Fair Society, Healthy Lives

The Marmot Review

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Strategic Review of Health Inequalities
in England post-2010

Rise up with me against
the organisation of misery
Pablo Neruda

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Note from the Chair

People with higher socioeconomic position in society have a greater array of life chances and more opportunities to lead a flourishing life. They also have better health. The two are linked: the more favoured people are, socially and economically, the better their health. This link between social conditions and health is not a footnote to the 'real' concerns with health – health care and unhealthy behaviours – it should become the main focus. Consider one measure of social position: education. People with university degrees have better health and longer lives than those without. For people aged 30 and above, if everyone without a degree had their death rate reduced to that of people with degrees, there would be 202,000 fewer premature deaths each year. Surely this is a goal worth striving for.

It is the view of all of us associated with this Review that we could go a long way to achieving that remarkable improvement by giving more people the life chances currently enjoyed by the few. The benefits of such efforts would be wider than lives saved. People in society would be better off in many ways: in the circumstances in which they are born, grow, live, work, and age. People would see improved well-being, better mental health and less disability, their children would flourish, and they would live in sustainable, cohesive communities.

I chaired the World Heath Organisation's Commission on Social Determinants of Health. One critic labelled the Commission's report 'ideology with evidence'. The same charge could be levelled at the present Review and we accept it gladly. We do have an ideological position: health inequalities that could be avoided by reasonable means are unfair. Putting them right is a matter of social justice. But the evidence matters. Good intentions are not enough.

The major task of this Review was to assemble the evidence and advise on the development of a health inequalities strategy in England. We were helped by nine task groups who worked quickly and thoroughly to bring together the evidence on what was likely to work. Their reports are available at www.ucl.ac.uk/gheg/marmotreview/Documents. These reports provided the basis for the evidence summarised in Chapter 2 of this report and the policy recommendations laid out in Chapter 4.

Of course, inequalities in health are not a new concern. We stand on the shoulders of giants from the 19th and 20th centuries in seeking solutions to the problem. Learning from more recent experience forms the basis for Chapter 3.

While we relied heavily on the scientific literature, this was not the only type of evidence we considered. We engaged widely with stakeholders and attempted to learn from their insights and experience. Indeed, an exciting feature of the Review process was the level of commitment and interest we appear to have engaged in central government, political parties across the spectrum, local government, the health services, the third sector and the private sector. The necessity of engaging these partners in making change happen is the subject of Chapter 5.

Knowing the nature and size of the problem and understanding what works to make a difference must be at the heart of taking action to achieve a fairer distribution of health. We therefore propose a monitoring framework on the social determinants of health and health inequalities in Chapter 5 and Annex 2.
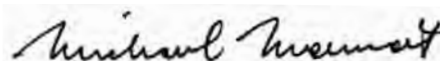
From the outset it was feared that we were likely to make financially costly recommendations. It was put to us that economic calculations would be crucial. Our approach to this was to look at the costs of doing nothing. The numbers, reproduced in Chapter 2, are staggering. Doing nothing is not an economic option. The human cost is also enormous – 2.5 million years of life potentially lost to health inequalities by those dying prematurely each year in England.

We are extremely grateful to two Secretaries of State for Health: Alan Johnson for having the vision to set up this Review and Andy Burnham for continuing to support it enthusiastically. When the report of the Commission on Social Determinants of Health was published in August 2008, Alan Johnson asked if we could apply the results to England. This report is our response to his challenge.

The Review was steered by wise Commissioners who gave of their knowledge, experience and commitment. It was served by a secretariat whose knowledge and selfless devotion to this task were simply inspiring. I am enormously grateful to both groups. One way and another, through excellent colleagues at the Department of Health, working committees, task groups, consultations and discussions, we involved scores of people. I hope they will see their influence reflected all through this Review.

I quoted Pablo Neruda when we began the Global Commission, and it seems appropriate to quote him still:

'Rise up with me against the organisation of misery'

Michael Marmot (Chair)

Terms of Reference

In November 2008, Professor Sir Michael Marmot was asked by the Secretary of State for Health to chair an independent review to propose the most effective evidence-based strategies for reducing health inequalities in England from 2010. The strategy will include policies and interventions that address the social determinants of health inequalities.

