 languages are spoken (figure 3.2).

Figure 3.2: London Population: Ethnic Group Proportions – 2006

London population ethnic group proportions

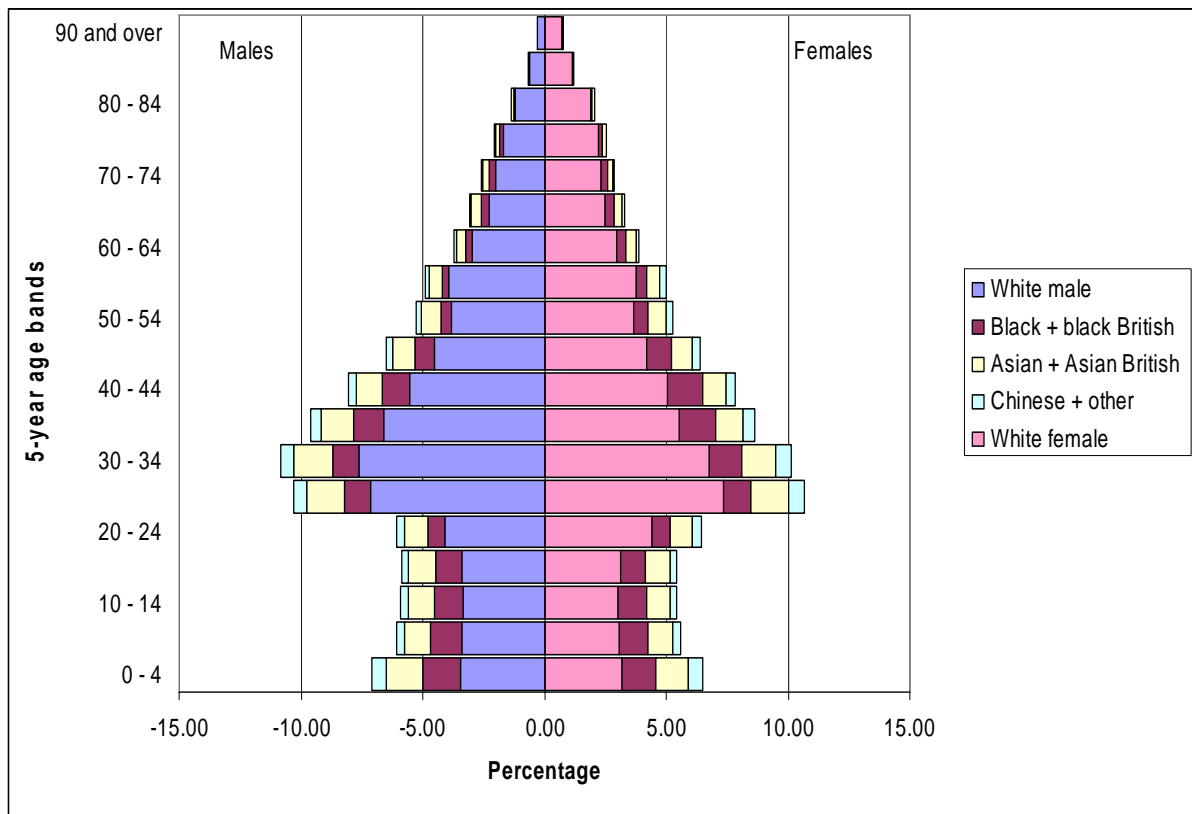


Data source: DMAG © Greater London Authority

The BAME population tends to be younger than the white population. Figure 3.3 shows the population pyramid for London, with 4 main ethnic blocks delineated. Even given the general decline in numbers in each age band beyond 35 years, the pyramid shows a clear decline in numbers of BAME people with advancing age. This more likely reflects the fact that most of the BAME migrant populations arrived

relatively recently in the UK (within the past 60 years) and people tend to migrate at a young age, rather than specifically indicating increased premature mortality in these groups.

Figure 3.3: London Population Age Structure by Ethnicity – 2006

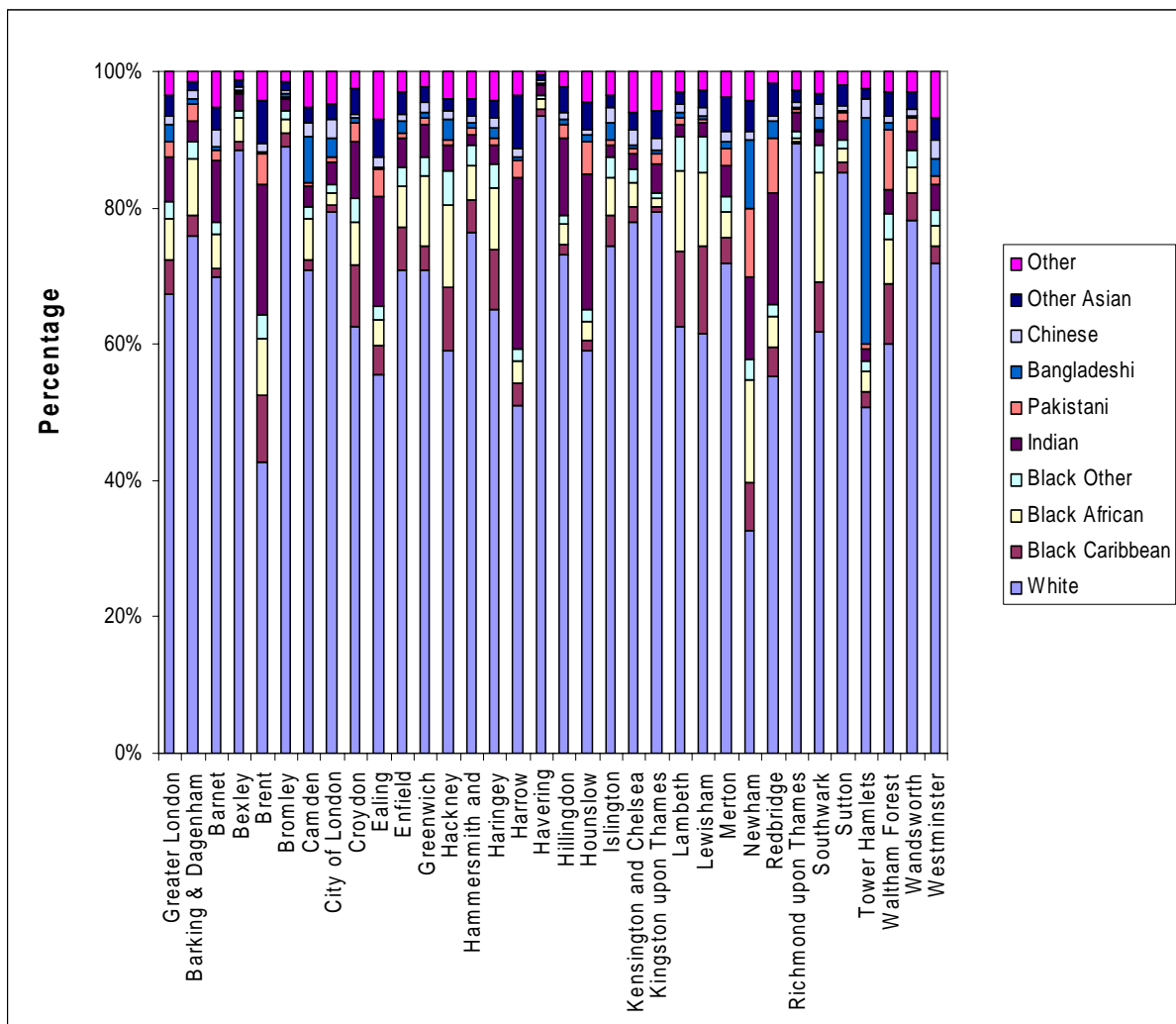


Data source: DMAG © Greater London Authority

3.3 Ethnicity and geography

Ethnic groups are distributed unevenly between London boroughs (figure 3.4). For the purpose of statistical analysis, DMAG uses ethnic categories that do not distinguish the mixed ethnic or white other groups. These groups are too small in number, relative to the total London population, for any meaningful statistical analysis to be done. However, it is clear that some of these groups are quite sizeable in certain boroughs or areas of London. E.g. in Brent, Ealing, Harrow and Newham the BAME population actually exceeds the white population, and it is approaching 50% in some other boroughs.

Figure 3.4: Proportion of borough populations in each ethnic group (2006)



Source: © GLA 2006 Round Ethnic Group Projections - RLP High

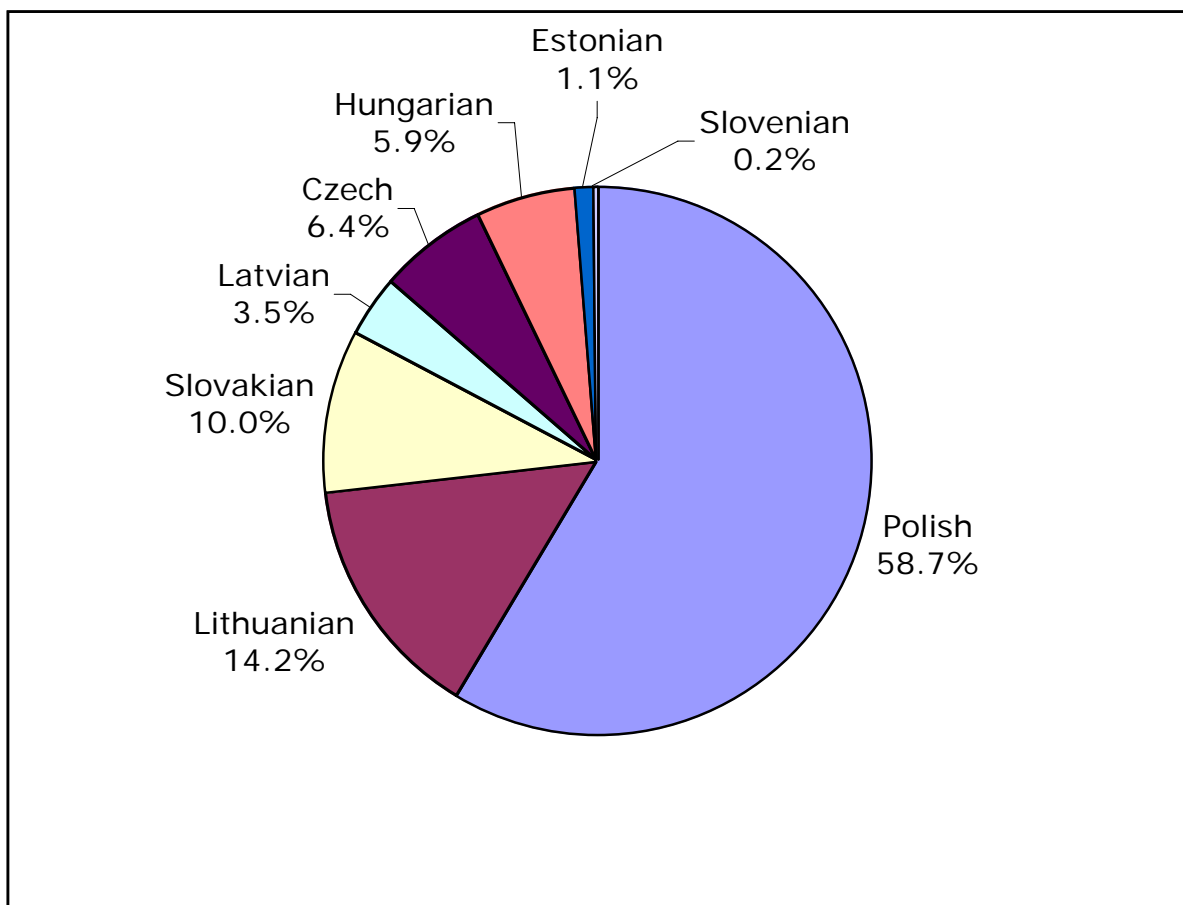
3.4 Migration

The “white other” ethnic category is becoming an increasingly important group, with migration from the European Union A8⁵ countries having a significant impact on London. Nationals from A8 countries who wish to be employed in the UK for more than one month are required to register under the Worker Registration Scheme (WRS). Although this is a registration of jobs, rather than workers, and is not an accurate measure of migration, the data provided by the WRS can be useful for analysing the proportions of workers by UK region and nationality.

⁵ A8, or Accession 8 countries = Czech Republic, Estonia, Hungary, Latvia, Lithuania, Poland, Slovakia and Slovenia.

Between May 2004 and December 2006 79,100 WRS applications were approved for London residents, which was 18% of total applications for England and Wales. The majority of these registrations were from Polish nationals (figure 3.5).

Figure 3.5 Nationality of approved worker registration applications in London, 2004 - 2006

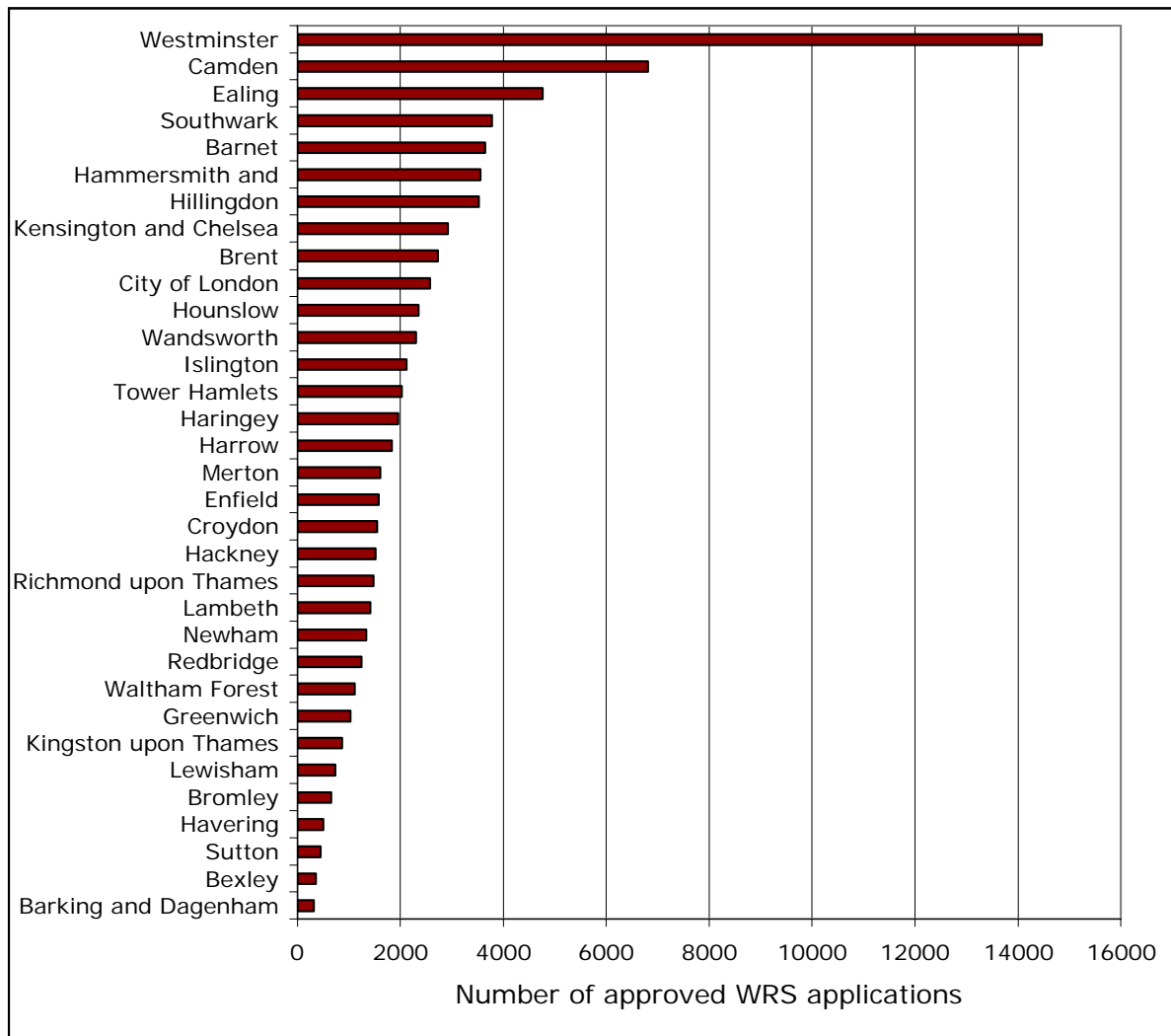


Data source: GLA data management and analysis group

Westminster recorded the most applications – about 14500, followed by Camden, 6800 and then Ealing, 4700 (figure 3.6).

Across London as a whole, the density of the resident workforce made up of WRS applicants is just two per cent.

Figure 3.6: WRS Approved Applications by Borough of Residence, May 2004 – December 2006



Data source: GLA data management and analysis group

Another useful measure of migration is derived from national insurance number registrations, or NINOs. The Department for Work and Pensions' National Insurance Recording System (NIRS) annually records the number of new NINOs by country of origin of the applicant and by where in the UK they have applied for registration. Unlike the worker registration scheme, this includes migrants from both inside and outside the European Union. Foreign nationals may be allocated a national insurance number for several reasons, including those in receipt of benefits or tax credits, as well as for those in paid employment. This is, therefore, a more comprehensive indicator than the WRS, but is still not measuring net migration, since it gives no indication of length of stay in the UK.

Table 3.2 shows the 2005/6 and 2006/7 NINo registrations for London residents. In 2006/7 the majority of new NINo registrations, over 70,000, were from nationals of new European Union members states – accession 12 or A12 countries (see table notes). Again the majority of these migrants were from Poland. The next largest group of applicants was from Africa, but with nearly 20,000 NINos they were far behind the A12 countries. Next came the old EU. In terms of individual countries, Poland, India, Australia and France topped the table.

Neither the NIRS nor the WRS scheme records migrants who are neither eligible to work or to receive benefits and so they both underestimate total migration. Moreover, they account only for the place of registration, but give no information about where the registered person then goes. So high numbers of registrations in a particular area might not mean that there is a correspondingly high number of resident workers remaining in that area.

Both inward and outward migration contribute to the changing demographic picture of London, but actual net migration is hard to capture and so its effect can only be broadly estimated.

Table 3.2: Top 20 countries of origin for NINo registrations

	Year of registration		Change	London as a % of UK
	2005/06	2006/07		
Poland	37,110	43,420	6,310	19
India	17,900	18,550	650	38
Slovak Rep	4,660	4,910	250	17
Pakistan	8,260	8,800	540	35
Australia	14,990	15,000	10	61
Rep of Lithuania	10,500	8,330	-2,170	35
France	8,640	10,640	2,000	53
South Africa	10,460	7,830	-2,630	46
Germany	5,550	6,510	960	43
China	2,600	2,700	100	21
Italy	6,310	7,700	1,390	59
Nigeria	7,070	6,350	-720	51
Czech Rep	2,920	2,340	-580	20
Rep of Latvia	2,100	1,900	- 200	17
Portugal	3,790	3,910	120	36
Hungary	2,920	3,720	800	34
Spain	4,080	4,320	240	40
USA	4,350	5,050	700	47
Bangladesh	4,690	5,380	690	53
Rep of Ireland	3,560	3,550	-10	35
A12 Total	63,580	70,030	6,450	22
Africa Total	24,280	19,800	-4,480	45
EU15 Total	42,390	48,110	5,720	46
SE Asia Total	34,200	36,120	1,920	40
Old C'wealth + USA Total	37,210	35,470	-1,740	54
Other Total	33,950	34,560	610	39
All countries	235,610	244,090	8,480	34

Data source: GLA data management and analysis group.

Notes:

A12 = Bulgaria, Cyprus, Czech Republic, Estonia, Hungary, Latvia, Lithuania, Malta, Poland, Romania, Slovakia and Slovenia

EU15 = Austria, Belgium, Denmark, France, Finland, Germany, Greece, Irish Republic, Italy, Luxembourg, Netherlands, Portugal, Spain, Sweden

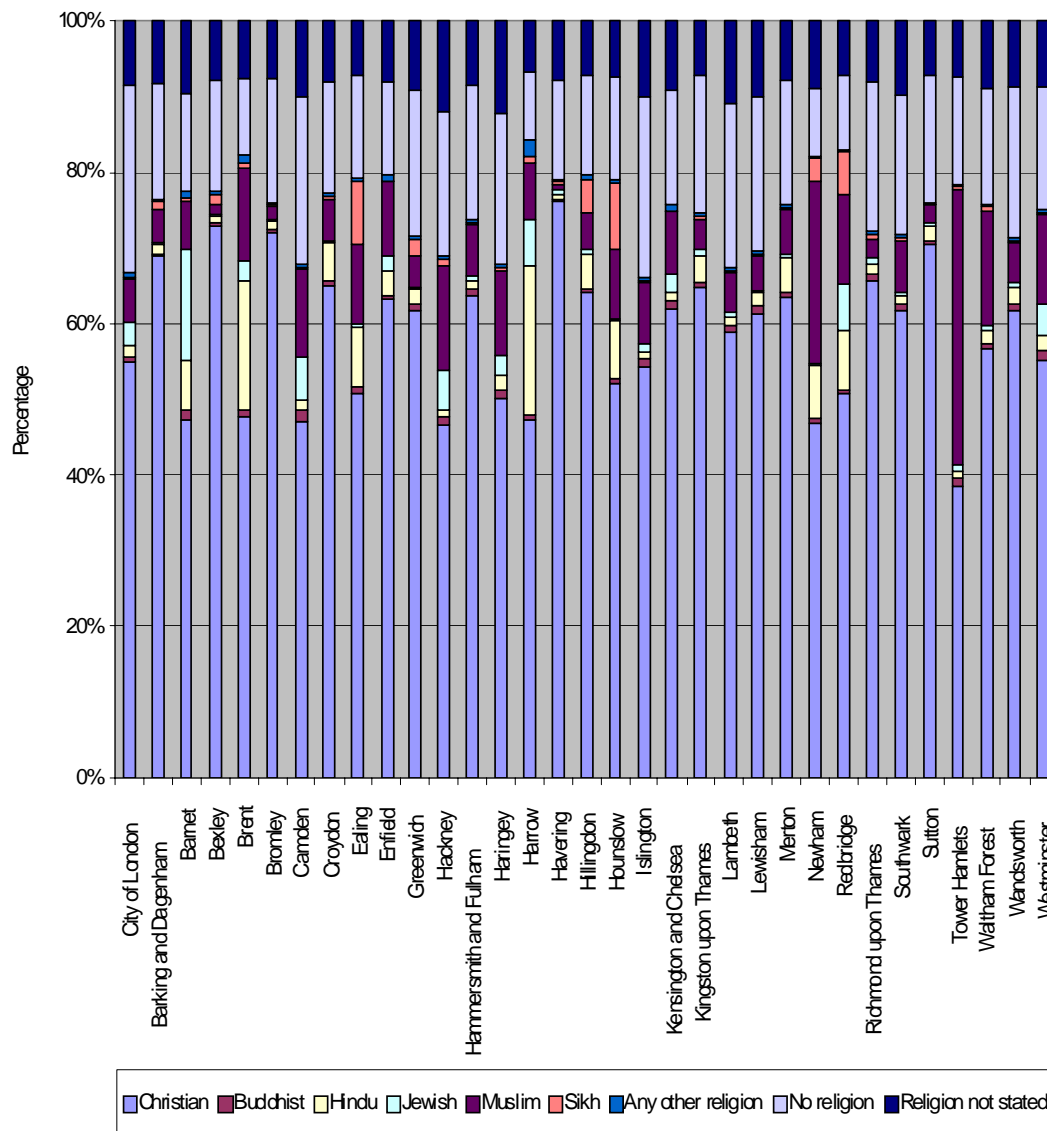
Old commonwealth = Canada, Australia, New Zealand and South Africa

SE Asia = India, Pakistan, Bangladesh and Sri Lanka

3.5 Religious Diversity

In the 2001 Census people were asked about their current religious belief for the first time. The question was voluntary, and so not answered by all Census respondents. Figure 3.8 shows the proportions of people in each borough, who belong to each religious group.