The Review had four tasks

1 **Identify, for the health inequalities challenge facing England, the evidence most relevant to underpinning future policy and action**

2 **Show how this evidence could be translated into practice**

3 **Advise on possible objectives and measures, building on the experience of the current PSA target on infant mortality and life expectancy**

4 **Publish a report of the Review's work that will contribute to the development of a post-2010 health inequalities strategy**

Disclaimer

This publication contains the collective views of the Strategic Review of Health Inequalities in England post-2010, chaired by Professor Sir Michael Marmot, and does not necessarily represent the decisions or the stated policy of the Department of Health.

The mention of specific organisations, companies or manufacturers' products does not imply that they are endorsed or recommended by the Department of Health in preference to others of a similar nature that are not mentioned.

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Acknowledgements

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Michael Marmot (Chair)
Tony Atkinson
John Bell
Carol Black
Patricia Broadfoot
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Ian Diamond
Ian Gilmore
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Executive summary

Key messages of this Review

1 Reducing health inequalities is a matter of fairness and social justice. In England, the many people who are currently dying prematurely each year as a result of health inequalities would otherwise have enjoyed, in total, between 1.3 and 2.5 million extra years of life.[1]

2 There is a social gradient in health – the lower a person's social position, the worse his or her health. Action should focus on reducing the gradient in health.

3 Health inequalities result from social inequalities. Action on health inequalities requires action across all the social determinants of health.

4 Focusing solely on the most disadvantaged will not reduce health inequalities sufficiently. To reduce the steepness of the social gradient in health, actions must be universal, but with a scale and intensity that is proportionate to the level of disadvantage. We call this proportionate universalism.

5 Action taken to reduce health inequalities will benefit society in many ways. It will have economic benefits in reducing losses from illness associated with health inequalities. These currently account for productivity losses, reduced tax revenue, higher welfare payments and increased treatment costs.

6 Economic growth is not the most important measure of our country's success. The fair distribution of health, well-being and sustainability are important social goals. Tackling social inequalities in health and tackling climate change must go together.

7 Reducing health inequalities will require action on six policy objectives:
   — Give every child the best start in life
   — Enable all children young people and adults to maximise their capabilities and have control over their lives
   — Create fair employment and good work for all
   — Ensure healthy standard of living for all
   — Create and develop healthy and sustainable places and communities
   — Strengthen the role and impact of ill health prevention

8 Delivering these policy objectives will require action by central and local government, the NHS, the third and private sectors and community groups. National policies will not work without effective local delivery systems focused on health equity in all policies.

9 Effective local delivery requires effective participatory decision-making at local level. This can only happen by empowering individuals and local communities.

Introduction

Reducing health inequalities is a matter of fairness and social justice

Inequalities are a matter of life and death, of health and sickness, of well-being and misery. The fact that in England today people in different social circumstances experience avoidable differences in health, well-being and length of life is, quite simply, unfair. Creating a fairer society is fundamental to improving the health of the whole population and ensuring a fairer distribution of good health.

Inequalities in health arise because of inequalities in society – in the conditions in which people are born, grow, live, work, and age. So close is the link between particular social and economic features of society and the distribution of health among the population, that the magnitude of health inequalities is a good marker of progress towards creating a fairer society. Taking action to reduce inequalities in health does not require a separate health agenda, but action across the whole of society.

The WHO Commission on Social Determinants of Health which, among other work, was an impetus for the commissioning of this Review by the Department of Health, surveyed the world scene and concluded that 'social injustice is killing on a grand scale'.[2] While within England there are nowhere near the extremes of inequalities in mortality and morbidity seen globally, inequality is still substantial and requires urgent action. In England, people living in the poorest neighbourhoods, will, on average, die seven years earlier than people living in the richest neighbourhoods (the top curve in Figure 1). Even more disturbing, the average difference in disability-free life expectancy is 17 years (the bottom curve in Figure 1). So, people in poorer areas not only die sooner, but they will also spend more of their shorter lives with a disability. To illustrate the importance of the gradient: even excluding the poorest five per cent and the richest five per cent the gap in life expectancy between low and high income is six years, and in disability-free life expectancy 13 years.