Figure 3.8 Proportions of each religion by borough, 2001



Data source: Census 2001, Office for National Statistics

Of those who both answered the question and professed a religion, Christians were the most numerous – numbering 4,176,175 across the capital. Although Christians also form the largest single religious group in every borough, ranging from 38.6% in

Tower Hamlets to 76.1% in Havering, they do not comprise an overall majority in several London boroughs. The second largest religious group overall is Muslims, who make up the second biggest group in several boroughs, including Camden (12%), Hackney (14%), Waltham Forest (15%), Newham (24%) and Tower Hamlets (36%). Hindus form the second largest religious group in Brent (17%) and Harrow (19%).

In all but six boroughs – Barnet, Brent, Harrow, Newham, Redbridge and Tower Hamlets – the second largest group of respondents after Christians was actually those with no religious belief, who made up 9% to 25% of the London population in 2001.

3.6 Key Points

- London is a very populous and diverse city.
- London is a predominantly young city, with two thirds of residents being 40 years old or younger.
- London is also ethnically and religiously diverse: one third of Londoners is of ethnic minority origin and a significant majority of residents of each borough belongs to a faith group.
- The capital is not uniform and individual boroughs are ethnically diverse to different degrees.
- Migration makes an important contribution to population change in London, but net migration cannot be measured.

Implications

Targeted interventions will probably be required to ensure that the proposed changes result in services that meet the diverse needs of the diverse population of London.

4. Inequalities

There are significant social and geographical inequalities between Londoners, in terms of income, education, employment, and living standards, as well as health. Inequalities exist not only on a geographical or socio-economic basis, but also between groups of people who share characteristics. Some of the dimensions of inequality include gender, disability, age, sexual orientation, faith or religion, and ethnicity.

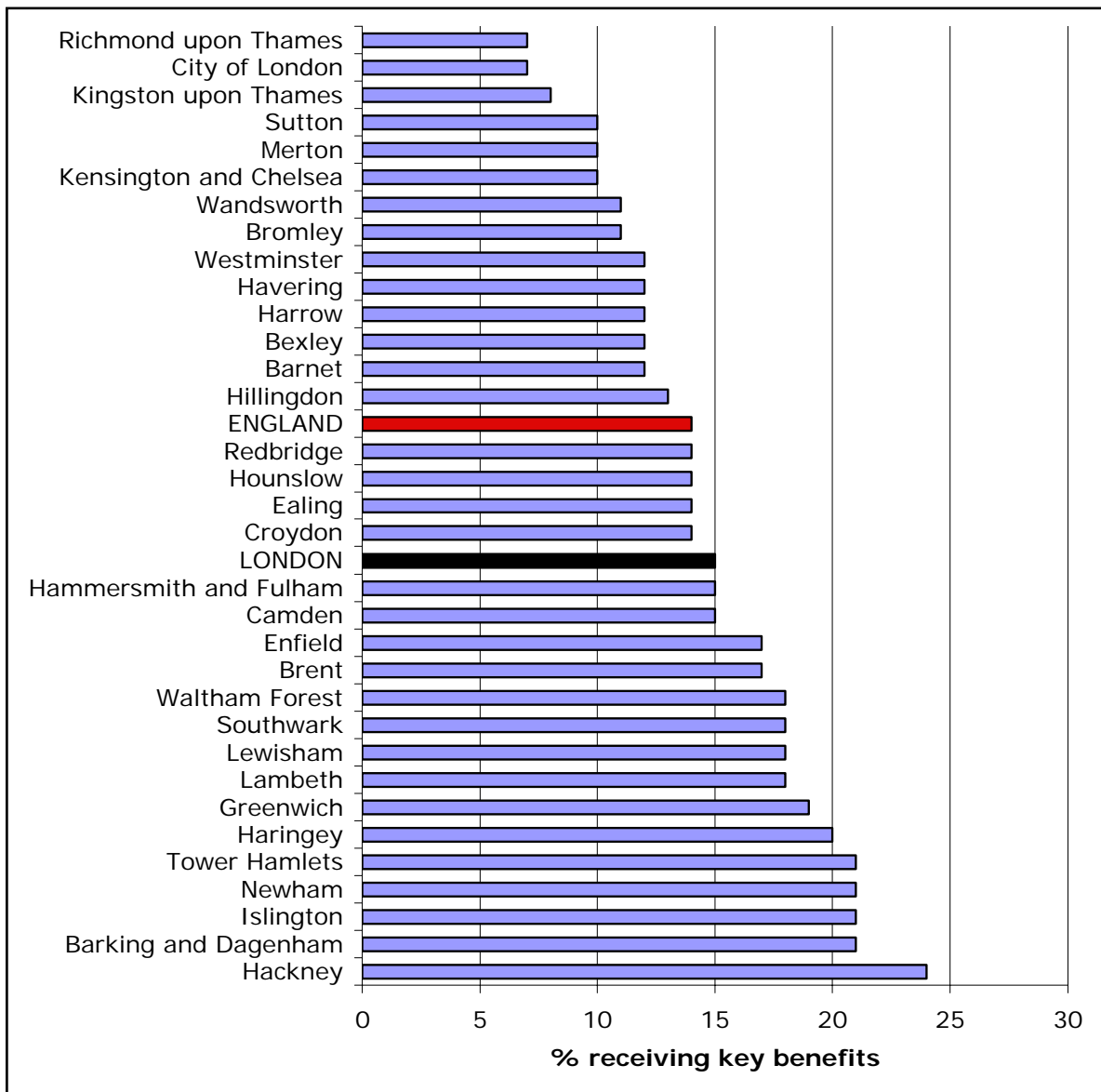
4.1 Income deprivation

London is home to some of the richest businesses and residents in the country. But, again, there are wide disparities in income and wealth. On average in London 15% of working age people are receiving key benefits, such as job seekers' allowance, incapacity benefits and other income-related benefits. This is similar to the England figure of 14%. However, this proportion varies widely from borough to borough, with only 7% of the working age population receiving key benefits in Richmond upon Thames, compared to 24% in Hackney and 21% in each of Barking and Dagenham, Islington, Newham and Tower Hamlets (figure 4.1). Income deprivation is associated with higher mortality and poor health.

Unemployment is also associated with increased morbidity and premature mortality. It is a significant, independent risk factor for both mental and physical illness, including coronary heart disease and depression. It is also associated with increased prevalence of smoking. Figure 4.2 shows the variation in the proportion of the working age population in each borough receiving Jobseeker's Allowance, as a measure of the proportion of unemployed adults.

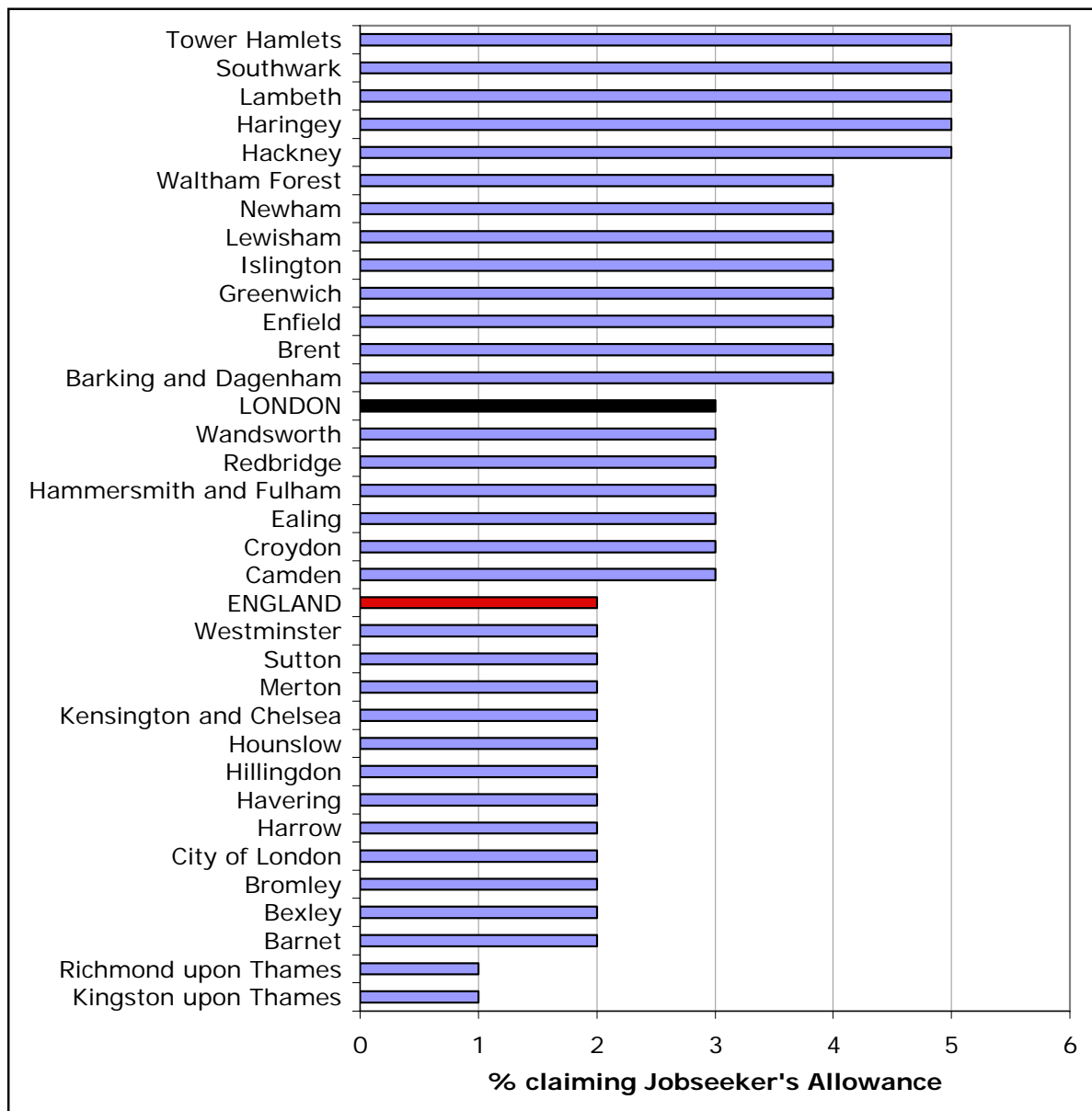
More than half of London boroughs have a higher proportion of adults on Jobseeker's Allowance than the England rate of 2%, with 13 of them having at least twice as many unemployed. The lowest unemployment rates are in Richmond upon Thames and Kingston upon Thames (1% each), with the highest being in Hackney, Haringey, Lambeth, Southwark and Tower Hamlets (each 5%).

Figure 4.1: Percentage of working population in receipt of key benefits by borough, 2005



Data source: Department for Work and Pensions (DWP) Working Age Client Group data, August 2005 and ONS 2005 mid-year population estimates. Neighbourhood Statistics

Figure 4.2: Percentage of working age population claiming Jobseeker's Allowance by borough (2005)



Data source Department for Work and Pensions (DWP) Working Age Client Group data, August 2005 and ONS 2005 mid-year population estimates. Neighbourhood Statistics

4.2 Geography and deprivation

There are two dimensions of geographical deprivation that contribute to inequalities in health:

1. An area is defined as deprived, because of the individual characteristics of the people who live in it. I.e. poorer people, who have poorer health tend to live in the poorest areas and, therefore, contribute to the morbidity and mortality statistics associated with the area.
2. Deprived areas, where the poorer people live, tend to be more hazardous, in terms of accidents, crime and environmental hazards, as well as being less well-resourced with good quality services and business than richer areas.

These dimensions of deprivation interact to multiply the measurable effect of deprivation on health.

4.2.1 Index of Multiple Deprivation

London is an affluent city, but also has some of the most deprived areas in the country. The Index of Multiple Deprivation (IMD) measures seven domains of deprivation, based on a variety of indicators, which combine to influence overall levels of deprivation. The seven domains are:

- Income
- Employment
- Health deprivation and disability
- Education, skills and training
- Barriers to housing and services
- Living environment
- Crime

The IMD is calculated at super output area (SOA)⁶ and then aggregated up to local authority level. There are six IMD measures at local authority level:

⁶ Super Output Areas (SOA) – small geographical areas (sub-electoral ward level) defined by the number of people in the population, with defined and unchanging boundaries, making comparisons between areas easier. There are 3 levels, called layers, according to size, upper layer with a minimum population of c.25000, middle layer – minimum population 5000, mean 7200 and lower layer with a population minimum of 1000, mean 1500.

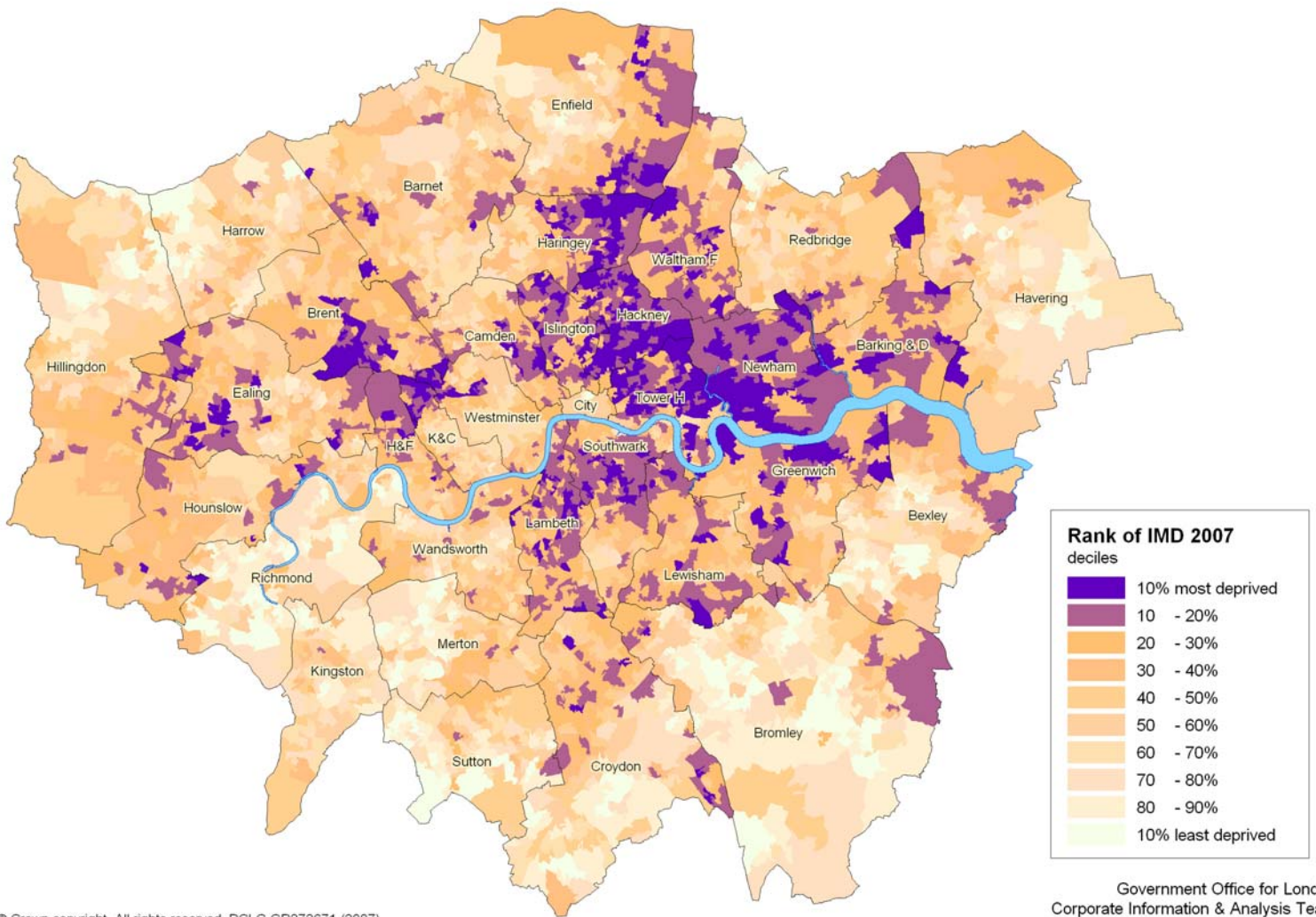
- Average Score: the average of the deprivation scores for all the SOAs in the authority
- Average Rank: the average of the ranks of all the SOAs on the deprivation score
- Extent: the proportion of the population which live in SOAs that are the most deprived
- Local Concentration: the average of the ranks of the most deprived SOAs in the authority which account for 10% of the population
- Income Scale: the number of people who are income deprived
- Employment Scale: the number of people who are employment deprived

Each local authority is given a rank for each measure and an overall rank from 1 (highest – i.e. most deprived) to 354 (least deprived).

There is marked variation in deprivation across London and within boroughs. According to the IMD 2007, London has 10 boroughs among the most deprived 10% of local authorities in England: Hackney, Tower Hamlets, Newham, Islington, Haringey, Lambeth, Southwark, Greenwich, Barking and Dagenham and Waltham Forest. 28% of London's SOAs are among the 20% most deprived in England. The IMD was recently updated from the 2004 index, which underpinned the 'Spearhead' definition (see below), and there has been some change in scores and ranks for London local authorities. Over two-thirds of London boroughs (23 out of 33) have increased in rank (i.e. are more deprived), though for many the change is not significant.

Map 1 shows the distribution of IMD 2007 ranks of SOAs in London boroughs.

Map 1. Index of multiple deprivation 2007



© Crown copyright. All rights reserved. DCLG GD272671 (2007)

Government Office for London
Corporate Information & Analysis Team
December 2007

4.2.2 Spearhead areas

Those local authority areas in England in the worst fifth for certain key indicators are designated the 'Spearhead Group'. Each of these local authorities is in the worst 20% for at least three out of five of the following indicators: male life expectancy at birth (1995-1997); female life expectancy at birth (1995-1997); under 75 cancer mortality rates; under 75 cardiovascular disease (CVD) mortality rates; and IMD 2004 average score.

11 of the 70 national Spearhead areas are in London: Barking and Dagenham, Greenwich, Hackney, Hammersmith and Fulham, Haringey, Islington, Lambeth, Lewisham, Newham, Southwark and Tower Hamlets (map 2). These areas are charged with closing the gap in life expectancy set out in the national health inequalities target.

Map 2. London Spearhead Local Authorities



ONS Super Output Area Boundaries. Crown Copyright 2004
Crown copyright material is reproduced with the permission of HMSO. Reproduced under the terms of the click-use licence

4.3 Equalities target groups

The Department of Health equality framework⁷ sets out the priorities for action by the department and the NHS when delivering improvements to health and social care services. It gives a commitment to delivering services which:

- are provided equally to those in need, free at the point of need;
- offer a personal service, which is truly patient-centred;
- have sufficiently increased capacity to enable choice and diversity to be offered to patients;
- are fair and provide equity of access to care.

Historically certain groups have been most likely to be disadvantaged or excluded during policy-making and planning, or have found it difficult to access employment, education or services. Equalities legislation has been enacted to try and ensure that individuals can have equal access to these services, regardless of their race, national or ethnic origin, sex or gender, sexual orientation, religion or belief, age or disability.

The equalities target groups, therefore, comprise people from black, Asian and other minority ethnic groups (BAME); children and young people; people living with disabilities; people from faith groups; lesbian, gay and bisexual people; older people; women; and other vulnerable, disadvantaged and marginalized groups in London. These groups are not only most likely to be disadvantaged in accessing services, but are also likely to have worse health outcomes than the general population.

Routine population data, collected through vital registrations and the decennial census, provide information about the age, gender and ethnic structure of London's population.

Data about people living with a limiting long-term illness are also collected through the census, as is information about faith or religion, but these data are now over six

⁷ Department of Health Equality Framework: Priorities for Action. 2003 Department of Health. (http://www.dh.gov.uk/en/Publicationsandstatistics/Publications/PublicationsPolicyAndGuidance/DH_4078894)

years old. There is no routine data collection that would allow the production of up-to-date, reliable indicators of the proportions or distribution of the other equalities groups across London. A summary of whether some routine data are available regarding equalities groups is provided in Appendix 1.

4.3.1 Age and ethnicity

Information about the age, sex and ethnicity of Londoners is given above (see section 3).