Figure 1 also shows the finely graded relationship between the socioeconomic characteristics of these neighbourhoods and both life expectancy and disability-free life expectancy. Not only are there dramatic differences between best-off and worst-off in England, but the relationship between social circumstances and health is also a graded one. This is the social gradient in health. We can draw similar graphs to Figure 1 classifying individuals not by where they live but by their level of education, occupation, housing conditions – and see similar gradients. Put simply, the higher one's social position, the better one's health is likely to be.

These serious health inequalities do not arise by chance, and they cannot be attributed simply to genetic makeup, 'bad', unhealthy behaviour, or difficulties in access to medical care, important as those factors may be. Social and economic differences in health status reflect, and are caused by, social and economic inequalities in society.

The starting point for this Review is that health inequalities that are preventable by reasonable means are unfair. Putting them right is a matter of social justice. A debate about how to close the health gap has to be a debate about what sort of society people want.

Action is needed to tackle the social gradient in health

The implications of the social gradient in health are profound. It is tempting to focus limited resources on those in most need. But, as Figure 1 illustrates, we are all in need – all of us beneath the very best-off. If the focus were on the very bottom and social action were successful in improving the plight of the worst-off, what would happen to those just above the bottom, or at the median, who have worse health than those above them? All must be included in actions to create a fairer society.

We are unlikely to be able to eliminate the social gradient in health completely, but it is possible to have a shallower social gradient in health and well-being than is currently the case for England. This is evidenced by the fact that there is a steeper socio-economic gradient in health in some regions than in others, as shown in Figure 2.

To reduce the steepness of the social gradient in health, actions must be universal, but with a scale and intensity that is proportionate to the level of disadvantage. We call this proportionate universalism. Greater intensity of action is likely to be needed for those with greater social and economic disadvantage, but focusing solely on the most disadvantaged will not reduce the health gradient, and will only tackle a small part of the problem.

Action on health inequalities requires action across all the social determinants of health

The Commission on Social Determinants of Health concluded that social inequalities in health arise because of inequalities in the conditions of daily life and the fundamental drivers that give rise to them: inequities in power, money and resources.[3]

These social and economic inequalities underpin the determinants of health: the range of interacting factors that shape health and well-being. These include: material circumstances, the social environment, psychosocial factors, behaviours, and biological factors. In turn, these factors are influenced by social position, itself shaped by education, occupation, income, gender, ethnicity and race. All these influences are affected by the socio-political and cultural and social context in which they sit.[4]

When we consider these social determinants of health, it is no mystery why there should continue to be health inequalities. Persisting inequalities across key domains provide ample explanation: inequalities in early child development and education, employment and working conditions, housing and neighbourhood conditions, standards of living, and, more generally, the freedom to participate equally in the

Figure 1 Life expectancy and disability-free life expectancy (DFLE) at birth, persons by neighbourhood income level, England, 1999–2003

Age

Neighbourhood Income Deprivation
(Population Percentiles)