4.3.2 People living with disabilities

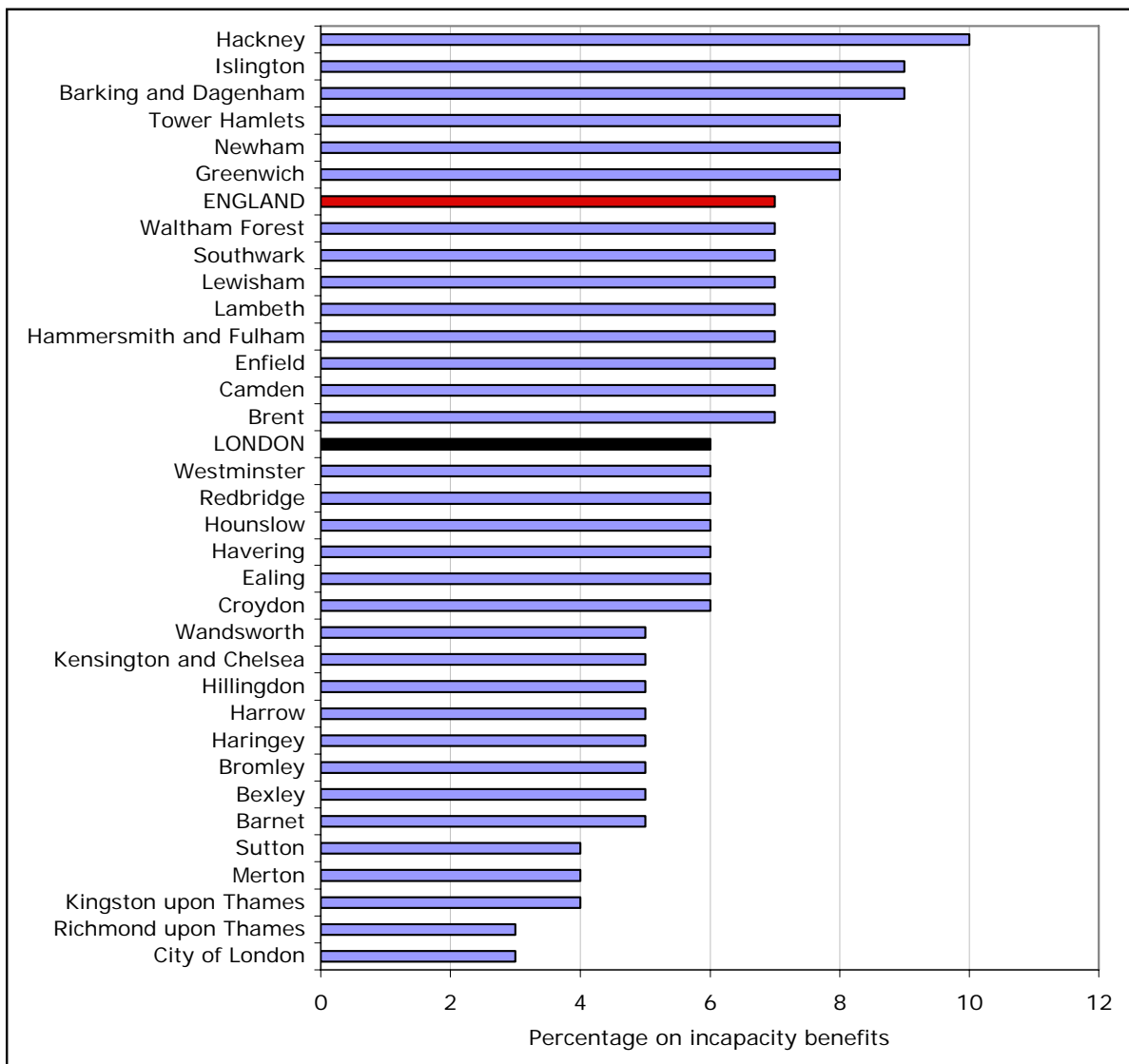
Potential indicators of the prevalence of disability in the population are:

- i. the proportion of people who are receiving disability-related benefits. Data for this indicator are collected routinely by the Department for Work and Pensions (DWP). This is a problematic indicator, since only those with disabilities that render them incapable of working will be eligible to receive these benefits. Working people with disabilities will not be included.
- ii. The proportion of people living with a limiting long-term illness. This is a self-reported, Census indicator and has the possibility of picking up those who are not eligible for benefits and /or are in work, or not of working age, but living with a disability or illness. However, it has not been updated since the last Census in 2001.

Figure 4.3 shows the variation in the proportions of people in receipt of incapacity benefits across London. The highest proportion of incapacity claimants is in Hackney (10%), with the lowest being Richmond upon Thames (3%), followed by Kingston upon Thames (4%). The City of London, with only 3% incapacity benefit claimants, actually has the lowest resident workforce population in London, which can tend to distort the statistics.

It is estimated that 50% of Londoners, who are in receipt of incapacity benefits have a primary diagnosis of mental illness.

Figure 4.3: Percentage of working age population receiving incapacity benefits by borough, 2005

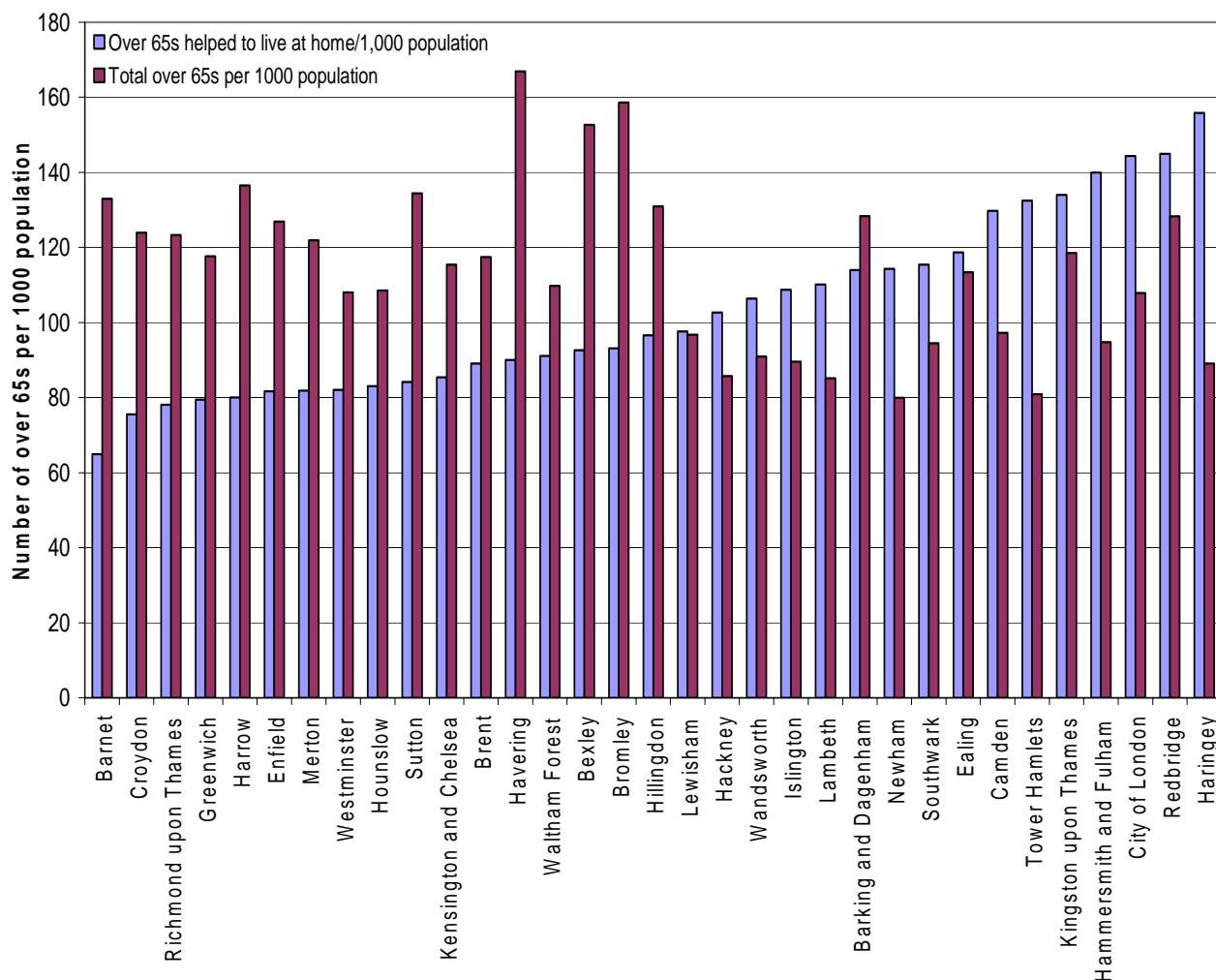


4.3.3 Older People

The proportion of older people (over 65 years) in the population, who are helped by local authority social services to live at home gives an indication of the level of need for support among older people in the community. This indicator includes people receiving even low-level care in their home, which can prevent or postpone the need for more intensive care packages or residential care.

Figure 4.4 shows the variation in proportions of older people receiving care in their homes as a proportion of the resident population, by borough. There is wide variability between boroughs, which does not mirror the total over 65 population.

Figure 4.4: Older People helped to live at home per 1000 resident population



Source: 2005-2006 PAF INDICATOR AO/C32. London Health Observatory local basket of inequalities indicators.

This variation in levels of care in part reflects the different eligibility criteria that each borough uses for access to these services. It probably also reflects the varying abilities of older people in different boroughs to pay for their own home care.

4.4 Health inequalities

Tackling inequalities in health is a government priority, which is reflected in the national public service agreement (PSA):

- By 2010 to reduce inequalities in health outcomes by 10% as measured by infant mortality and life expectancy at birth.

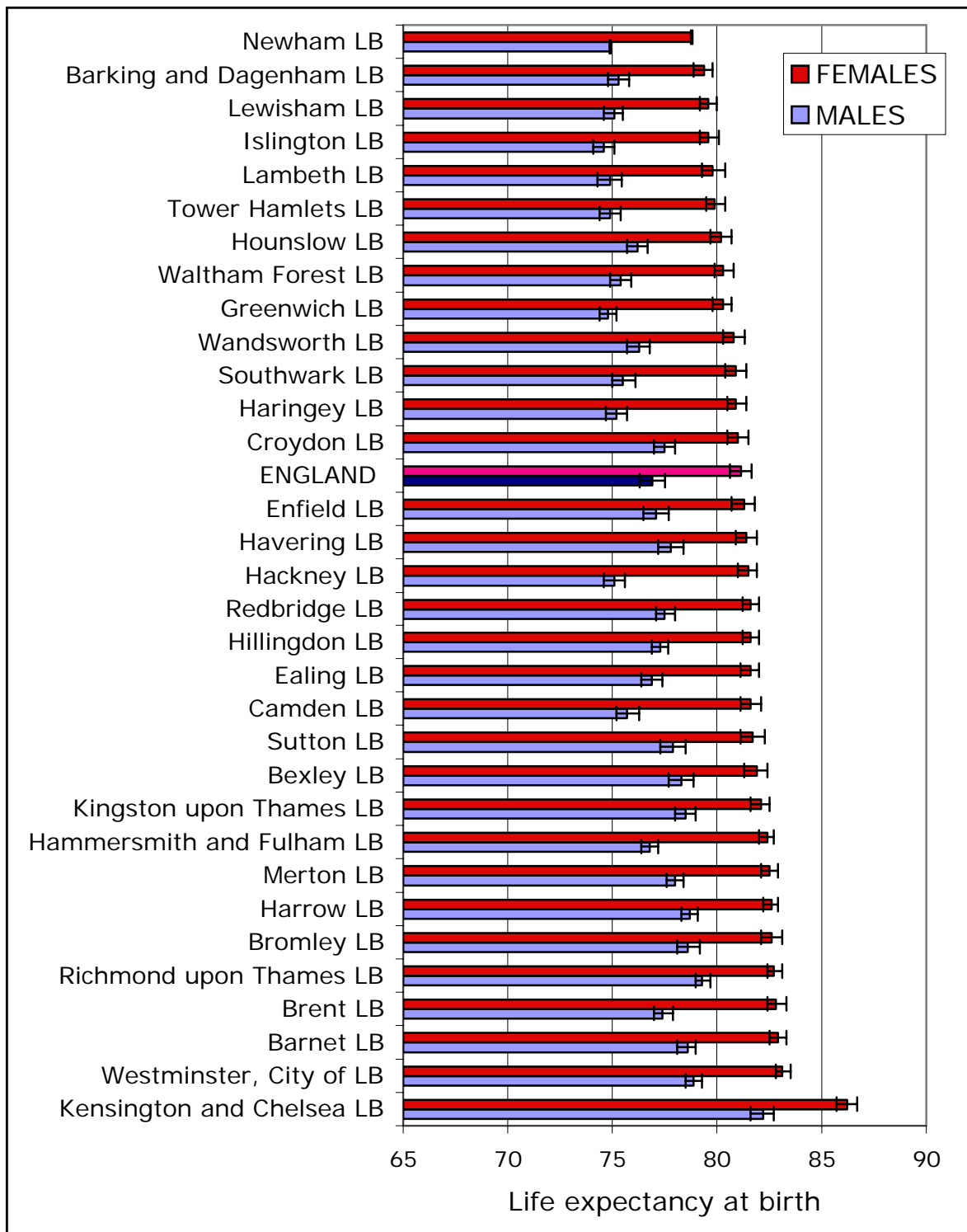
It has two underlying, more detailed objectives, which seek to address socio-economic and geographical inequalities:

- Starting with children under one year, by 2010 to reduce by at least 10 % the gap in mortality between routine and manual groups and the population as a whole.
- Starting with local authorities, by 2010 to reduce by at least 10% the gap between the fifth of areas with the lowest life expectancy and the population as a whole.

Both life expectancy and infant mortality are good summary indicators of the health of a population. Life expectancy reflects all the determinants of health, while infant mortality is affected by maternal health and social class, as well as the quality of antenatal care received.

Women and men have different life expectancies on average, with women generally expected to outlive men. Life expectancy at birth varies markedly between London boroughs. For the period 2003- 2005 residents of Kensington and Chelsea have the longest life expectancy at 82.2 years for men and 86.2 years for women. Islington has the lowest male life expectancy, 74.6 years, while Newham has the lowest female life expectancy, 78.8 years (figure 4.5).

Figure 4.5: Male and female life expectancy at birth, by borough.



Data source: Compendium of Clinical and Health Indicators / Clinical and Health Outcomes

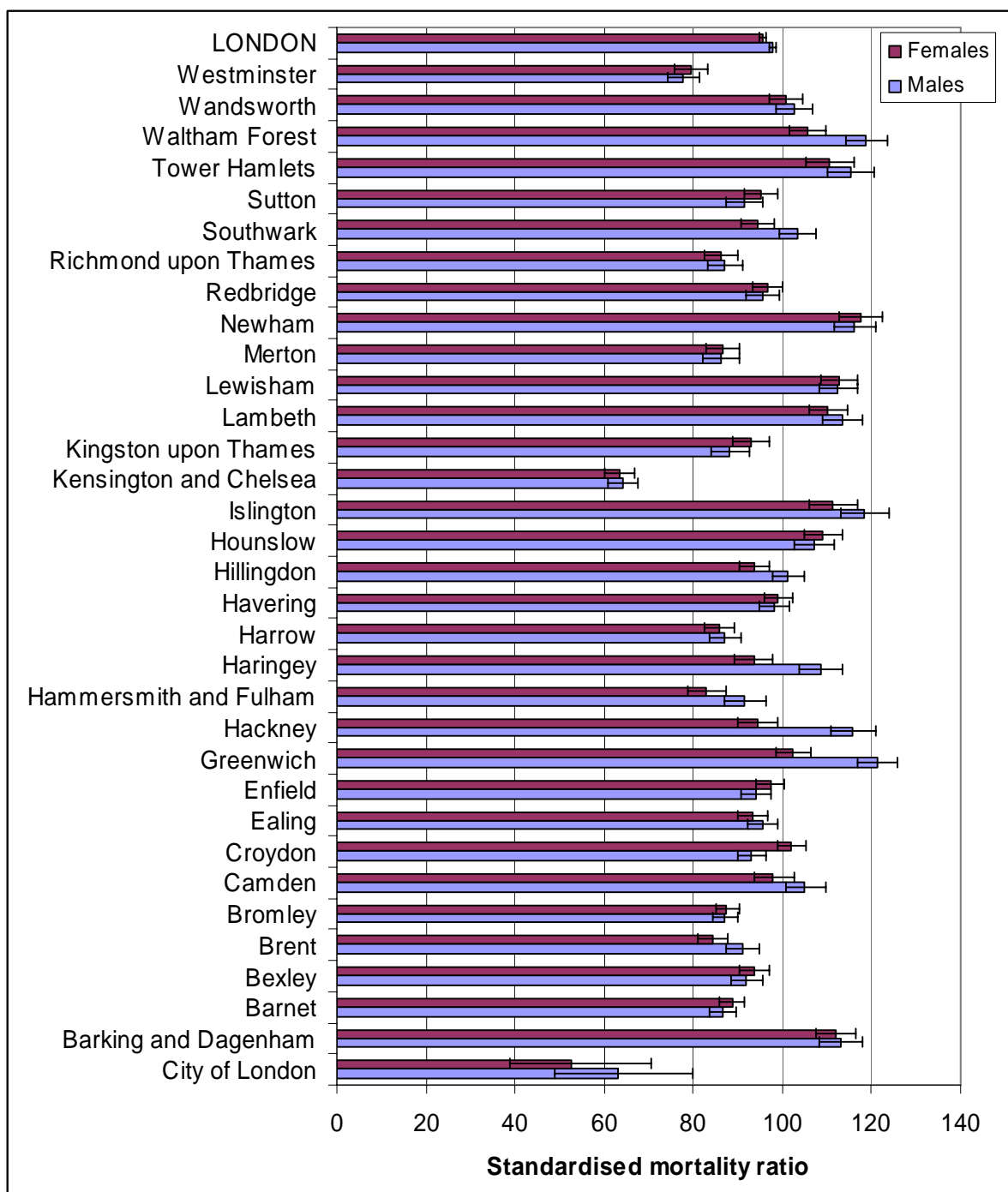
Knowledge Base (www.nchod.nhs.uk or nww.nchod.nhs.uk)

The Information Centre for Health and Social Care. © Crown Copyright.

All-age, all cause mortality is another useful summary indicator of the health of a population. The indicator used to summarise all-age, all cause mortality is the standardised mortality ratio, or SMR. The SMR compares the population age and sex-specific mortality in each area to that of England and is shown as a percentage. An SMR greater than 100 means there is excess mortality compared to England, while an SMR less than 100 means there is reduced mortality in that population.

Figure 4.6 shows the standardised mortality ratios (SMR) for deaths from all causes, from 2004 to 2006, for each London borough. All-age, all cause mortality varies by place of residence. Wandsworth, Waltham Forest, Tower Hamlets, Newham, Lewisham, Lambeth, Islington, Hounslow, Greenwich, and Barking and Dagenham have standardised mortality ratios (SMR) for both genders over 100 for 2004-2006, whereas City of London, Kensington and Chelsea and Westminster have much lower SMRs for the same period.

Figure 4.6: All-age, all-cause mortality, by local authority, 2004-2006



Data source: SMRs of deaths from all causes from the Compendium of Clinical and Health Indicators / Clinical and Health Outcomes Knowledge Base (www.nchod.nhs.uk or www.nchod.nhs.uk)
 The Information Centre for Health and Social Care. © Crown Copyright

Key Points

- Inequalities in health mirror inequalities in general.
- There are both very affluent and very deprived areas and people in London.
- Levels of income deprivation and unemployment vary between boroughs, with unemployment ranging from 7% in Richmond, the most affluent area of London, to 24% in Hackney, one of the most deprived.
- London has 11 of the 70 areas in England that are in the most deprived fifth of areas and that are in the worst fifth of areas for life expectancy and mortality from cardiovascular disease and cancer.
- The equalities target groups, which have historically been disadvantaged or subject to discrimination, tend to have poorer access to health services and worse health outcomes than the general population.
- Life expectancy is highest and all-age, all cause mortality is lowest in affluent Kensington and Chelsea, while highest all-age, all cause mortality occurs in more deprived areas, such as Barking and Dagenham, Islington and Newham.

Implications

- Local factors, both area factors and individual factors, must be considered when implementing the *Healthcare for London* proposals in any given area.

5. Primary care and polyclinics

The Healthcare for London strategy recommends that people should be able to use local facilities, rather than going to hospital, and should be able to see a doctor (GP) for a routine appointment in the evenings or at weekends. It recommends that general practices and other services should be grouped together in polyclinics.

5.1 Access to primary care

Access to GPs and other primary care professionals is a key issue for many, as reported in the *Our Health, Our Care, Our Say* White Paper (2006)⁸. It has long been recognised that the most deprived areas are relatively under-served by GPs, while the populations of these areas have the greatest health needs (*the inverse care law*)⁹. A borough is considered under-served by GPs if it has less than the national (England) average for its population, i.e. fewer than 57.44 GPs per 100,000 weighted population. The number of GPs per 100,000 weighted population is a measure of relative access to primary care and is a national headline inequalities indicator. In calculating this indicator populations are weighted according to an age-standardised, limiting long-term illness ratio and deprivation, to reflect need for GP consultations. However, no consideration is given to the diversity or mobility of the population, both of which affect health needs and are prominent issues in London.

In 2006 there were 1579 general practices across London, 479 of them single-handed. Figure 5.1 shows the variation in GPs per 100,000 population across London boroughs. Spearhead areas are shown in red.

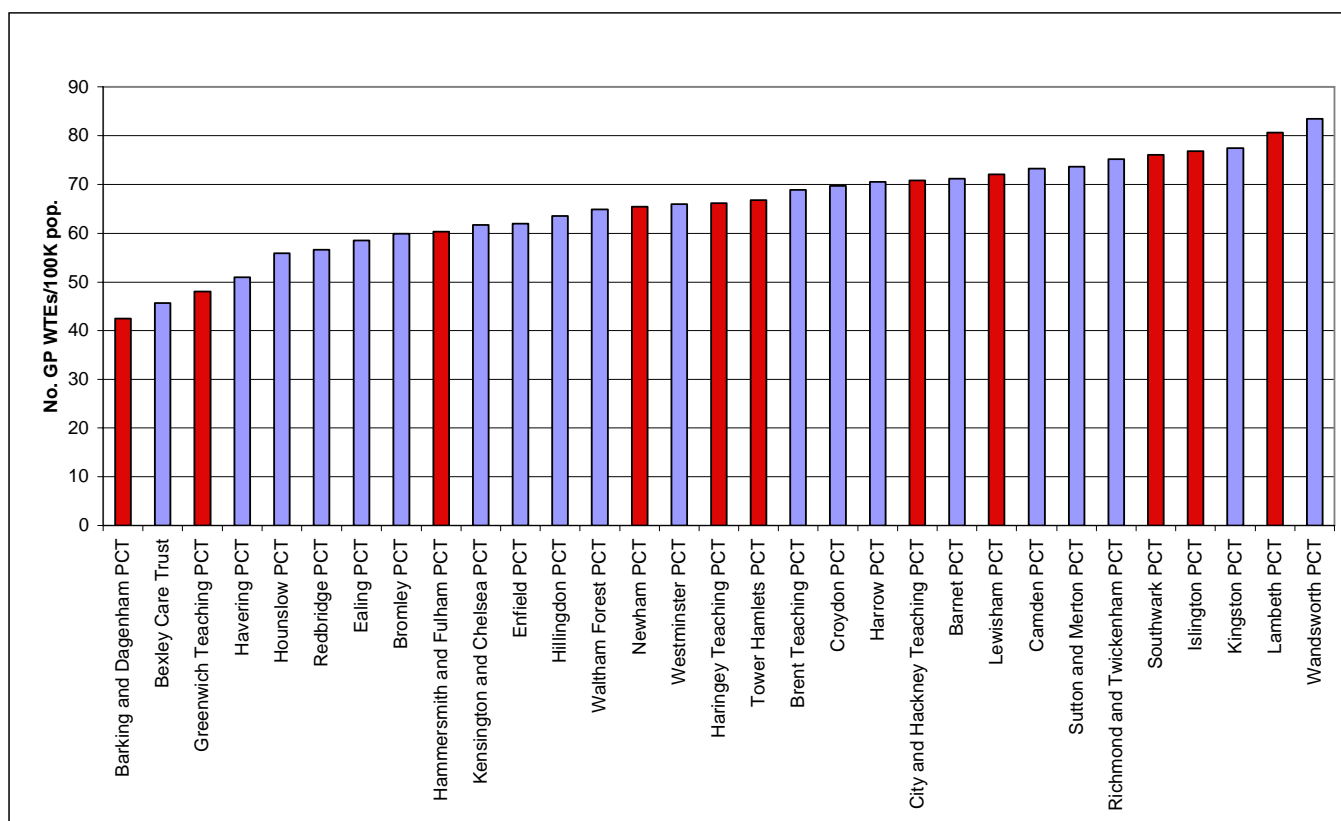
⁸ Our health, our care, our say. 2006 Department of Health. (http://www.dh.gov.uk/en/Publicationsandstatistics/Publications/PublicationsPolicyAndGuidance/DH_4127453)