Most deprived ⟵   ⟶ Least deprived

- ▪ Life expectancy
- ▪ DFLE
- ▪ Pension age increase 2026–2046
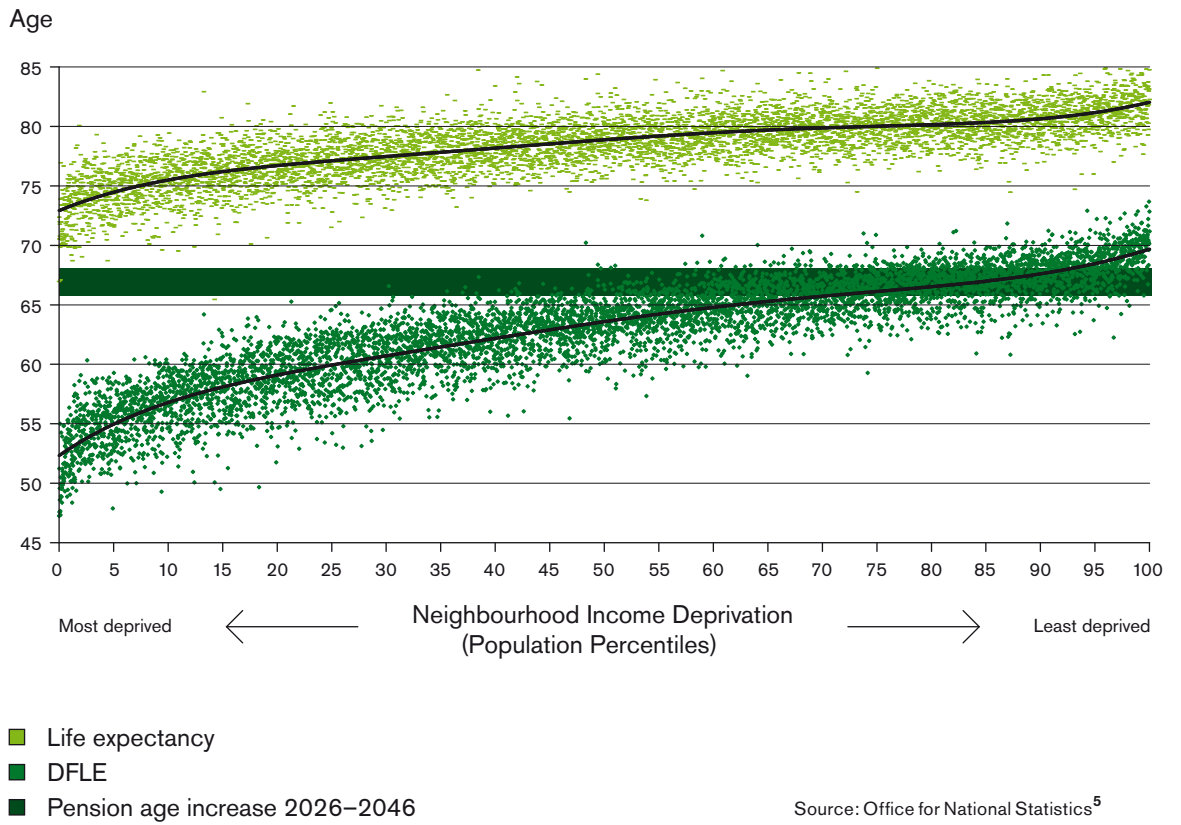
Figure 2 Age standardised mortality rates by socioeconomic classification (NS-SEC) in the North East and South West regions, men aged 25–64, 2001–2003

Mortality rate
per 100,000

- ▪ North East
- ▲ South West
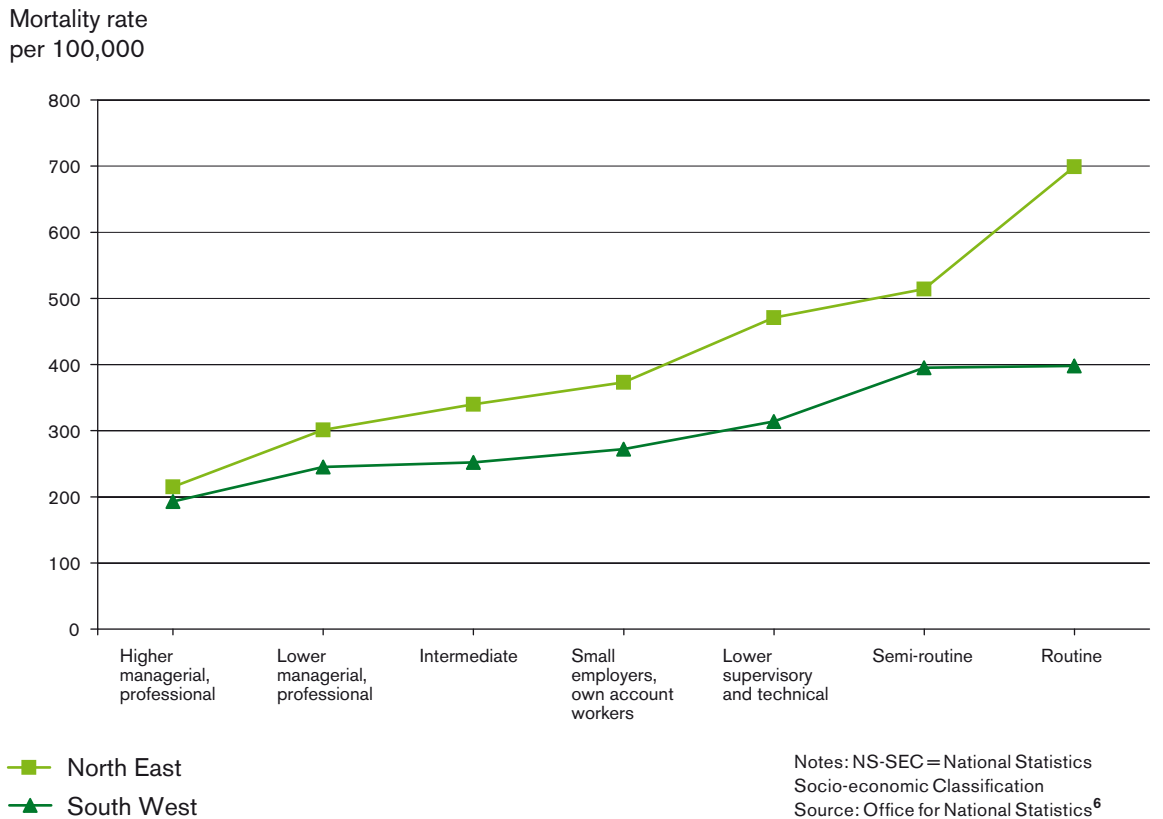
benefits of society. A central message of this Review, therefore, is that action is required across all these social determinants of health and needs to involve all central and local government departments as well as the third and private sectors. Action taken by the Department of Health and the NHS alone will not reduce health inequalities.