⁹ J. Tudor Hart (1971) The inverse care law. *Lancet* 1(7696): 405-12

Those boroughs that are currently underserved by GPs include:

- Redbridge – 51.32 GPs per 100,000 population
- Havering – 51.21
- Waltham Forest – 56.66
- Hammersmith and Fulham – 57.42
- Greenwich – 52.87
- Bexley – 56.03
- Barking and Dagenham – 44.9

Figure 5.1: GPs per weighted PCT population, September 2006



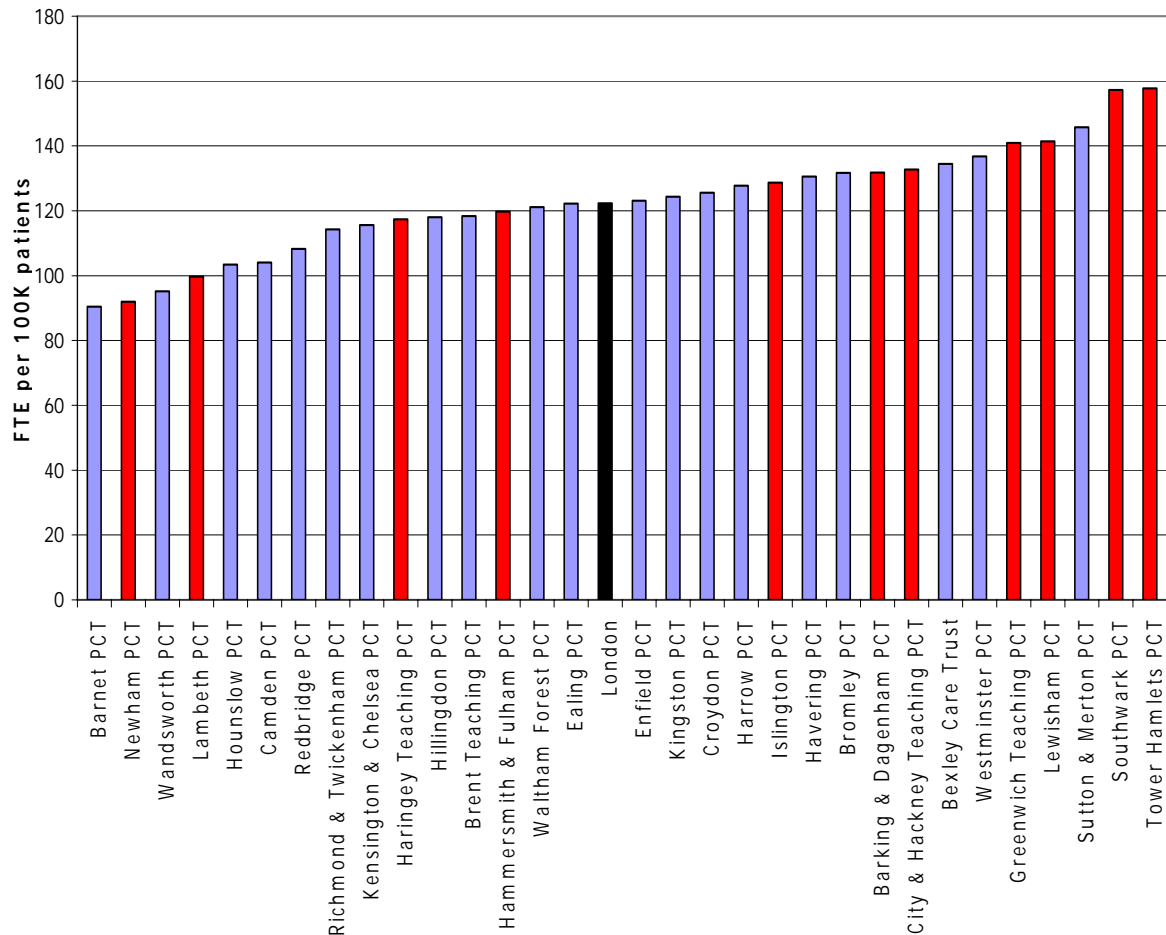
Indicator source: LHO – Local basket of inequalities indicators

Note: spearhead PCTs shown in red.

Data are collected on other primary care staff, but all non-medical staff are grouped together, not distinguishing between nurses, receptionists or practice managers, etc. These data, therefore, might indicate the degree of organisation of a practice, but do not provide any direct indication of access to healthcare *per se* (figure 5.2).

As with GPs, it is not necessarily the most deprived areas, nor the spearhead areas, that have the lowest numbers of non-medical primary care staff per registered patient population. Neither the areas with the lowest nor the highest numbers of non-medical staff are the same as those that are under-served by GPs. There is no consistent pattern.

Figure 5.2 Number of primary care staff (non-medical) per PCT-registered population

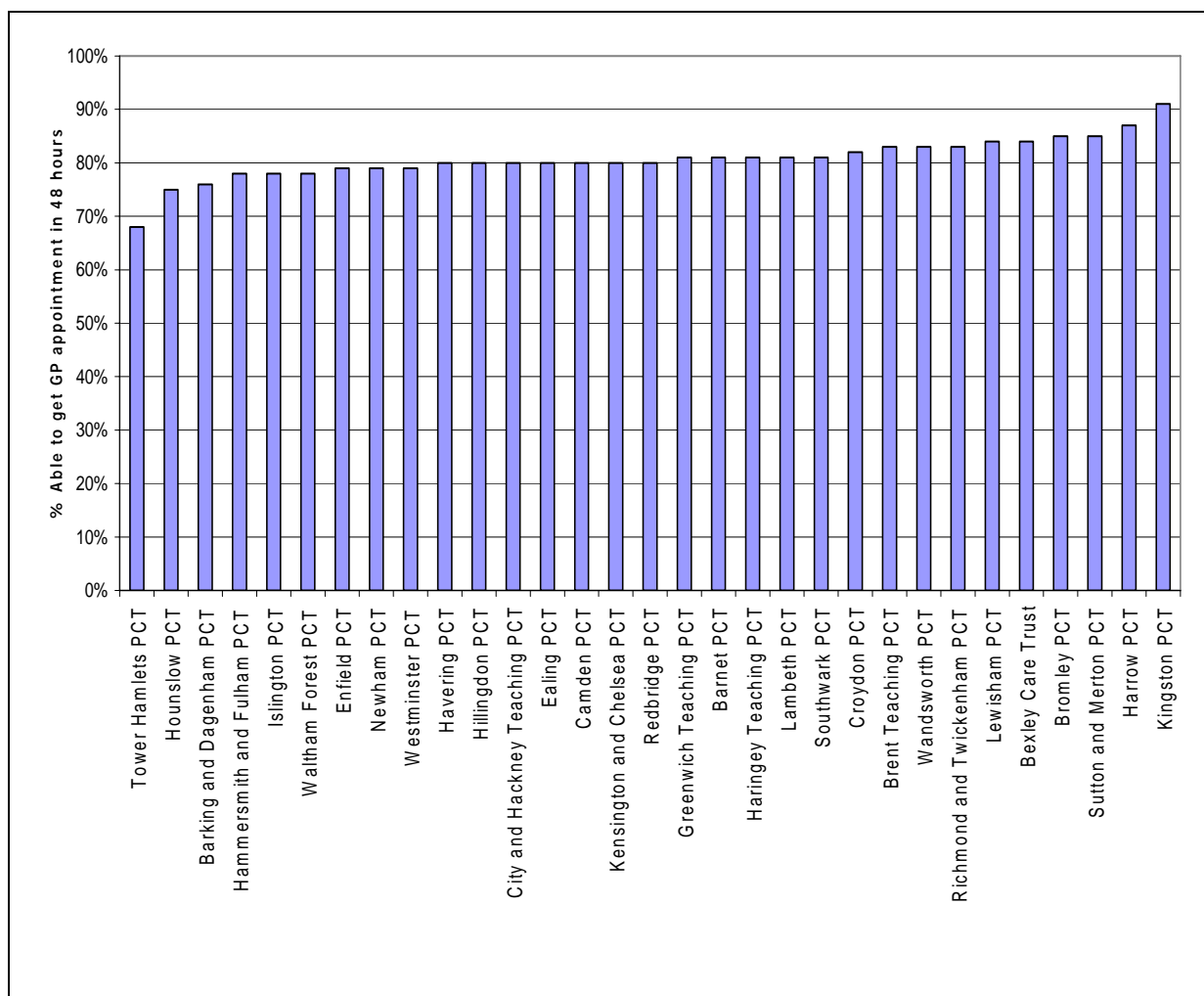


Data Source: The Information Centre: General and Personal Medical Services; Medical and Dental Workforce Census; Non-medical Workforce Census

Note: spearhead PCTs shown in red.

Another primary care access indicator to consider is 48 hour GP access. This is the percentage of the patients who can see a GP within 48 hours – a government access target. The data displayed in figure 5.3 are based on the results from the GP Patient Survey 2007, conducted by the Department of Health. It is reported that 81% of people are able to get GP appointments within 48 hours across London and the majority of PCTs achieve above 70%, with the exception of Tower Hamlets.

Figure 5.3: Percentage of patients who are able to get GP appointments in 48 hours by London PCTs



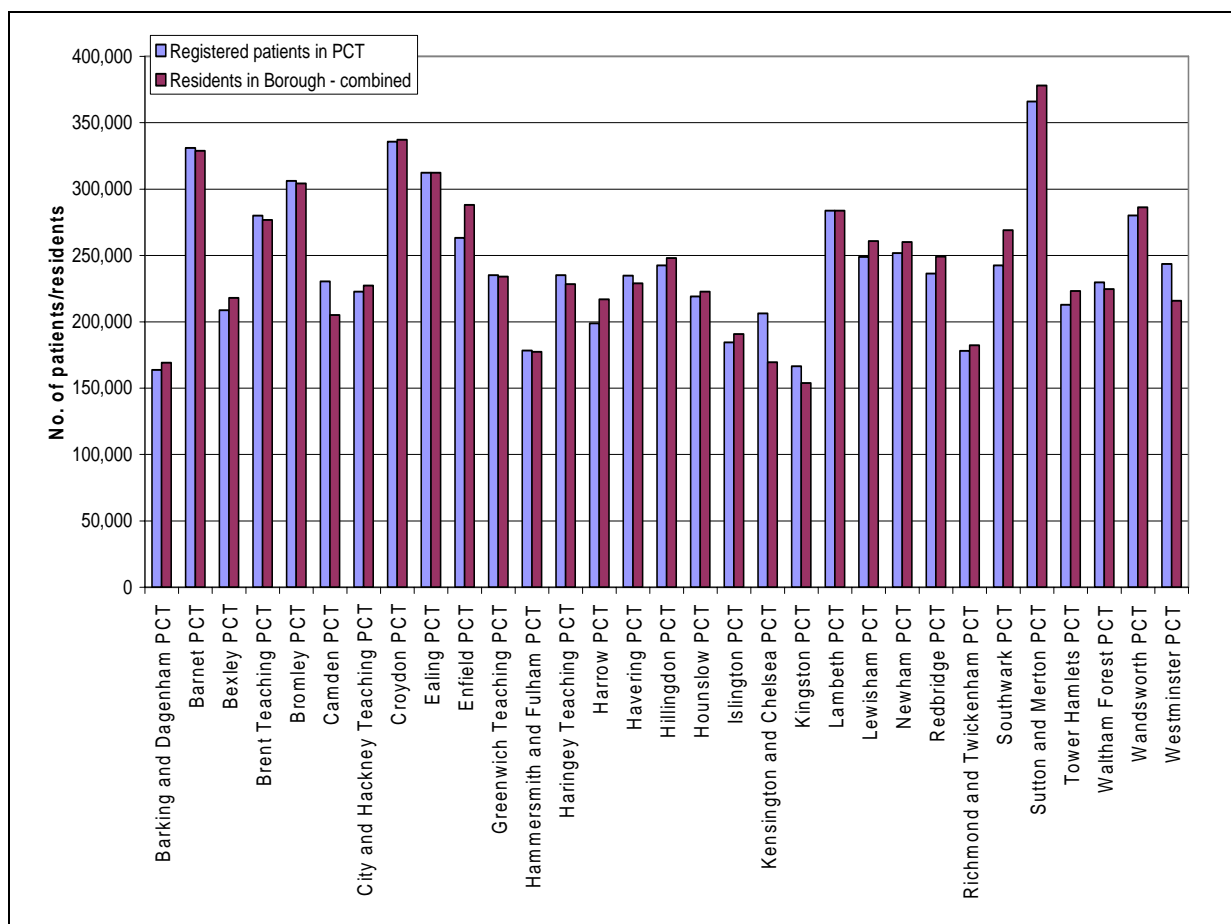
Source: GP patient survey 2007, Department of Health. (Note: results for survey are not weighted)

http://www.dh.gov.uk/en/Publicationsandstatistics/PublishedSurvey/GPpatientsurvey2007/DH_075126

Comparing the GP-registered population in a PCT with its respective borough population could provide an indication of the extent to which some populations do not have access to GP services. Discrepancies between the number of GP registered population and resident population could be due to a number of factors, which are outside the scope of this paper to explore. Resident populations could be underestimated by migration between boroughs and unregistered population groups, such as some refugees, asylum seekers, and illegal immigrants, etc. Registered populations could be exaggerated by people who have moved out of the PCT area, but have not registered with another GP practice.

Figure 5.4 indicates that the following have a significant number of residents (over 10,000) not registered for local GP services (i.e. the resident population exceeds the GP registered population): Enfield PCT, Harrow PCT; Lewisham PCT, Redbridge PCT, Sutton and Merton PCT, Southwark PCT, Tower Hamlets PCT.

Figure 5.4: Number of registered patients by PCT and projected number of residents¹⁰ by borough



Source: Attribution Data Set of GP Registered Populations – 2006. Information Centre.

<http://www.ic.nhs.uk/pubs/gpregpop06>. July 30, 2007; Projected number of residents in boroughs:

© GLA 2006 Round Ward Population Projections - RLP High

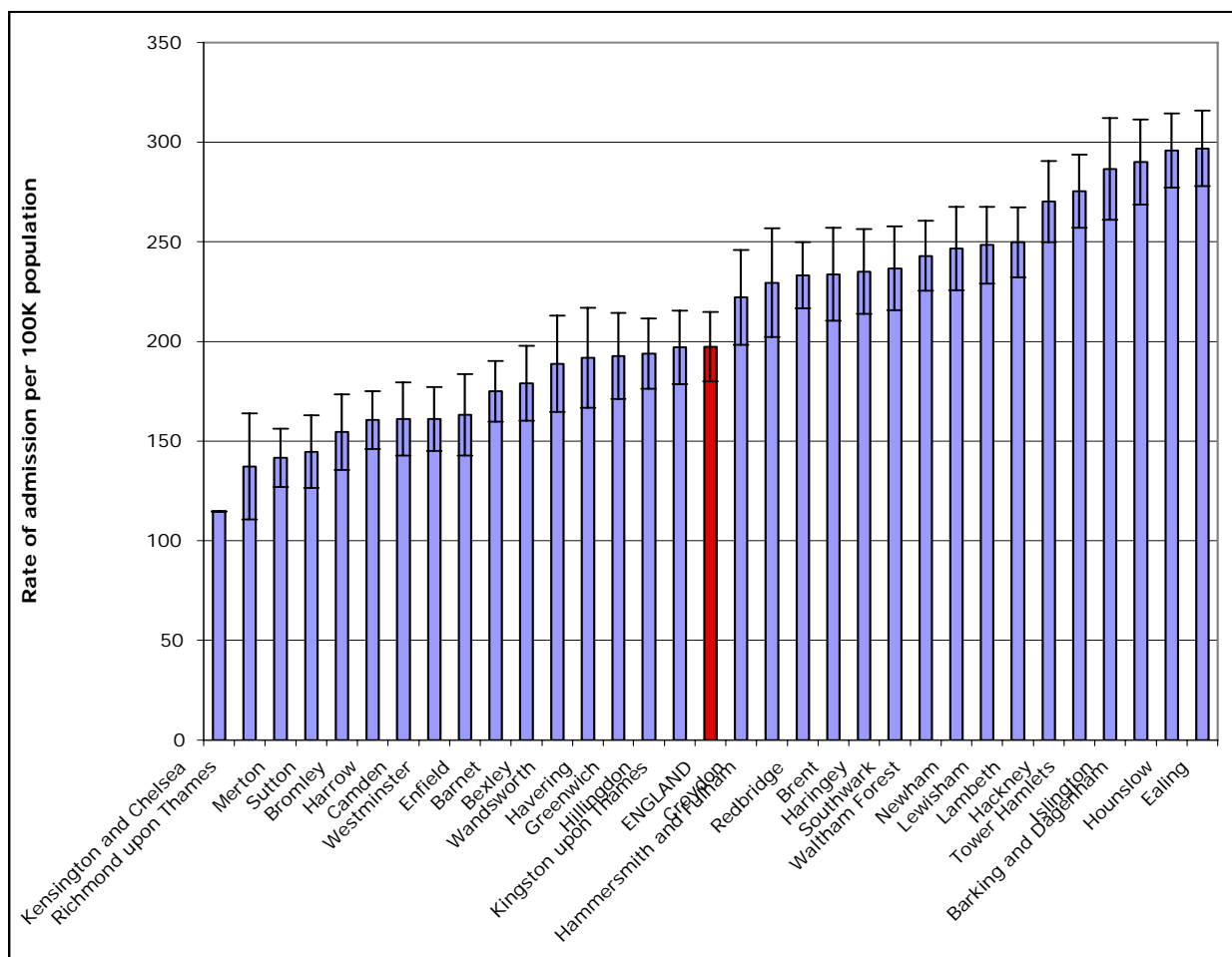
Notes:

1. In order to compare the registered populations of City and Hackney PCT and Sutton and Merton PCT with the relevant registered populations, the population numbers for City of London and London Borough of Hackney have been combined, as have those for LB Sutton and LB Merton.
2. Richmond and Twickenham PCT serves the London Borough of Richmond upon Thames .

5.2 Quality of primary care: avoidable emergency admissions

Improving care and self-management for people with long-term conditions, such as asthma and diabetes mellitus, can help to reduce emergency hospital admissions for these conditions. The Department of Health PSA targets include reducing emergency bed days for people with long-term conditions, through improved primary and community-based care. Emergency admissions for asthma and diabetes are potentially avoidable, if people receive high quality care in the primary care setting. Management of these conditions is representative of all chronic care management, so this indicator is a reflection of primary care quality generally. Figure 5.5 shows potentially avoidable, emergency admissions for asthma and diabetes in 2006, by local authority.

Figure 5.5: Emergency admissions for asthma and diabetes per 100,000 GP relevant population, by local authority, 2006 (age and sex standardised rates)¹¹



¹¹ Data source: LHO local basket of inequalities indicators

Key Points

- There is marked variation in several aspects of access to primary care services across London boroughs.
- Some boroughs are currently under-doctored, i.e. there are fewer GPs per weighted population than the England average.
- There is variation in PCT performance on providing GP access within 48hours of requesting an appointment, ranging from less than 70% in Tower Hamlets to over 90% in Kingston.
- 7 PCTs appear to have a significant resident population (more than 10,000), who are not registered with a GP. This could represent a significant problem with access to primary care, but needs to be looked into further for full understanding.
- Primary care quality is even more variable than access, as measured by potentially avoidable emergency hospital admissions. These vary from just over 100 per 100,000 population in Kensington and Chelsea to around 300 per 100,000 population in Ealing.

Implications

- Reorganisation of primary care services needs to take into account the potential difficulty of recruiting GPs into certain areas.
- Making it easier to register with a practice or making provision for unregistered populations to receive adequate services will also be important.

6. Preventive Health Care

Alongside the *inverse care law* there exists an equally important *inverse prevention law*, in which those who are most disadvantaged and with the greatest health need often have the worst access to preventive health care and are least likely to take on board health promotion messages.

Here we consider smoking cessation and immunisations to demonstrate inequalities in preventive services.

6.1. Access to smoking cessation services

GPs are given incentives through the quality and outcomes framework (QOF) to record the smoking status of all over 16s on their lists, i.e. whether or not they are smokers. From this we should be able to derive an estimate of smoking prevalence at a local level. However, the data recording is inconsistent and of poor quality. The Department of Health (DH) was concerned that some GPs were recording the smoking status of smokers only, or that some returns were based on a sample and not the complete list of over 16 year olds. DH, therefore, applied a data quality threshold of 70% for recording smoking status – i.e. if smoking status is recorded on less than 70% of all registered over 16s, the data are deemed unreliable. In addition, if the calculated smoking prevalence is less than 15% or more than 35% the data are also deemed unreliable.

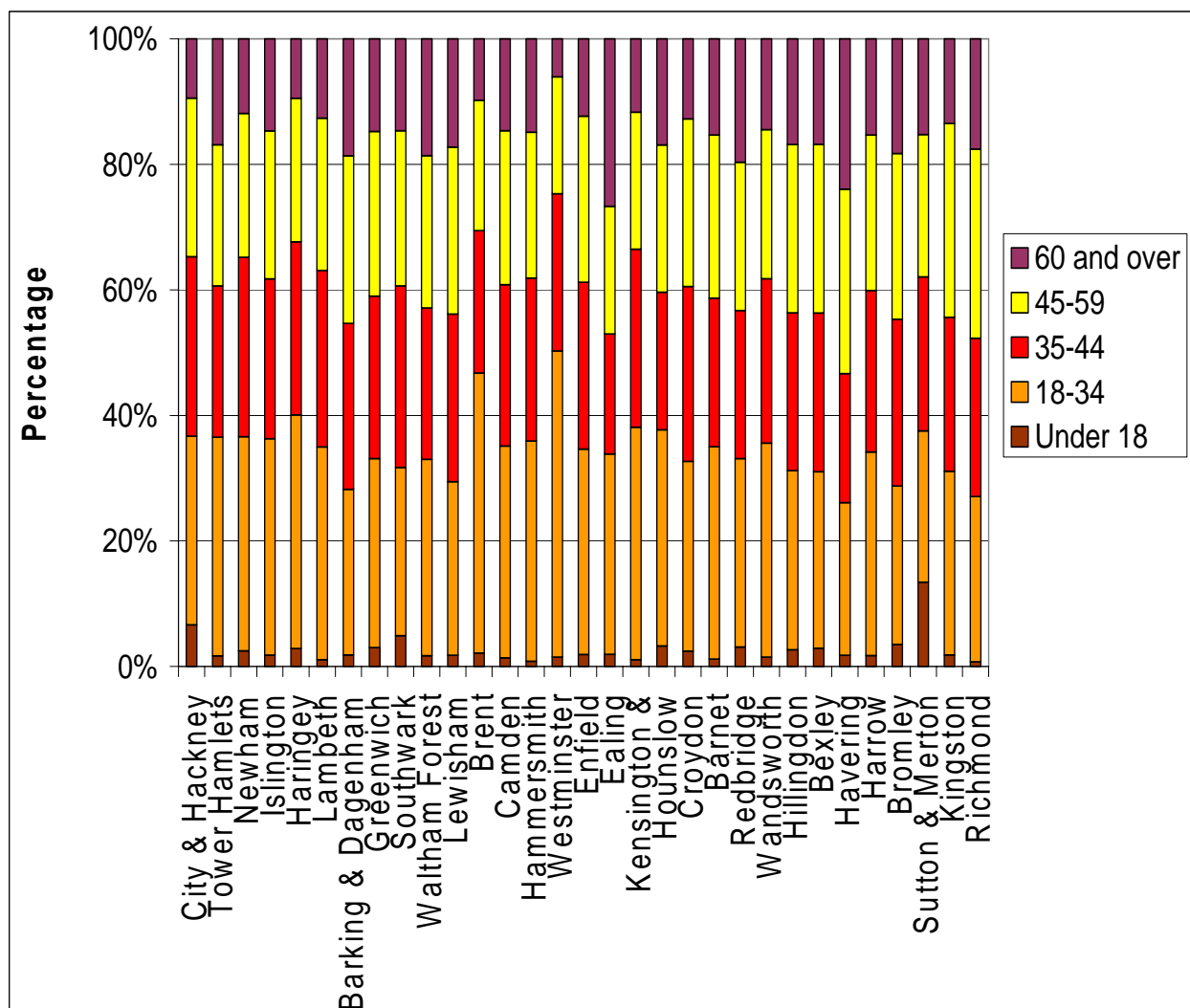
Only 10 London PCTs met the DH quality standard for recording smoking status in the first quarter of 2007/8: Barking and Dagenham, Barnet, Croydon, Haringey, Islington, Kingston, Lewisham, Southwark and Waltham Forest. It is, therefore, not possible to derive any meaningful information about inequalities in smoking prevalence or, indeed, of GP recording of it from these data and they are not presented here.