The unfair distribution of health and length of life provides compelling enough reason for action across all social determinants. However, there are other important reasons for taking action too. Addressing continued inequalities in early child development, in young people's educational achievement and acquisition of skills, in sustainable and healthy communities, in social and health services, and in employment and working conditions will have multiple benefits that extend beyond reductions in health inequalities.

Reducing health inequalities is vital for the economy

The benefits of reducing health inequalities are economic as well as social. The cost of health inequalities can be measured in human terms, years of life lost and years of active life lost; and in economic terms, by the cost to the economy of additional illness. If everyone in England had the same death rates as the most advantaged, people who are currently dying prematurely as a result of health inequalities would, in total, have enjoyed between 1.3 and 2.5 million extra years of life.[7] They would, in addition, have had a further 2.8 million years free of limiting illness or disability.[8] It is estimated that inequality in illness accounts for productivity losses of £31-33 billion per year, lost taxes and higher welfare payments in the range of £20-32 billion per year[9], and additional NHS healthcare costs associated with inequality are well in excess of £5.5 billion per year.[10] If no action is taken, the cost of treating the various illnesses that result from inequalities in the level of obesity alone will rise from £2 billion per year to nearly £5 billion per year in 2025.[11]

As further illustration, we have drawn on Figure 1 a line at 68 years – the pensionable age to which England is moving. With the levels of disability shown, more than three-quarters of the population do not have disability-free life expectancy as far as the age of 68. If society wishes to have a healthy population, working until 68 years, it is essential to take action to both raise the general level of health and flatten the social gradient.

This report is published in an adverse economic climate. We join our voice to those who say that a crisis is an opportunity: it is a time to plan to do things differently. Austerity need not lead to retrenchment in the welfare state. Indeed, the opposite may be necessary: the welfare state in England, the NHS itself, was born in the most austere post-war conditions. This required both courage and imagination. Today we call for courage and imagination again, to ensure equal health and well-being for future generations.

Beyond economic growth to well-being of society: sustainability and the fair distribution of health

It is time to move beyond economic growth as the sole measure of social success. Not a new idea, it was given new emphasis by the recent Commission on the Measurement of Economic Performance and Social Progress, set up by President Sarkozy and chaired by Joseph Stiglitz, with Amartya Sen and Jean-Paul Fitoussi.[12] Well-being should be a more important societal goal than simply more economic growth. Prominent among the measures of well-being should be levels of inequalities in health.

Environmental sustainability, too, should be a more important societal goal than simply more economic growth. Economic growth without attending to its environmental impact, maintaining the status quo, is not an option for the country or for the planet. Globally, climate change and attempts to combat it have the worst effects on the poorest and most vulnerable. The need for mitigation of, and adaptation to, climate change means that we must do things differently. Creating a sustainable future is entirely compatible with action to reduce health inequalities: sustainable local communities, active transport, sustainable food production, and zero-carbon houses will have health benefits across society. We set out measures that will aid mitigation of climate change and also reduce health inequalities.