Numbers of people who set a date to quit smoking can be used as an indicator of access to smoking cessation services. Figure 6.1 shows the proportion of smokers in each PCT who had set a quit date during quarter 1 of 2007/8 by age group.

Across all PCTs the under-18 group has the smallest proportion setting a quit date, usually less than 10%, although in Sutton and Merton it is significantly higher. Brent and Westminster have the highest proportions of 18 to 34 year olds setting quit dates. This age group forms the greatest proportion of people accessing smoking cessation services overall.

The highest proportion of over 60s accessing smoking cessation services is in Ealing.

Figure 6.1. : Percentage of smokers in each group setting a quit date, by PCT

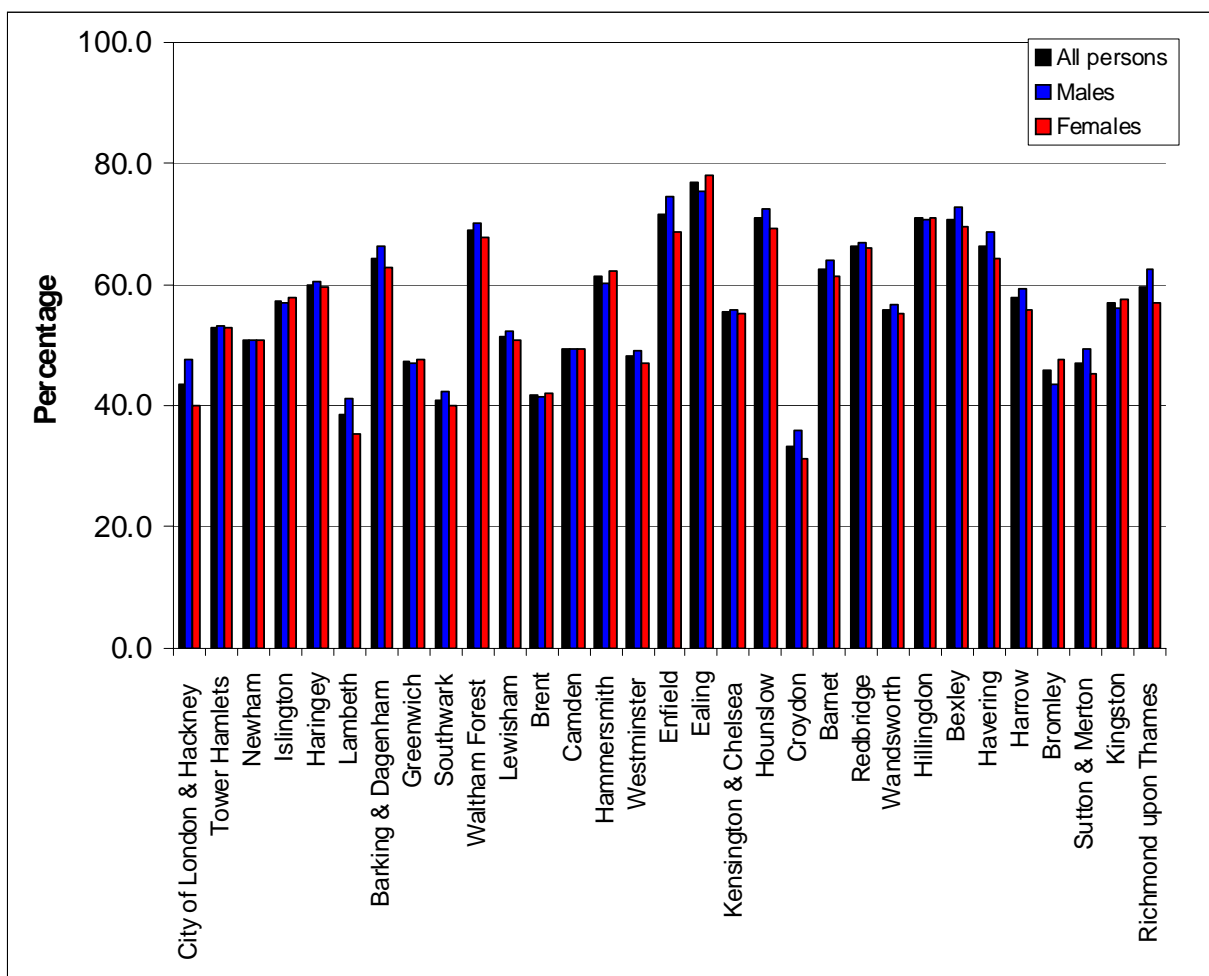


Data source: PCT returns: quarter 1 2007/8

Notes: PCTs displayed from left to right in order of IMD rank, as a measure of deprivation – i.e. from most deprived to least deprived.

An indicator of effectiveness of smoking cessation services is the proportion of people who have set a quit date and are no longer smoking after four weeks, or “four week quitters”. Again there is marked variability between PCTs in the numbers of successful four week quitters (figure 6.2). In quarter 1 of 2007/8, some PCTs were quite successful at converting those intending to quit (having set a date) into non-smokers (i.e. quit at four weeks). The following PCTs were able to convert 60% or more: Barking and Dagenham, Barnet, Enfield, Hammersmith and Fulham, Havering, Hillingdon, Hounslow, Redbridge, Richmond, Waltham Forest and Wandsworth. Ealing stands out in converting close to 80% of smokers setting a date into four week quitters. Croydon had converted less than 40%.

Fig. 6.2: Four week quitters as percentage of persons setting a quit date by PCT, 2006-7.



Data Source: PCT returns

6.2 Immunisations

Immunisation against infectious diseases is one of the most effective public health interventions. Achieving a high level of population coverage with immunisation reduces and prevents the spread of infections and can protect individuals from serious morbidity. Immunisation coverage is considered here as an indicator of access to and uptake of preventive health care.

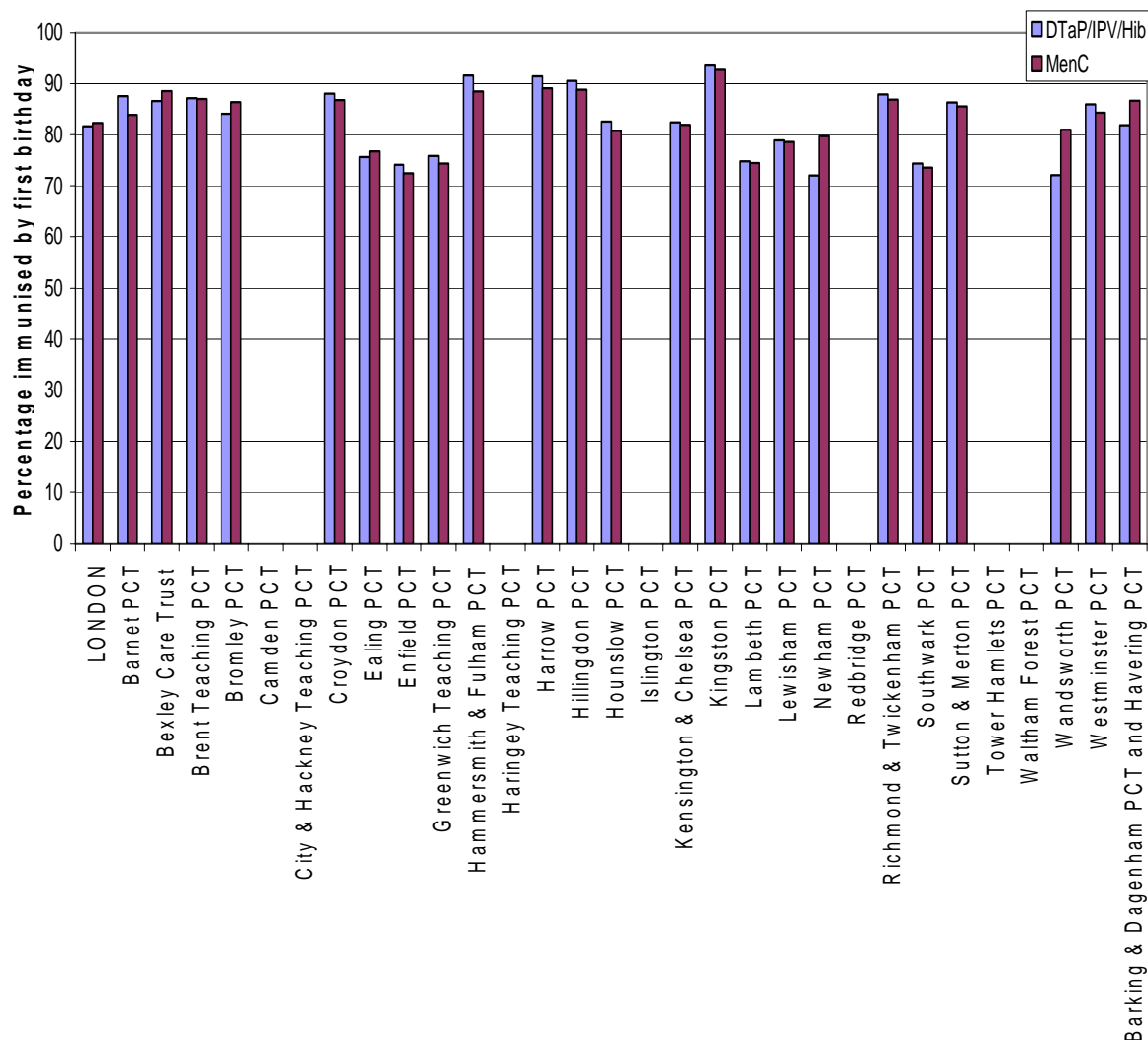
Figures 6.3 and 6.4 show the percentage of children in each PCT immunised with routine vaccinations (according the prevailing schedule) by their first and fifth birthdays. There is considerable variation in immunisation coverage by vaccine, as well as by PCT.

Coverage for 1 year-olds ranges from around 70% for combined diphtheria, tetanus, polio and Haemophilus influenza B (DTaP/IPV/HiB) in Newham and Greenwich to over 90% for both DTaP/IPV/HiB and meningitis C vaccine in Kingston.

By age 5, there is even more variation in coverage by vaccine as well as by borough. At this stage there is no obvious relationship between the level of deprivation in a borough and the vaccine coverage.

Some data are missing as a result of problems with data recording in a new system. No data are shown for the affected PCTs (see chart note).

**Figure 6.3: Percentage of children immunised by their 1st birthday, by PCT
2006-07**

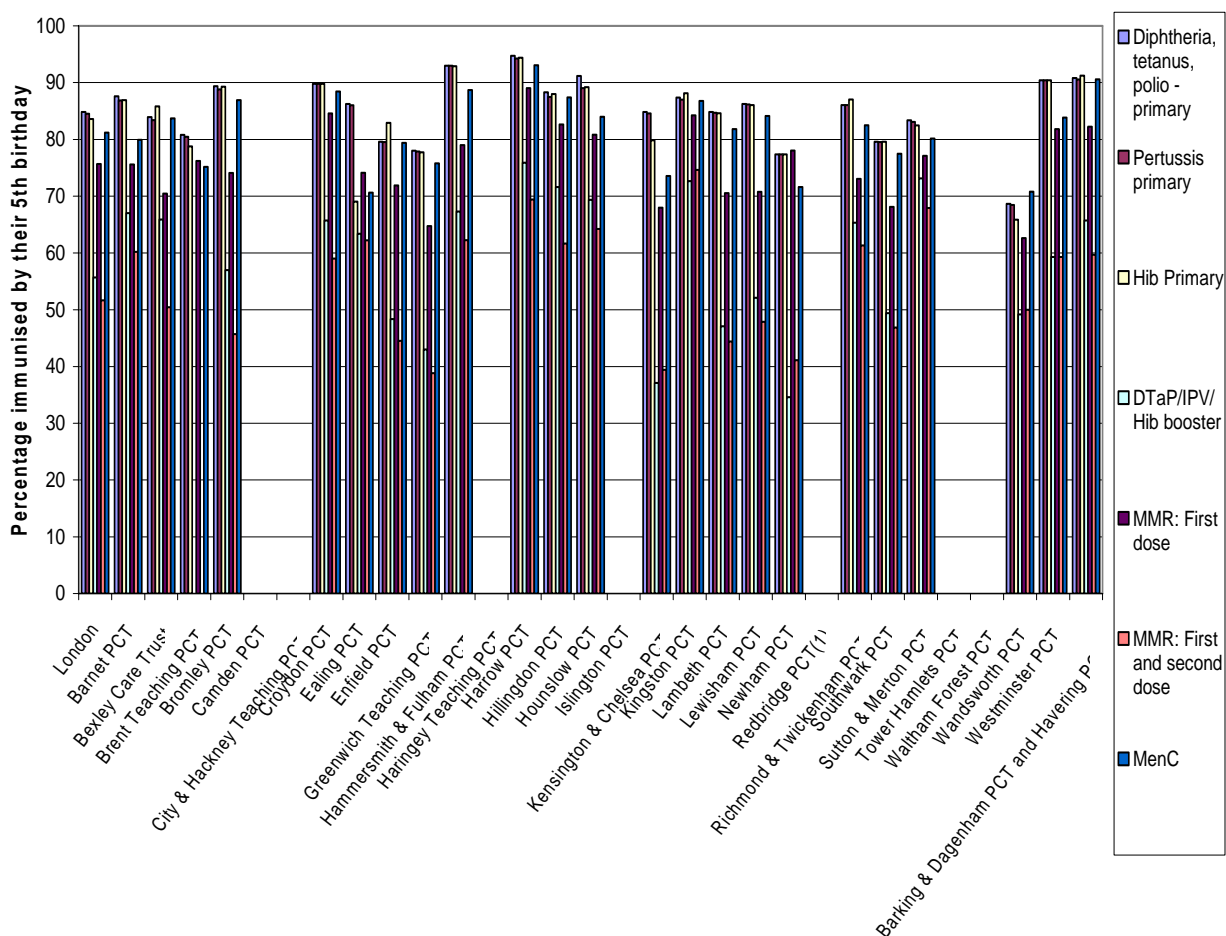


Data source: Health Protection Agency COVER data; NHS Immunisation Statistics, England: 2006-7. The Information Centre.

***Notes:**

1. The 7 PCTs for which no data are shown – Camden, City and Hackney, Haringey, Islington, Redbridge, Tower Hamlets and Waltham Forest – were unable to provide reliable annual data due to ongoing problems relating to the implementation of a new child health system.
2. Five year booster data not available for Brent Teaching PCT due to systems problem

Figure 6.4 : Percentage children immunised by their 5th birthday by PCT, 2006-2007

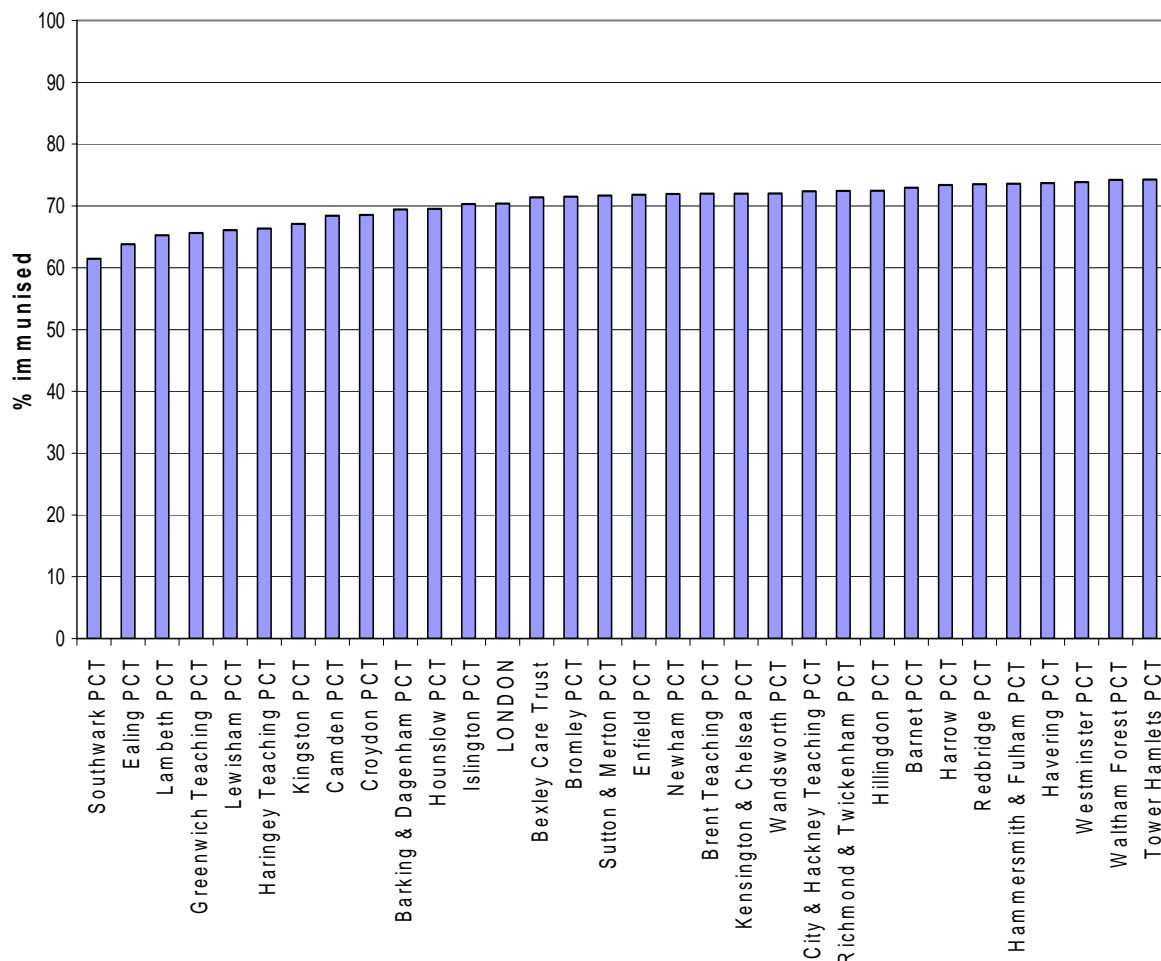


Data source: NHS Immunisation Statistics, England: 2006-7. The Information Centre.

*Note: the 7 PCTs for which no data are shown – Camden, City and Hackney, Haringey, Islington, Redbridge, Tower Hamlets and Waltham Forest – were unable to provide reliable annual data due to ongoing problems relating to the implementation of a new child health system.

As a measure of uptake of preventive services by older people, we will consider influenza vaccination, which is offered to all people over 65 every winter. Figure 6.5 shows the 2006/7 coverage of 'flu immunisation in over 65s by PCT. Coverage ranges from just over 60% in Southwark to over 70% in Tower Hamlets. There is less variation in immunisation coverage in this age group than there is for childhood immunisation, but it is generally lower. As with children, there is no obvious relationship between immunisation uptake in the over 65s and area deprivation.

Figure 6.5: Percentage over 65 year-olds immunised against flu during October 2006 to January 2007, by PCT



Data source: NHS Immunisation Statistics, England: 2006-7. The Information Centre.

Key Points

- There is variation in access to and uptake of preventive services, which could be explained in part by different health seeking behaviours of different groups, but also in part by inability of services to reach certain groups.
- London shows variation in access to and effectiveness of smoking cessation services.
- Variation in access occurs by age and by borough. The worst access/poorest uptake of smoking cessation services is among those under 18 years, while 18 to 34 years old have the highest uptake.
- In Ealing nearly 80% of those smokers, who set a quit date with smoking cessation services remained quit at four weeks. Whereas, in Croydon only 40% were converted to four week quitters.
- There are variations in uptake of childhood immunisations at all ages and across boroughs. The picture is complex, with coverage differing between individual vaccines and no clear relationship to deprivation or affluence.
- Variations in uptake of flu vaccine by older people are less than for childhood immunisations.

Implications

- Understanding local factors and more precisely targeting preventive interventions could help improve their uptake and effectiveness.

7. Maternity

Healthcare for London proposes that there should be fewer obstetric units across the capital and that those that remain should each have a partner midwife-led unit, either in the hospital or in the community. The quality of antenatal and maternity care plays a significant role in the health of the newborn and in reducing infant mortality.

Some of the indicators known to be associated with poorer neonatal outcomes are sole registration of birth by mother, teenage pregnancy, low birth weight, late booking and infant mortality. Each of these shows considerable variation between London boroughs.

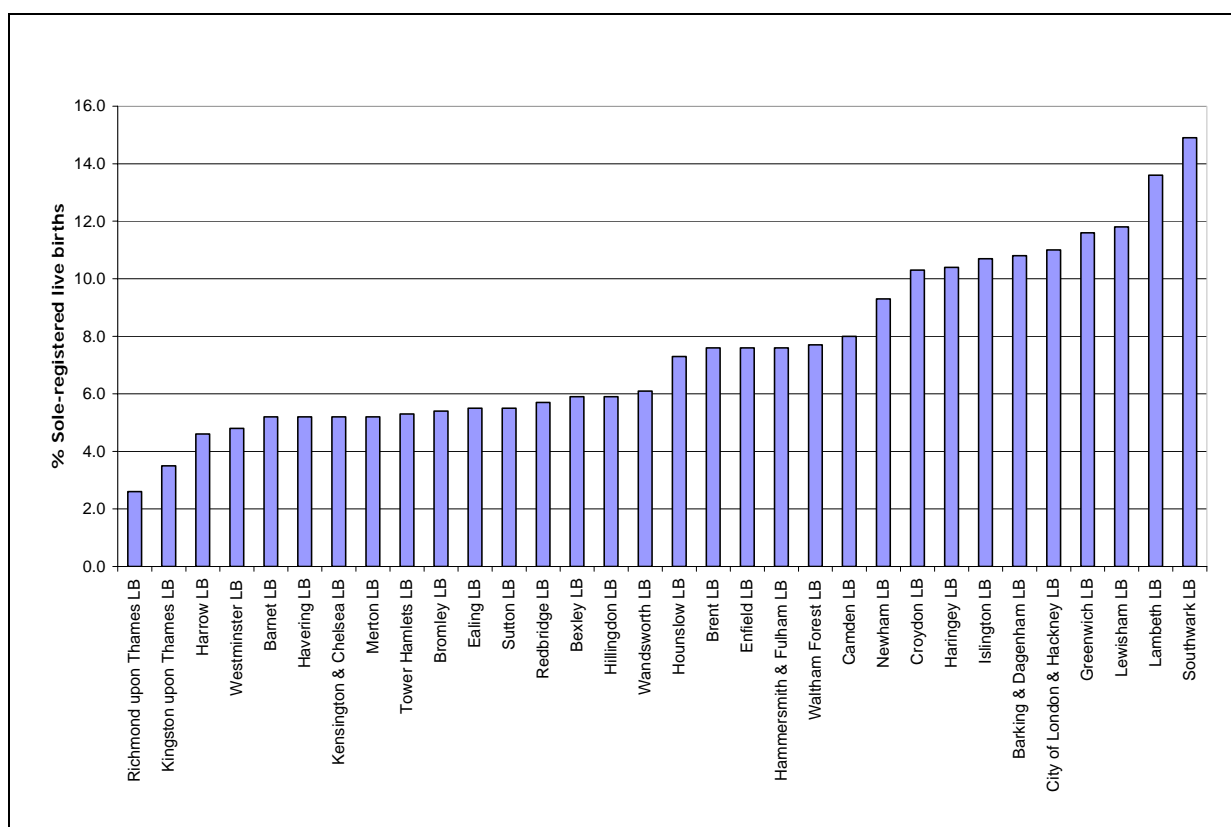
7.1 Births sole-registered by mother

The target for reduction in inequality in infant mortality rates was introduced in November 2001. Its current form compares the rate in the 'routine and manual' group in the new National Statistics Socio-Economic Classification (NS-SEC) to the rate in the general population. Classification into groups is based on father's occupation, and therefore these groups (and the 'general population') exclude births registered to the mother alone, which is a very important group in London.

Figure 7.1 shows the proportions of births sole registered by mothers as a proportion of all live births for the period 2001-2003. Sole registration means that the father's name does not appear on the birth certificate and the mothers are presumed to be lone parents.

More than 10% of births in Croydon, Haringey, Islington, Barking & Dagenham, City of London & Hackney, Greenwich, Lewisham, Lambeth and Southwark were registered by the mother alone. Of these eight boroughs with high proportions of sole registrations, only Croydon is not a spearhead area. Lower proportions of sole registered births were found in outer London boroughs, with proportions below 4% in Richmond upon Thames and Kingston upon Thames.

Figure 7.1: Proportion of sole-registered live births in ascending order, London Boroughs, 2001-3



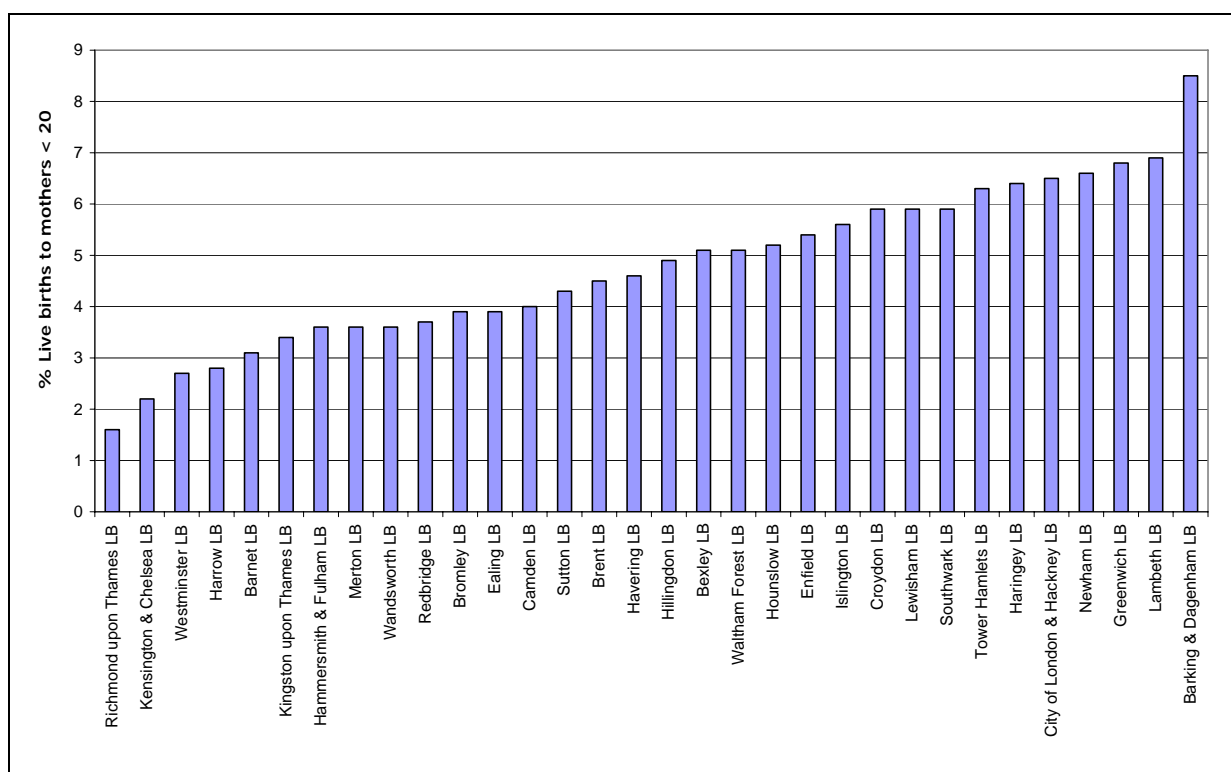
Source: *Born Equal? Inequalities in Infant Mortality in London. A Technical Report. July 2007.*
London Health Observatory

7.2 Births to teenage mothers

Figure 7.2 gives the proportion of births in each borough to mothers aged under 20 in 2001-2003, i.e. those babies that were conceived by teenage mothers. The top 10 boroughs for teenage pregnancy are Croydon, Lewisham, Southwark, Tower Hamlets, Haringey, City and Hackney, Newham, Greenwich, Lambeth and Barking and Dagenham. Again, all but Croydon are spearheads.

In Barking & Dagenham, more than 8% of births were to mothers aged under 20, while in Harrow, Westminster, Kensington and Chelsea and Richmond upon Thames, the proportion was less than 3%.

Figure 7.2: Proportion of live births to mothers aged under 20 in ascending order, London Boroughs, 2001-3

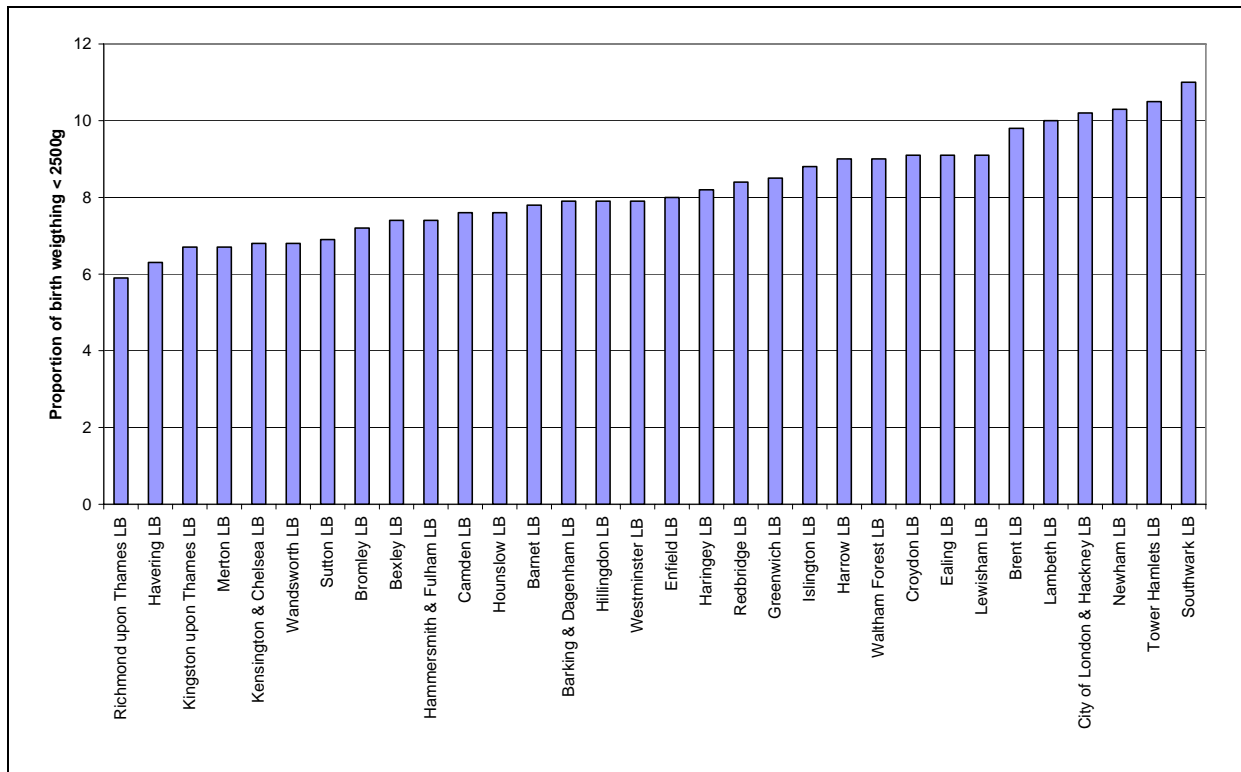


Source: *Born Equal? Inequalities in Infant Mortality in London. A Technical Report. July 2007.*
 London Health Observatory

7.3 Proportion of low birth weight babies (< 2500 grams)

Birth weight is related to social status and to other factors such as smoking. Low birth weight, i.e. less than 2500g, is a marker of deprivation and represents an accumulated risk over generations. The proportion of births in each London borough under 2,500g (including low birth weight and very low birth weight – under 1,500g) are displayed in figure 7.3. Between 2001 and 2003, the highest proportions were in the spearhead authorities: Southwark; Tower Hamlets; Newham; City of London and Hackney; Lambeth; and in Brent (non spearhead) – all over 9.5%. The lowest were in Richmond upon Thames, Havering, Kingston upon Thames, Merton, Kensington and Chelsea, Wandsworth, and Sutton – all less than 7%.

Figure 7.3: Proportion of births weighting less than 2,500 grams in ascending order, London Boroughs, 2001-3



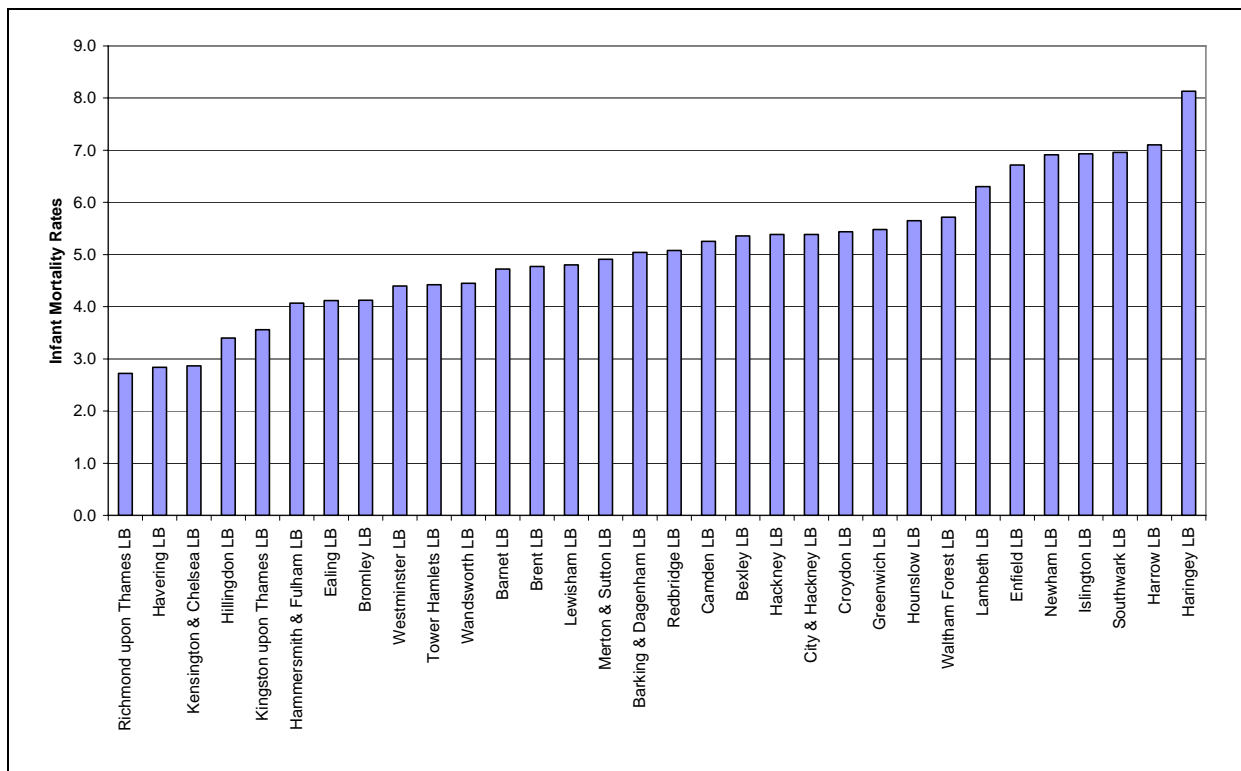
Source: *Born Equal? Inequalities in Infant Mortality in London. A Technical Report. July 2007.*

London Health Observatory

7.4 Infant Mortality Rate (IMR)

The Infant Mortality Rate (IMR) is the number of deaths in children aged under 1 year per 1000 live births. London boroughs' IMRs for 2003-2005 are provided in figure 7.4. There were marked differences between London boroughs: Haringey, Harrow and Southwark had the highest infant mortality rates – 8.1, 7.1 and 7.0 per 1000 live births respectively, i.e. almost three times as much as that of the boroughs with the lowest rates.

Figure 7.4: Infant Mortality Rates in ascending order, London Boroughs, 2003-2005



Source: *Born Equal? Inequalities in Infant Mortality in London. A Technical Report. July 2007.*

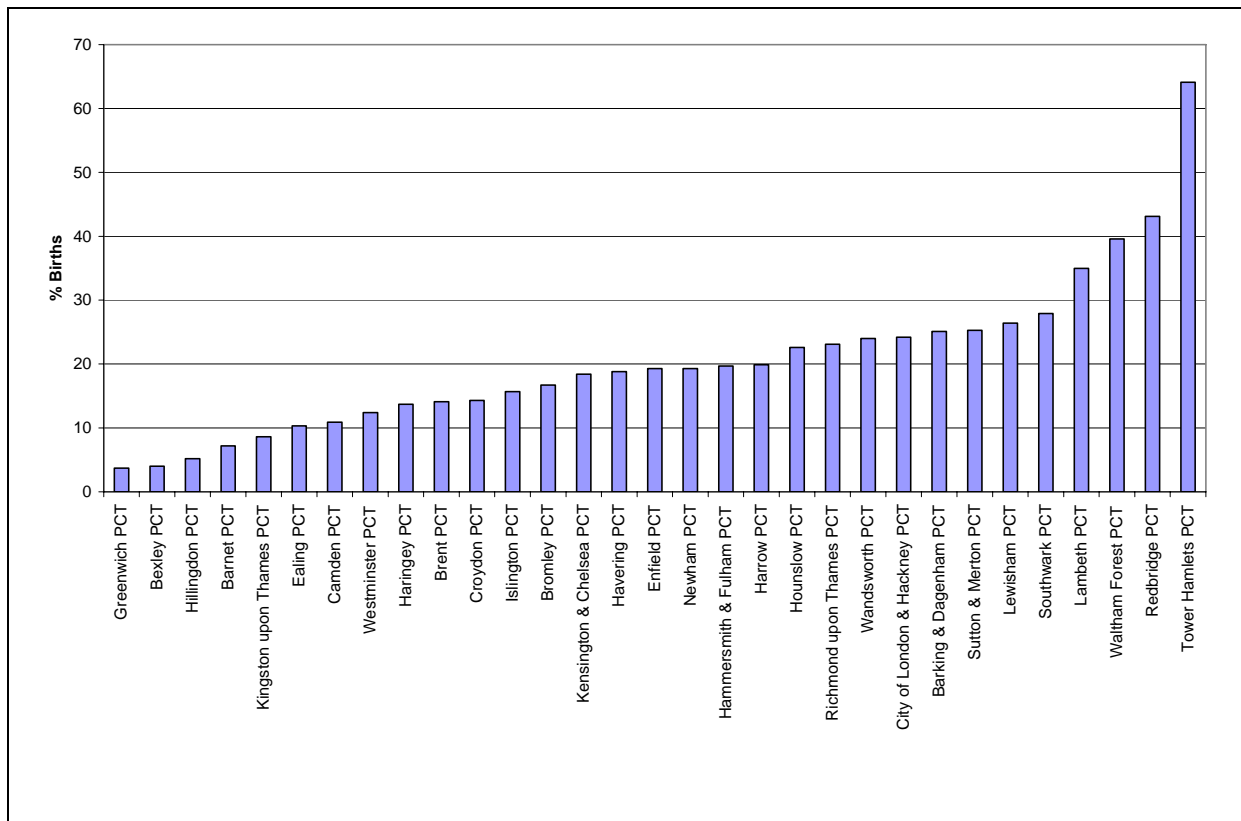
London Health Observatory

7.5 Proportion of early antenatal bookings (less than 12 weeks)

Early booking of the first antenatal appointment – within the first 12 weeks of pregnancy – is a good precursor of better health of the mother and child, and is identified in the Healthcare for London Strategy as a key point for assessment of risks in the mother. The percentage of early bookings by PCT is shown in figure 7.5. There is considerable variation between PCTs, ranging from 3.7% in Greenwich to 64.1% in Tower Hamlets.

It is alarming to note that Greenwich, Bexley, Hillingdon, Barnet and Kingston PCTs each had fewer than 10% of deliveries with early first antenatal appointments for 2005/6.

Figure 7.5: Proportion of early first antenatal bookings in ascending order, London PCTs, 2005-6



Source: *Born Equal? Inequalities in Infant Mortality in London. A Technical Report. July 2007.*

London Health Observatory

Key Points

- High proportions of sole registered births, teen pregnancies and low birth weight occur in some of the most deprived London boroughs.
- Low birth weight shows marked variation across London with rates almost doubling from the lowest, in Richmond, to the highest, in Southwark.
- The infant mortality rate is 3-4 times higher in the areas with the highest rates than in the areas with the least infant deaths.
- Early booking is essential for good antenatal care. The proportion of women booking before 12 weeks of pregnancy varies markedly between boroughs. Late booking does not appear to be associated with deprivation – being far less common in Tower Hamlets, with over 60% booking early, than in Kingston upon Thames, where less than 10% of mothers book before 12 weeks of pregnancy.

Implications

- To ensure the best outcomes, there might be more need for specialised obstetric units – or at least ready access to them – in the most deprived areas, with higher rates of risk factors for poor neonatal outcomes.

- **Stroke**

Healthcare for London recommends that treatment of acute stroke be centralised into a few specialist centres, in which multi-disciplinary professionals with the skills and experience from treating large numbers of people with stroke can provide the best care. This would include access to CT scans within hours of the onset of symptoms and early thrombolytic treatment, if appropriate. Rehabilitation therapy would take place in the patient's home, or close to home, sometimes at the local hospital or polyclinic.

Stroke is a common occurrence and, as well as being a significant cause of morbidity and disability, it contributes to cardiovascular disease (CVD) mortality and, therefore, to the gap in mortality and life expectancy. It is the third commonest cause of death in the UK and the single most important cause of disability in people living in their own homes. Strokes occur either as a result of thrombosis or embolism (cerebral infarction) or of haemorrhage. Cerebral infarctions make up the vast majority – as much as 85% of all strokes.

Incidence of stroke has been reported to range from 81 to 150 per 100,000, doubling every decade after 55 years of age. 75% of strokes occur in people over 65 years of age. The incidence is higher in black people than in white people and it occurs at a younger age, with black people in London having a 60% higher incidence than white people¹².

Hypertension is a major risk factor for both types of stroke, so it is extremely important for stroke prevention that people with hypertension are identified and adequately treated. There is some financial incentive via the GP contract (quality and outcomes framework – QOF) to case-find and treat hypertension. Table 8.1 shows the prevalence of stroke and hypertension in London, as derived from general practice disease registers via the QOF.