Simply restoring economic growth, trying to return to the status quo, while cutting public spending, should not be an option. Economic growth without reducing relative inequality will not reduce health inequalities. The economic growth of the last 30 years has not narrowed income inequalities. And although there is far more to inequality than just income, income is linked to life chances in a number of salient ways. As Amartya Sen has argued, income inequalities affect the lives people are able to lead.[13] A fair society would give people more equal freedom to lead flourishing lives.

The central ambition of this Review is to create the conditions for people to take control over their own lives. If the conditions in which people are born, grow, live, work, and age are favourable, and more equitably distributed, then they will have more control over their lives in ways that will influence their own health and health behaviours, and those of their families. However, the freedom to flourish is graded. As an example, Figure 3 shows how answers to the General Health Questionnaire are related to deprivation for women in the Health Survey for England in 2001 and 2006 – a score of 4 or more indicates symptoms of mental disturbance.

Figure 3 Age standardised percentage of women with a General Health Questionnaire (GHQ) score of 4 or more by deprivation quintile, 2001 and 2006

Percent

Least deprived ← Deprivation quintiles → Most deprived

■ 2001
■ 2006
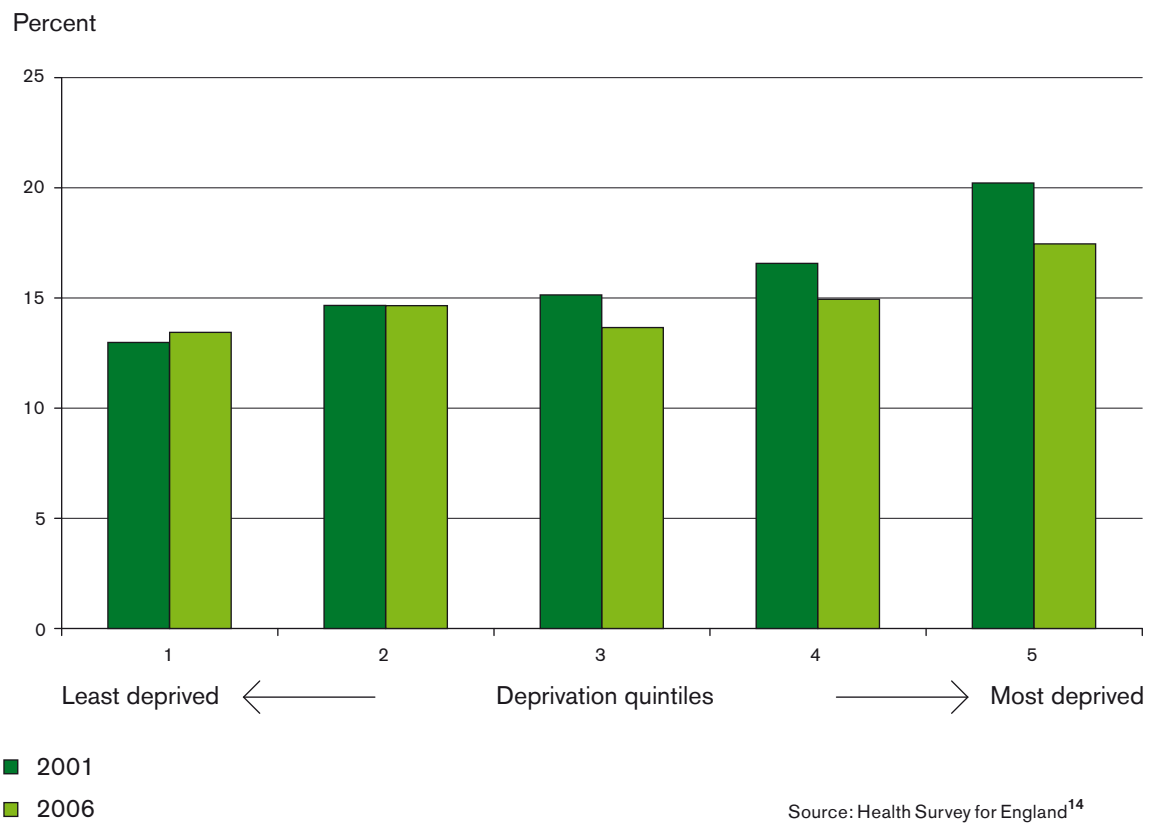
Figure 4 The Conceptual framework

Reduce health inequalities and improve health and well-being for all.