¹² C D A Wolfe, A G Rudd, R Howard, C Coshall, J Stewart, E Lawrence, C Hajat and T Hillen
Incidence and case fatality rates of stroke subtypes in a multiethnic population: the South London
Stroke Register 2002;72;211-216 *J. Neurol. Neurosurg. Psychiatry*

Table 8.1. Prevalence of hypertension and stroke in London

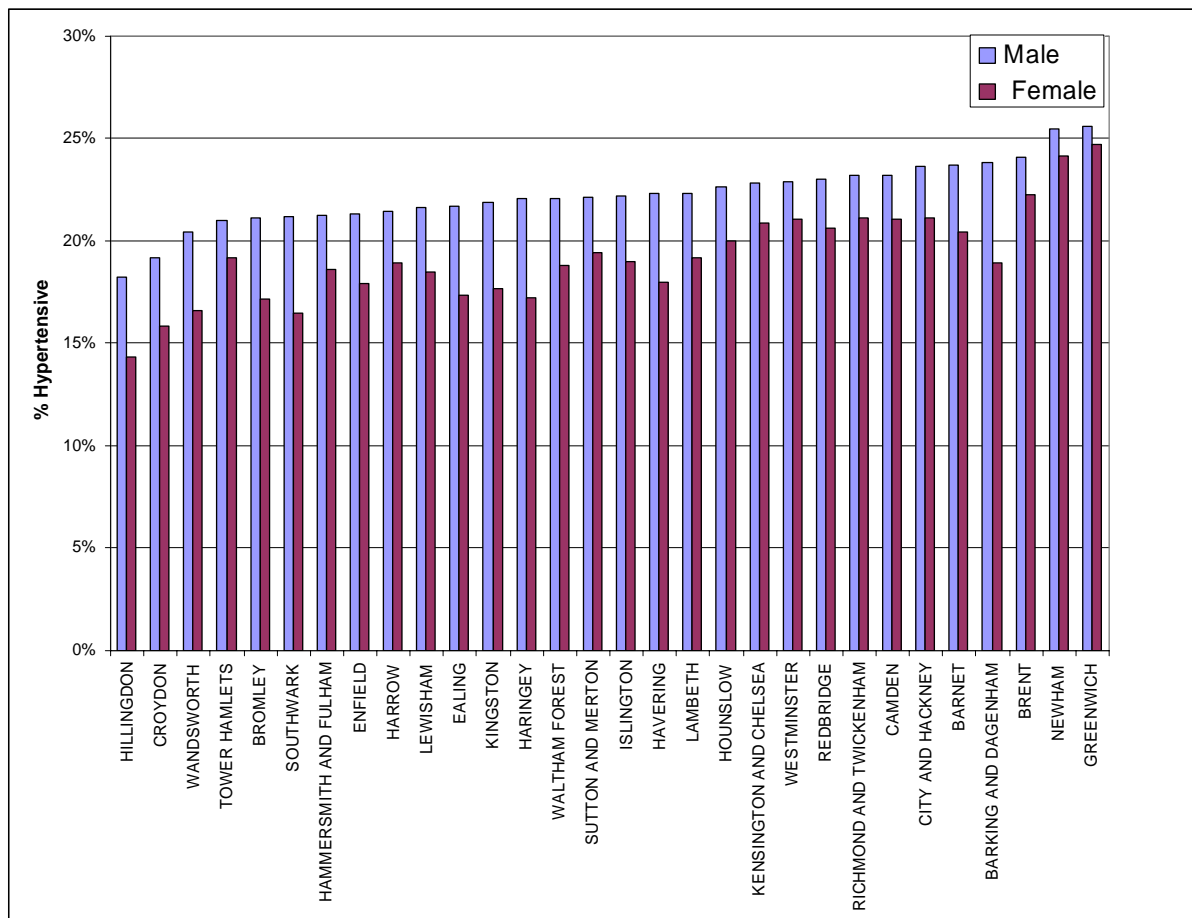
	Total GP-registered population in London	Total n° on GP stroke registers	Unadjusted Prevalence – London	England average prevalence	Min Prevalence per practice	Max Prevalence per practice
Stroke	8,440,321	85,508	1.01%	1.61%	0.00%	23.48%
Hypertension	8,440,321	870,445	10.31%	12.49%	0.00%	51.74%

Data Source: QMAS database - 2006/07 data as at end of June 2007

Data prepared by ERPHO

Figure 8.1 shows the variation in prevalence of hypertension between London PCTs. It can be seen that hypertension is more prevalent in men than in women, with prevalence in men ranging from around 17% in Hillingdon to over 25% in Greenwich.

Figure 8.1: Prevalence of hypertension in males and females by PCT



Source: ERPHO hypertension prevalence model

There is also some variation between practices and at PCT level in the proportions of people with hypertension, who are being treated adequately (figure 8.2). This variation occurs in spite of the QOF incentive, but is not solely a measure of the quality of treatment, but also reflects the willingness of people to receive treatment, as well as variation in clinical severity.

Figure 8.2: Percentage of people with hypertension treated and controlled

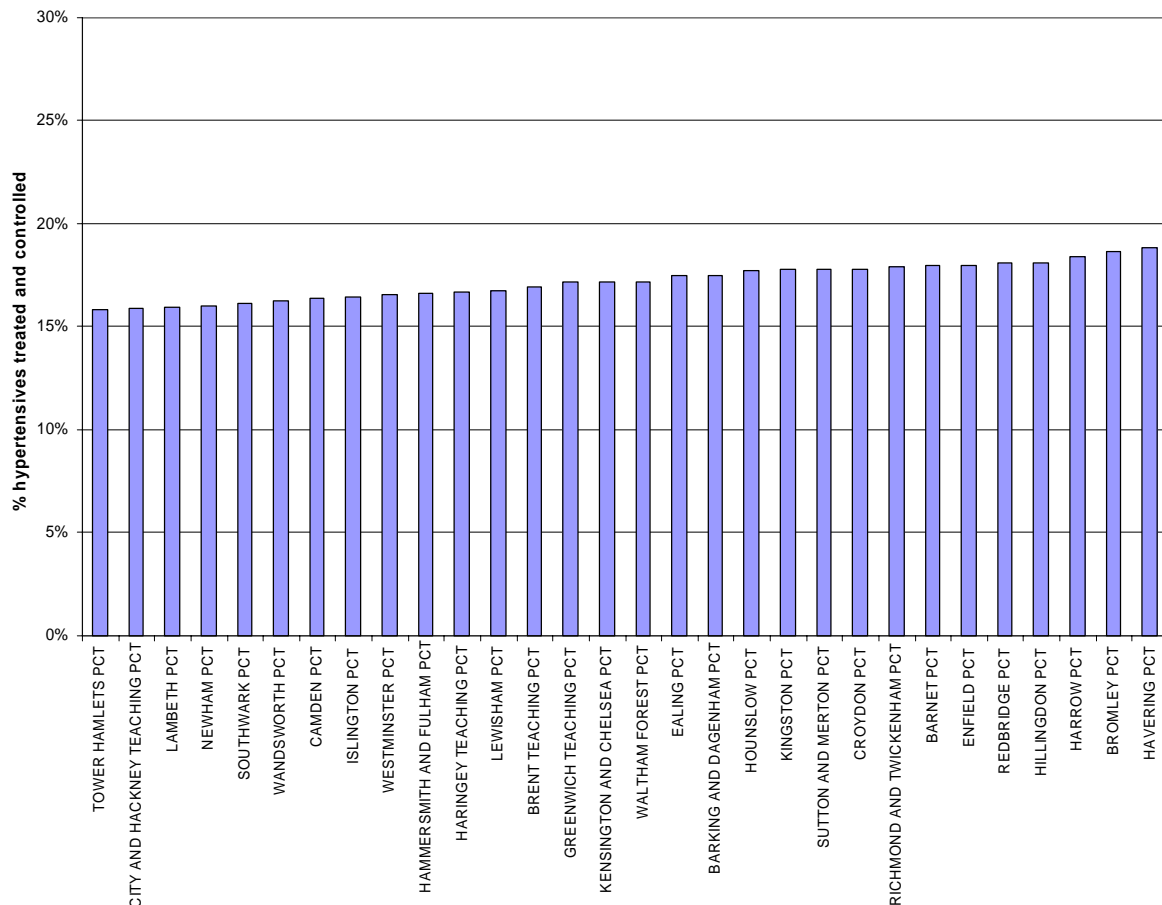


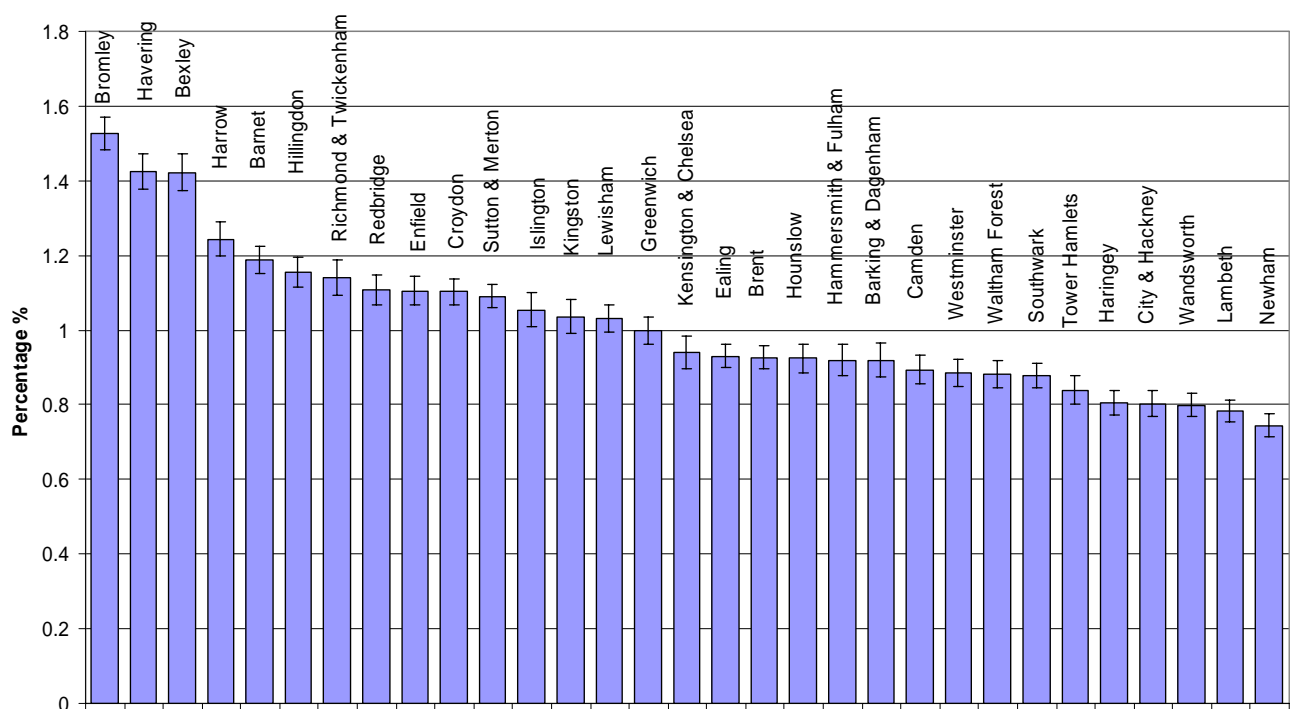
Figure 8.2 shows the percentage of people with hypertension, who are being adequately treated as a proportion of all those being treated, by PCT. Across the board there is a marked failure to get hypertension under control – no area has achieved even 20% of people with hypertension treated and controlled. These data include only those on treatment: the percentages of those adequately treated would be even lower as a proportion of all hypertensives.

There are wide, practice-level variations in the prevalence of both hypertension and stroke, as recorded in the QOF. Figure 8.3 shows the distribution of QOF-recorded

stroke and TIA prevalence by PCT. There is significant variation in prevalence between PCTs, ranging from <0.8% in Newham to around 1.5% in Bromley. This likely reflects the relative age structures of the populations, with some contribution from the ethnic make-up.

Transient ischaemic attack (TIA) is the forerunner of stroke in the same way as angina heralds a future heart attack. It points to significant cerebrovascular disease and a high risk of subsequent stroke. In the QOF, TIAs and completed strokes are recorded in the same register, so it has not been possible to separate them for this analysis.

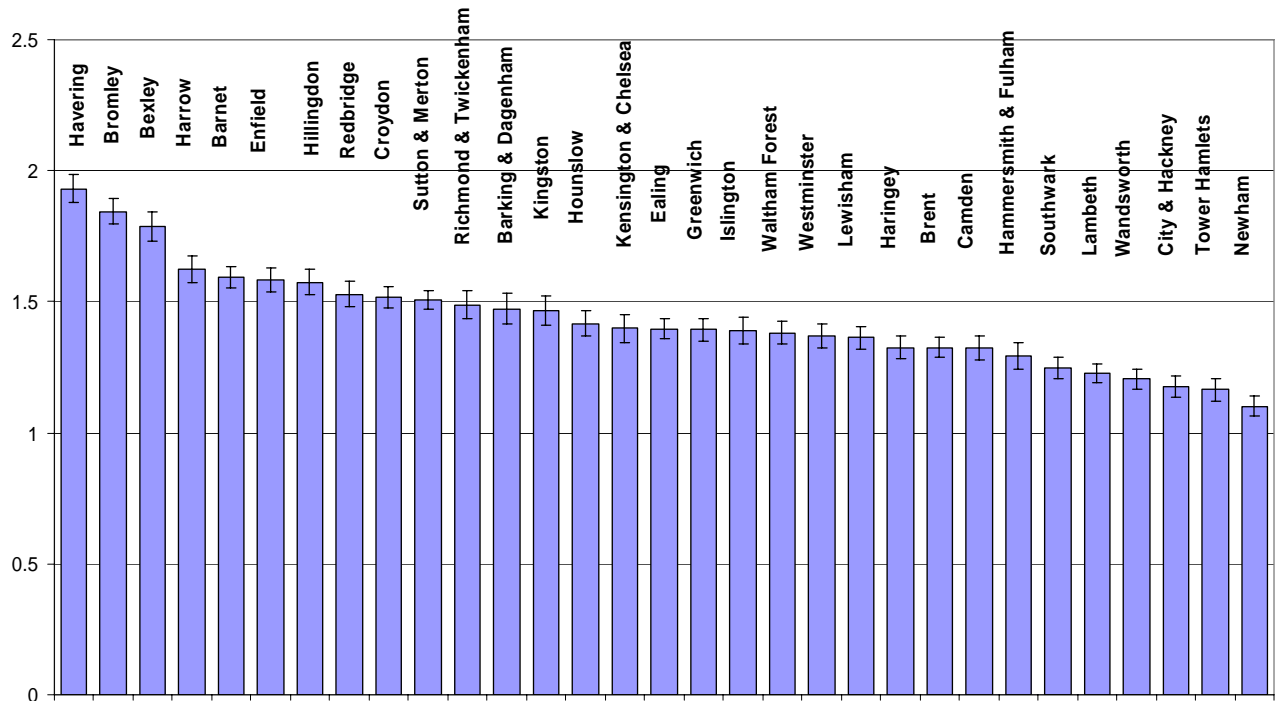
Figure 8.3: Prevalence of stroke and TIA (QOF) by PCT, 2006/7



Data Source: QMAS, analysis from LHO practice profiles.

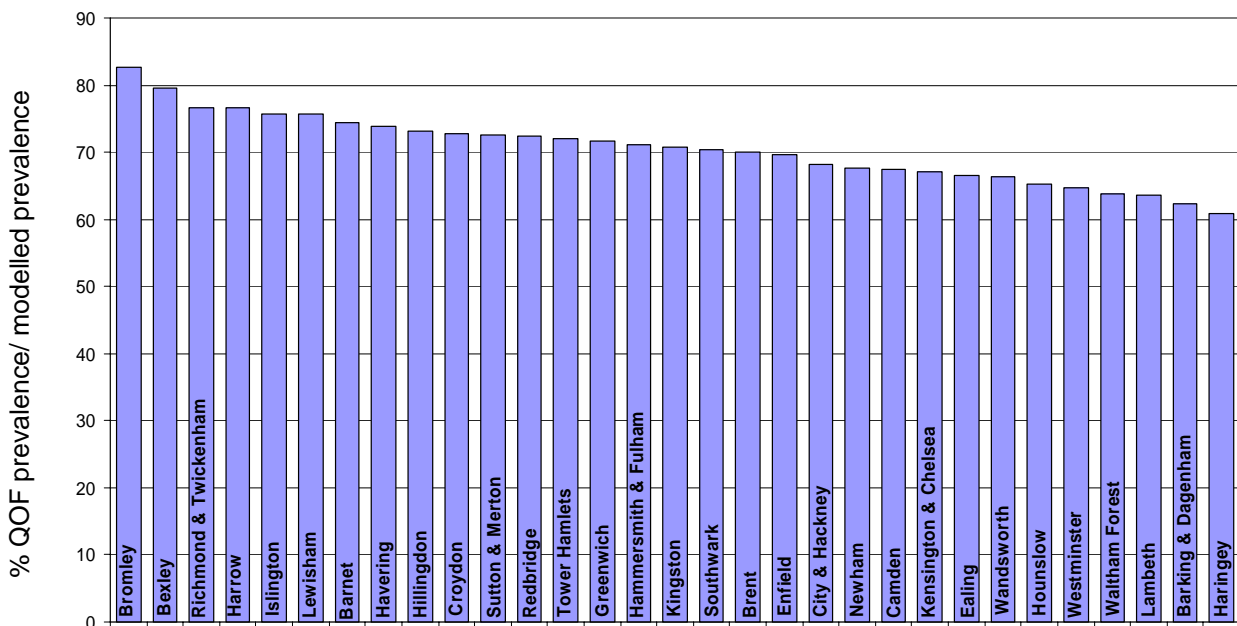
Figure 8.4 shows the prevalence of stroke and TIA, by PCT, estimated by a mathematical model (see below). Figure 8.5 shows the ratio of actual (QOF) to expected (modelled) prevalence.

Figure 8.4: Estimated prevalence of stroke and TIA at PCT level



Data Source: QMAS, analysis from LHO practice profiles.

Figure 8.5: Stroke and TIA: ratio of QOF prevalence to estimated prevalence.



Data Source: QMAS, analysis from LHO practice profiles.

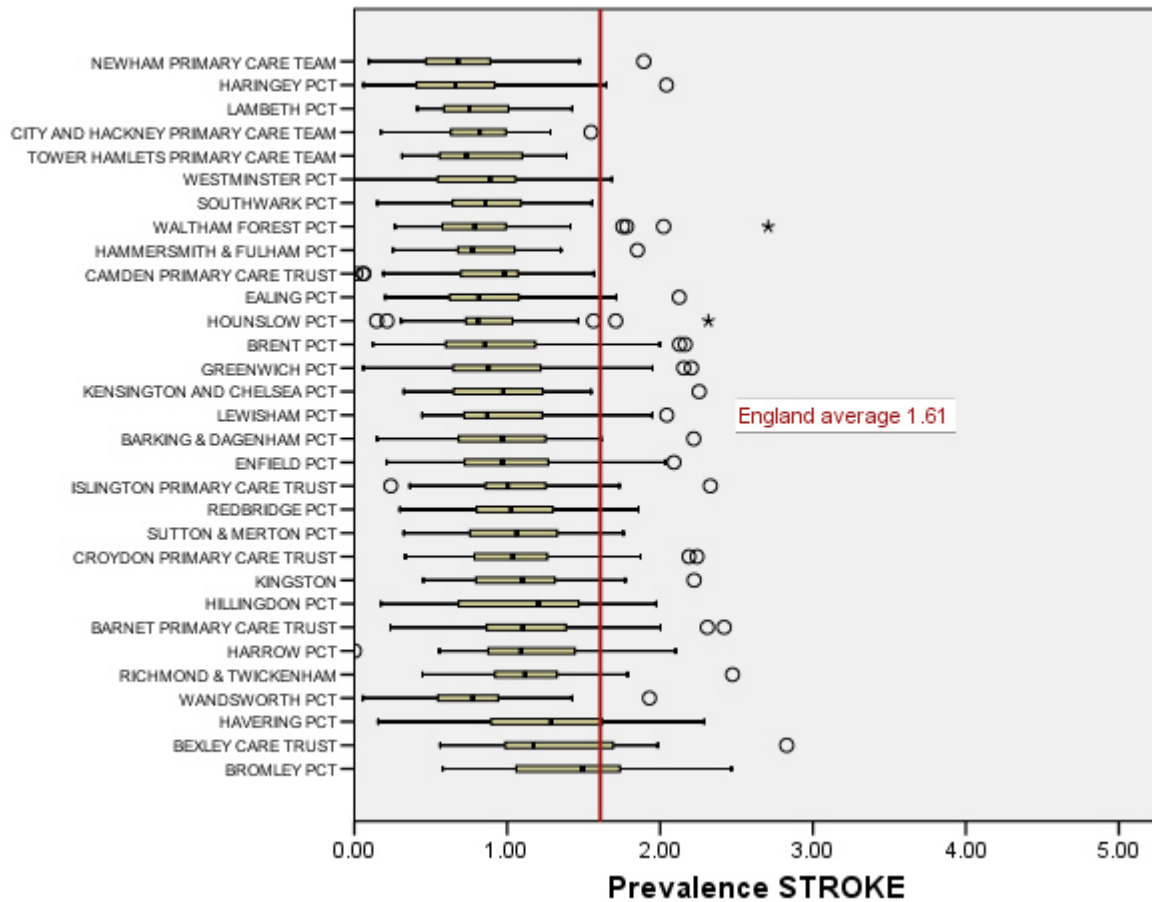
For every borough the QOF-recorded prevalence of stroke and TIA is less than predicted by the prevalence model. One possible explanation for the discrepancy is that the model predicts the number of people who have had a stroke at any time in the past, while GPs are likely to record only those who have presented with a stroke since coming under their care. A proportion of people with stroke, especially those who have no obvious, residual disability could, therefore, be missed. Such people would still need to have risk factors identified and managed, to prevent further strokes.

Estimated stroke prevalence is derived using an adaptation of the Doncaster model¹³, which is based on prevalence estimates by age and sex from the Health Survey for England 2003 for patient-reported, doctor-diagnosed stroke, with an additional adjustment made for deprivation. The model does not make any adjustment for ethnicity, even though the prevalence of both hypertension and stroke are known to be higher among black people.

Figures 8.6 and 8.7 show the spread of QOF-recorded stroke and hypertension prevalence across practices, by London PCTs. They illustrate the wide variation between practices. The average recorded prevalence for each PCT is below the England average, most likely as a result of the younger age profile of London compared to England as whole. In some PCTs prevalence is significantly below the England average and probably reflects a degree of under-recording, since these London boroughs have a much higher proportion of people from black ethnic backgrounds than the country as a whole, e.g. Hackney, Lambeth and Southwark.

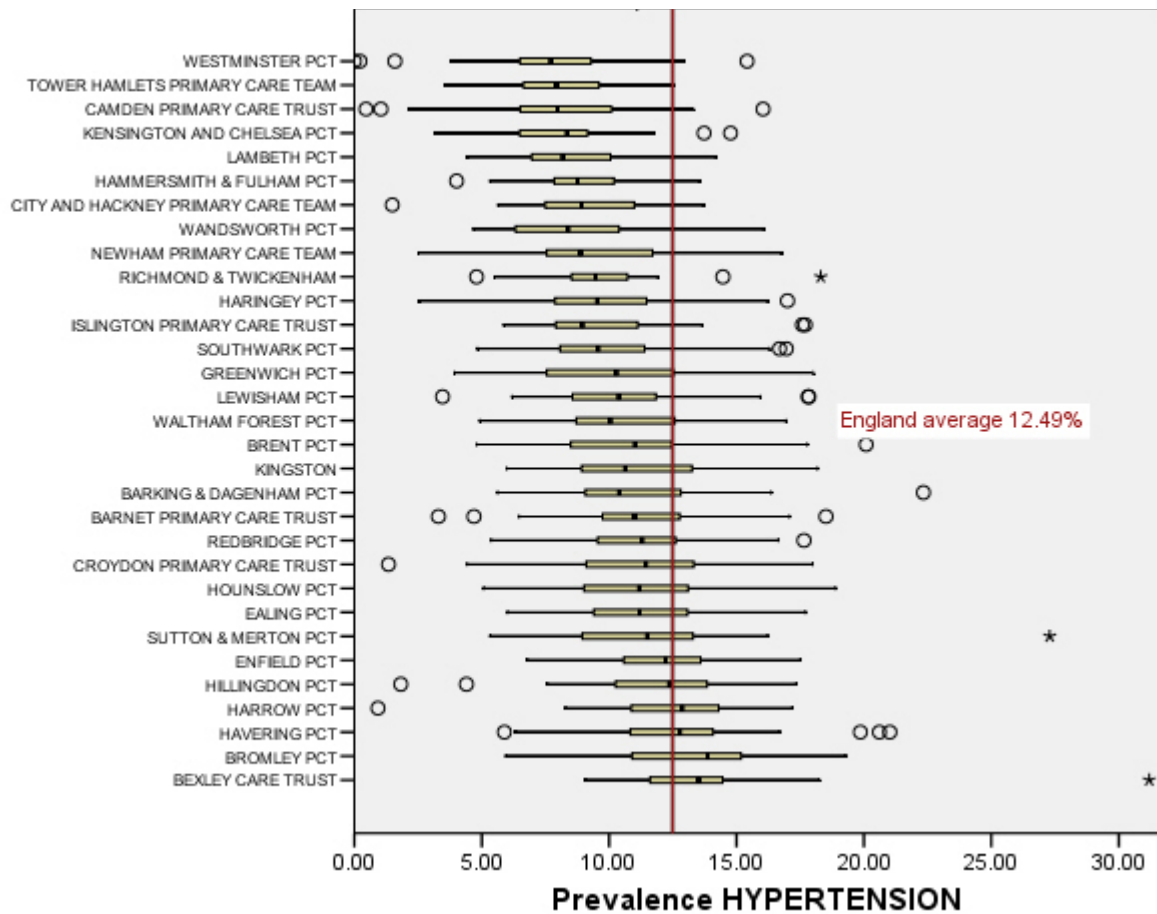
¹³ Doncaster PCT Stroke Model <http://www.doncasterpct.nhs.uk/phiu-resources.asp?ArticleID=100180>

Figure 8.6: Variation in stroke prevalence at practice level, 2006/7



Data Source: QMAS database - 2006/07 data as at end of June 2007. Graph prepared by ERPHO
 Copyright (c) 2007. The Information Centre for Health and Social Care, Prescribing Support Unit. All rights reserved

Figure 8.7: Variation in prevalence of hypertension by practice, 2006/7



Data Source: QMAS database - 2006/07 data as at end of June 2007

Graph prepared by ERPHO

Copyright (c) 2007. The Information Centre for Health and Social Care, Prescribing Support Unit. All rights reserved

Currently it is not possible to show from routine data whether or not people who have had strokes were treated in specialist stroke units, since the data are not collected in such a way as to allow this.

The Royal College of Physicians stroke audit¹⁴ defines stroke units in the following way:

Stroke unit – a multidisciplinary team, including specialist nursing staff, based in a discrete ward which has been designated for stroke patients. This includes the following sub-divisions:

- *Acute stroke units* that accept patients acutely but discharge early (usually within 7 days). This could include an “intensive” model of care with continuous monitoring and high nurse staffing levels.
- *Rehabilitation stroke units* which accept patients after a delay of usually 7 days or more and focus on rehabilitation
- *Combined stroke units* (i.e. no separation between acute and rehabilitation beds) that accept patients acutely but also provide rehabilitation for at least several weeks if necessary.

The Stroke Unit Trialists' Collaboration has given rise to five key characteristics for assessing the organization of a stroke unit. These are:

- Consultant physician with responsibility for stroke
- Formal links with patient and carer organisations
- Multidisciplinary meetings at least weekly to plan patient care
- Provision of information to patients about stroke
- Continuing education programmes for staff

The Department of Health National Performance Indicator on the percentage of patients admitted to a stroke unit uses a minimum of 4/5 of these criteria to define a stroke unit. Neither the definition nor the assessment criteria make reference to the availability of early scans or thrombolysis, which are critical to improving outcomes and reducing mortality. The performance of each London trust against each of the stroke clinical audit indicators is set out in appendix 2.

¹⁴ Royal College of Physicians. National Sentinel Stroke Audit, 2007

Key Points

- Stroke is a major cause of death and disability, contributing to the gap in CVD mortality between the spearhead areas and the country as a whole.
- There are ethnic variations in prevalence of hypertension and occurrence of strokes. The incidence of stroke is 60% higher in black people than in white.
- Stroke is primarily a disease of older people – 75% of strokes occur in those over 65 years.
- Despite its importance as a risk factor for CVD, hypertension is poorly managed, with only 15-18% of people being adequately treated.
- There is probably some under-recording of stroke in GP registers, meaning that opportunities for secondary prevention are being missed.
- Rates of both stroke and hypertension are lower across London than the England average, probably as a result of London's relatively young population.
- No routine dataset exists to enable us to determine what proportion of people who have had strokes were treated in specialist stroke units.

Implications

- Stroke prevention requires increased case finding for hypertension and better treatment of it.
- Recording of stroke in disease registers needs to improve, to enable more targeted secondary prevention.
- A single, national definition of a stroke unit and routine data collection are necessary to allow proper comparisons of treatment outcomes.

Conclusion

This report provides an overview of health inequalities and inequities in London. In doing so, it helps to provide some understanding of the likely impact of the *Healthcare for London* proposed changes on those groups most at risk of being disadvantaged.

The report describes inequalities in health and in access to health services in London, using specific indicators of determinants of health and access to health care. It gives an overview that focuses particularly on inequalities related to place, age, sex and ethnicity. Other dimensions of inequality, such as disability and faith/religion, are also considered, but there are no reliable routine data connecting these dimensions with peoples' health experiences or health outcomes.

For some groups, such as transgender people, no data are collected even to allow them to be counted, much less monitor their health experiences. Even for those dimensions of inequality for which data are routinely collected, there are gaps, which limit our understanding of their health needs, experiences and outcomes. The needs of small groups or small areas can be overlooked when analysing data at a higher population or geographical level. Small numbers and small area data must be treated with caution, but it will be necessary to make use of these to get a proper understanding of the inequalities and inequities that affect the invisible minorities, especially at a local level.

Improving both the completeness and the accuracy of data recording on equalities groups and other vulnerable groups, including the invisible groups, will be an important measure in ensuring that the Healthcare for London reconfigurations improve health services for all and do not widen existing inequalities or result in new ones.

Health inequalities exist across all the areas of health and health care considered in this profile: primary care and preventive services, maternity care and stroke care. The pattern of inequalities is complex. To understand it fully we would need to take a more detailed look at inequalities in local areas and make use of local intelligence about the culture of the people and the services.

In taking forward the *Healthcare for London* strategy, it will be important to use local community equity profiles to ensure the best outcome for equalities groups in local areas.

Appendix 1. Availability of routine datasets or indicators by different dimensions of inequality and for different equalities groups.

Routine Data or Indicators	Age	Deprivation	Disability	Ethnicity	Faith	Gender (sex)*	Geography	Socio-economic status	Sexual orientation
Demographic	✓	✓	✓	✓	✓	✓	✓	✓	X
Life expectancy	N/A	X	X	X	X	✓	✓	X	X
Mortality	✓	X	X	X	X	✓	✓	X	X
GPs/population	∞	X	X	X	X	✓	✓	X	X
Other primary care staff/population	X	X	X	X	X	X	✓	X	X
48hr GP access (sample survey data only)	✓	✓	X	✓	X	✓	✓	X	?
Registered/ resident population	X	X	X	X	X		✓	X	X
Avoidable admissions	✓	X	X	¥	X	✓	✓	X	X
Access to stop smoking services	✓	X	X	✓	X	✓	✓	X	X
Maternity data	✓	X	X	#	X	N/A	✓	✓	X
Prevalence of stroke, TIA and hypertension	✓			∞	X	✓	✓	X	X
% hypertension controlled	∞	X	X	∞	X	∞	✓	X	X

Notes:

✓ routinely recorded

X no routine data collection.

*Male/female, not transgender

∞ Data collected at practice level, but not reported for routine datasets

¥ Incomplete recording and reporting of data at hospital level.

Mother's country of birth only, not actual ethnicity, nor ethnicity of father or infant.

APPENDIX 2. National Sentinel Stroke Audit (2006)

Table 1. Summary of key organisational results by hospital for stroke unit provision and quality and other models of care

SITE	Acute stroke unit	Combined stroke unit	Number of acute stroke unit features (max. 6)	Rehabilitation stroke unit	Number of key stroke unit features (max. 5)	Mobile stroke team	Specialist community stroke team	Early supported discharge team
Barking Havering & Redbridge Hospitals NHS Trust (King George)	Yes	None	5	Yes	5	No	No	No
Barking Havering & Redbridge Hospitals NHS Trust (Oldchurch)	Yes	None	4	Yes	5	No	Yes	No
Barnet and Chase Farm Hospitals NHS Trust (Barnet Hospital)	Yes	None	4	Yes	4	Yes	Yes	Yes
Barnet and Chase Farm Hospitals NHS Trust (Chase Farm Hospital)	Yes	None	4	Yes	5	Yes	Yes	No
Barts and the London NHS Trust jointly with Tower Hamlets PCT	Yes	None	6	Yes	5	No	Yes	Yes
Bromley Hospitals NHS Trusts	None	None	None	Yes	5	No	No	No
Chelsea and Westminster Healthcare NHS Trust	None	Yes	5	No	5	Yes	Yes	No
Ealing Hospital NHS Trust	Yes	None	2	No	3	Yes	No	No
Epsom & St Helier University Hospitals NHS Trust (Epsom Hospital)	None	Yes	2	No	4	Yes	Yes	No

Epsom & St Helier University Hospitals NHS Trust (St Helier Hospital)	Yes	None	3	Yes	4	Yes	No	Yes
Guy's & St Thomas' Hospital NHS Foundation Trust	Yes	None	6	Yes	5	No	No	No
Hammersmith Hospitals NHS Trust (Charing Cross)	Yes	None	6	Yes	5	No	No	No
Hammersmith Hospitals NHS Trust (Hammersmith)	None	None	None	No	No stroke unit	Yes	No	No
Havering Primary Care Trust	None	None	None	Yes	4	Yes	Yes	No
Hillingdon Hospital NHS Trust	None	Yes	2	No	4	No	No	No
Homerton University Hospital NHS Foundation Trust	None	None	None	Yes	4	Yes	Yes	No
King's College Hospital NHS Trust	Yes	None	6	Yes	5	Yes	No	No
Kingston Hospital NHS Trust	Yes	None	3	Yes	5	No	No	No
Lewisham Hospital NHS Trust	Yes	None	4	Yes	5	Yes	No	No
Mayday Healthcare NHS Trust	None	None	None	Yes	4	No	No	No
Newham University Hospital NHS Trust	Yes	None	4	Yes	5	Yes	Yes	No
North Middlesex University Hospital NHS Trust – jointly with Haringey PCT	None	Yes	4	Yes	4	Yes	No	No
North West London Hospital NHS Trust (Central Middlesex Hospital, including Willesden Community Hospital (Brent PCT))	Yes	None	4	No	5	Yes	Yes	Yes
North West London Hospital NHS Trust (Northwick Park Hospital)	None	Yes	5	No	4	Yes	No	No

Queen Elizabeth Hospital NHS Trust	None	Yes	4	No	5	No	No	No
Queen Mary's Sidcup NHS Trust	None	None	None	Yes	5	No	No	No
Royal Free Hampstead NHS Trust	None	Yes	6	No	4	Yes	No	No
St George's Healthcare NHS Trust	Yes	None	5	Yes	5	No	No	No
St Mary's NHS Trust	None	Yes	6	No	5	No	Yes	No
University College London Hospitals NHS Foundation Trust	None	Yes	6	No	5	Yes	Yes	No
West Middlesex University Hospital NHS Trust	None	Yes	2	No	4	Yes	No	No
Whipps Cross University Hospital NHS Trust	Yes	None	5	Yes	4	No	No	No
Whittington Hospital NHS Trust	Yes	None	5	Yes	4	No	Yes	No

Table 2. Summary of key organisational results by hospital, including waiting times for scan, presence of neurovascular/TIA clinic and involvement with patients.

SITE	CT scan average waiting time - weekdays	CT scan average waiting time - weekends	MRI scan average waiting time - weekdays	MRI scan average waiting time - weekends	Neurovascular/TIA clinic	TIA patients seen and investigated within 7 days	Patient/carer views sought on service	Report been produced within 12m analysing patient views	OVERALL POSITION ¹
Barking Havering & Redbridge Hospitals NHS Trust (King George)	5-24 hrs	5-24 hrs	5-24 hrs	5-24 hrs	Yes	Yes	Yes	Yes	Middle
Barking Havering & Redbridge Hospitals NHS Trust (Oldchurch)	5-24 hrs	25-48 hrs	25-48 hrs	>48 hrs	No	No	Yes	Yes	Middle
Barnet and Chase Farm Hospitals NHS Trust (Barnet Hospital)	5-24 hrs	5-24 hrs	5-24 hrs	25-48 hrs	Yes	Yes	Yes	No	Middle
Barnet and Chase Farm Hospitals NHS Trust (Chase Farm Hospital)	5-24 hrs	25-48 hrs	>48 hrs	>48 hrs	Yes	No	Yes	Yes	Middle
Barts and the London NHS Trust jointly with Tower Hamlets PCT	0-4 hrs	0-4 hrs	25-48 hrs	25-48 hrs	No	Yes	Yes	Yes	Upper
Bromley Hospitals NHS Trusts	5-24 hrs	25-48 hrs	25-48 hrs	>48 hrs	No	No	Yes	Yes	Lower
Chelsea and Westminster Healthcare NHS Trust	0-4 hrs	0-4 hrs	25-48 hrs	>48 hrs	Yes	Yes	Yes	No	Upper

¹ The total organisational score is an aggregated score across all the above domains. Overall position = upper quartile, lower quartile, or middle.

Ealing Hospital NHS Trust	25-48 hrs	25-48 hrs	>48 hrs	>48 hrs	No	No	No	No	Lower
Epsom & St Helier University Hospitals NHS Trust (Epsom Hospital)	>48 hrs	>48 hrs	>48 hrs	>48 hrs	No	No	Yes	No	Lower
Epsom & St Helier University Hospitals NHS Trust (St Helier Hospital)	25-48 hrs	>48 hrs	>48 hrs	>48 hrs	Yes	No	Yes	No	Middle
Guy's & St Thomas' Hospital NHS Foundation Trust	0-4 hrs	0-4 hrs	5-24 hrs	5-24 hrs	Yes	Yes	Yes	Yes	Upper
Hammersmith Hospitals NHS Trust (Charing Cross)	0-4 hrs	5-24 hrs	5-24 hrs	25-48 hrs	Yes	Yes	Yes	No	Upper
Hammersmith Hospitals NHS Trust (Hammersmith)	0-4 hrs	0-4 hrs	5-24 hrs	5-24 hrs	No	Yes	Yes	No	Lower
Havering Primary Care Trust	>48 hrs	>48 hrs	>48 hrs	>48 hrs	Yes	Yes	Yes	No	Middle
Hillingdon Hospital NHS Trust	5-24 hrs	25-48 hrs	25-48 hrs	>48 hrs	Yes	Yes	Yes	Yes	Middle
Homerton University Hospital NHS Foundation Trust	25-48 hrs	>48 hrs	25-48 hrs	>48 hrs	Yes	No	Yes	No	Lower
King's College Hospital NHS Trust	0-4 hrs	0-4 hrs	5-24 hrs	25-48 hrs	Yes	Yes	Yes	Yes	Upper
Kingston Hospital NHS Trust	5-24 hrs	25-48 hrs	25-48 hrs	>48 hrs	Yes	No	Yes	No	Middle
Lewisham Hospital NHS Trust	5-24 hrs	25-48 hrs	>48 hrs	>48 hrs	Yes	No	Yes	No	Middle
Mayday Healthcare NHS Trust	>48 hrs	>48 hrs	>48 hrs	>48 hrs	Yes	No	Yes	No	Lower

Newham University Hospital NHS Trust	5-24 hrs	25-48 hrs	>48 hrs	>48 hrs	Yes	No	Yes	No	Middle
North Middlesex University Hospital NHS Trust – jointly with Haringey PCT	5-24 hrs	25-48 hrs	25-48 hrs	>48 hrs	Yes	No	Yes	Yes	Middle
North West London Hospital NHS Trust (Central Middlesex Hospital, including Willesden Community Hospital (Brent PCT))	5-24 hrs	5-24 hrs	>48 hrs	>48 hrs	Yes	No	Yes	No	Upper
North West London Hospital NHS Trust (Northwick Park Hospital)	25-48 hrs	>48 hrs	>48 hrs	>48 hrs	Yes	No	Yes	No	Middle
Queen Elizabeth Hospital NHS Trust	>48 hrs	>48 hrs	>48 hrs	>48 hrs	Yes	No	Yes	Yes	Lower
Queen Mary's Sidcup NHS Trust	5-24 hrs	25-48 hrs	5-24 hrs	>48 hrs	No	No	No	No	Middle
Royal Free Hampstead NHS Trust	5-24 hrs	25-48 hrs	0-4 hrs	0-4 hrs	Yes	Yes	Yes	No	Middle
St George's Healthcare NHS Trust	0-4 hrs	5-24 hrs	5-24 hrs	25-48 hrs	Yes	No	No	No	Upper
St Mary's NHS Trust	0-4 hrs	0-4 hrs	25-48 hrs	>48 hrs	Yes	Yes	Yes	Yes	Upper
University College London Hospitals NHS Foundation Trust	0-4 hrs	0-4 hrs	>48 hrs	0-4 hrs	Yes	No	Yes	Yes	Upper
West Middlesex University Hospital NHS Trust	5-24 hrs	5-24 hrs	25-48 hrs	>48 hrs	No	No	Yes	Yes	Middle
Whipps Cross University Hospital NHS Trust	5-24 hrs	25-48 hrs	25-48 hrs	>48 hrs	No	No	Yes	No	Middle
Whittington Hospital NHS Trust	5-24 hrs	5-24 hrs	25-48 hrs	25-48 hrs	Yes	No	Yes	Yes	Upper

Key Indicators of Stroke Care

The 12 key standards are as follows:

- More than 50% of stay on a stroke unit
- Screened for swallowing disorders within first 24 hours of admission
- Brain scan within 24 hours of stroke
- Commenced aspirin by 48 hours after stroke
- Physiotherapy assessment within first 72 hours of admission
- Assessment by an Occupational Therapist within 7 days of admission
- Weighed at least once during admission
- Mood assessed by discharge
- On antithrombotic therapy by discharge
- Rehabilitation goals agreed by the multi-disciplinary team
- Home visit performed before discharge
- Treated in a stroke unit during their stay

Table 3. Key Indicators of Stroke Care By Hospital

SITE	Number of cases in the audit	Patients treated in a Stroke Unit	Patients treated for >50% of stay in Stroke Unit	Screening for swallowing disorders <24 hours after admission	Brain scan within 24 hours	Aspirin by 48 hours after stroke	Physiotherapist assessment within 72 hours of admission	OT assessment within 7 days of admission	Patient weighed during admission	Patient's mood assessed by discharge	Patient on antithrombotic therapy by discharge	Rehabilitation goals agreed by the multidisciplinary team	Home visit performed before discharge	2006 key 12 indicator score	2004 key 12 indicator score
Barking Havering & Redbridge Hospitals NHS Trust (King George)	45	16	16	95	60	83	77	69	58	50	100	58	47	61	52
Barking Havering & Redbridge Hospitals NHS Trust (Oldchurch)	81	27	26	87	65	86	72	78	55	55	100	68	59	65	N/A
Barnet and Chase Farm Hospitals NHS Trust (Barnet Hospital)	59	81	71	68	51	94	96	98	90	78	100	91	93	84	72
Barnet and Chase Farm Hospitals NHS Trust (Chase Farm Hospital)	62	73	68	74	81	91	88	87	68	54	100	96	79	80	59
Barts and the London NHS Trust jointly with Tower Hamlets PCT	51	96	88	88	65	95	78	100	86	81	100	100	100	90	78
Bromley Hospitals NHS Trusts	76	37	34	47	25	89	28	22	48	56	100	85	36	51	56
Chelsea and Westminster Healthcare NHS Trust	49	86	78	79	84	95	98	97	70	76	100	95	100	88	82
Ealing Hospital NHS Trust	62	69	58	92	52	91	83	42	100	15	100	4	91	66	67
Epsom & St Helier University Hospitals NHS Trust (Epsom Hospital)	62	58	53	51	20	64	17	10	72	20	100	35	40	45	41

Epsom & St Helier University Hospitals NHS Trust (St Helier Hospital)	59	73	69	78	22	96	49	68	69	76	100	72	86	71	69
Guy's & St Thomas' Hospital NHS Foundation Trust	79	95	92	94	82	95	97	87	74	90	100	98	87	91	86
Hammersmith Hospitals NHS Trust	79	59	44	55	54	86	76	68	96	56	100	69	75	70	N/A
Hillingdon Hospital NHS Trust	54	78	67	31	61	90	88	88	84	20	100	79	62	71	70
Homerton University Hospital NHS Foundation Trust	39	72	72	63	64	90	78	47	82	68	100	77	95	76	68
King's College Hospital NHS Trust	64	78	72	79	79	98	75	94	53	56	100	74	67	77	68
Kingston Hospital NHS Trust	40	58	55	55	43	81	64	87	44	35	100	75	45	62	38
Lewisham Hospital NHS Trust	79	82	82	73	63	89	91	55	60	27	100	98	81	75	56
Mayday Healthcare NHS Trust	46	46	41	40	30	82	53	68	34	64	100	86	78	60	67
Newham University Hospital NHS Trust	57	72	53	83	67	100	66	80	56	24	100	71	77	71	57
North Middlesex University Hospital NHS Trust – jointly with Haringey PCT	47	53	47	69	70	94	67	84	76	31	100	81	42	68	47
North West London Hospital NHS Trust (Central Middlesex Hospital, including Willesden Community Hospital (Brent PCT))	43	81	70	55	65	82	90	94	58	37	100	76	100	76	51
North West London Hospital NHS Trust (Northwick Park Hospital)	64	50	50	82	36	91	85	91	55	20	100	63	93	68	72
Queen Elizabeth Hospital NHS Trust	38	68	61	57	45	63	70	57	17	0	100	33	85	55	64
Queen Mary's Sidcup NHS Trust	33	42	39	45	39	82	57	30	26	25	100	62	35	49	61
Royal Free Hampstead NHS Trust	45	87	80	92	58	100	91	100	83	80	100	100	100	89	93

St George's Healthcare NHS Trust	71	99	66	92	63	92	82	95	99	95	100	100	75	88	84
St Mary's NHS Trust	51	82	76	86	80	97	93	78	96	86	100	100	54	86	89
University College London Hospitals NHS Foundation Trust	30	87	87	59	83	100	85	100	69	80	100	96	50	83	83
West Middlesex University Hospital NHS Trust	52	54	40	59	77	85	49	52	44	52	100	72	100	65	68
Whipps Cross University Hospital NHS Trust	72	53	47	64	56	95	64	82	46	87	100	68	78	70	45
Whittington Hospital NHS Trust	38	79	71	86	50	81	88	88	76	57	100	94	92	80	61

London Health Observatory

The London Health Observatory (LHO) was set up in 2001 following the Government White Paper: "Saving Lives Our Healthier Nation" (DoH, 1999). The LHO brings together the information and know-how needed to analyse and research health in the capital. It also has a role to help all those working to improve the health of Londoners to make better use of health and health-related information. The LHO is part of a national network of Public Health Observatories and has a lead role on health inequalities, social exclusion and regeneration.

www.lho.org.uk