Create an enabling society that maximises individual and community potential.

Ensure social justice, health and sustainability are at heart of policies.

Policy objectives

A.
Give every child the best start in life.

C.
Create fair employment and good work for all.

E.
Create and develop healthy and sustainable places and communities.

B.
Enable all children, young people and adults to maximise their capabilities and have control over their lives.

D.
Ensure healthy standard of living for all.

F.
Strengthen the role and impact of ill health prevention.

Policy mechanisms

Equality and health equity in all policies.

Effective evidence-based delivery systems.

Six policy recommendations to reduce health inequalities

A framework for action

This Review has twin aims: to improve health and well-being for all and to reduce health inequalities. To achieve this, we have two policy goals:

— To create an enabling society that maximises individual and community potential
— To ensure social justice, health and sustainability are at the heart of all policies.

Based on the evidence we have assembled, our recommendations are grouped into six policy objectives, as shown in Figure 4.

Our recommendations in these six policy objectives are underpinned by two policy mechanisms:

— Considering equality and health equity in all policies, across the whole of government, not just the health sector
— Effective evidence-based interventions and delivery systems.

Action across the life course

Central to the Review is a life course perspective. Disadvantage starts before birth and accumulates throughout life, as shown in Figure 5. Action to reduce health inequalities must start before birth and be followed through the life of the child. Only then can the close links between early disadvantage and poor outcomes throughout life be broken. That is our ambition for children born in 2010. **For this reason, giving every child the best start in life (Policy Objective A) is our highest priority recommendation.**

Meanwhile, there is much that can be done to improve the lives and health of people who have already reached school, working age and beyond, as demonstrateed by the evidence presented in the following sections. Services that promote the health, well being and independence of older people and, in so doing, prevent or delay the need for more intensive or institutional care, make a significant contribution to ameliorating health inequalities. For example, the Partnerships for Older People projects have been shown to be cost effective in improving life quality.

Figure 5 Action across the life course

Areas of action

Sustainable communities and places

Healthy Standard of Living

Early Years | Skills Development | Employment and Work | Prevention

Life Course

Accumulation of positive and negative effects on health and wellbeing

Prenatal | Pre-School | School | Training | Employment | Retirement

Family Building

Life course stages

Policy Objective A
Give every child the best start in life

If you are a single parent you don't get to go out that much, you don't really see anybody.

Quote from participant in qualitative work undertaken for the Review, which explored barriers to healthy lives among specific groups living in Hackney (London), Birmingham and Manchester. See Annex 1 and www.ucl.ac.uk/gheg/marmotreview. The remaining quotes in this summary also come from this work.

Inequalities in early child development

Giving every child the best start in life is crucial to reducing health inequalities across the life course. The foundations for virtually every aspect of human development – physical, intellectual and emotional – are laid in early childhood. What happens during these early years (starting in the womb) has lifelong effects on many aspects of health and well-being– from obesity, heart disease and mental health, to educational achievement and economic status.[15] To have an impact on health inequalities we need to address the social gradient in children's access to positive early experiences. Later interventions, although important, are considerably less effective where good early foundations are lacking.[16]

As Figure 6 shows, children who have low cognitive scores at 22 months of age but who grow up in families of high socioeconomic position improve their relative scores as they approach the age of 10. The relative position of children with high scores at 22 months, but who grow up in families of low socioeconomic position, worsens as they approach age 10.

What can be done to reduce inequalities in early child development?

There has been a strong government commitment to the early years, enacted through a wide range of policy initiatives, including Sure Start and the Healthy Child Programme. It is vital that this is sustained over the long term. Even greater priority must be given to ensuring expenditure early in the developmental life cycle (that is, on children below the age of 5) and that more is invested in interventions that have been proved to be effective.

We are therefore calling for a 'second revolution in the early years', to increase the proportion of overall expenditure allocated there. This expenditure should be focused proportionately across the social gradient to ensure effective support to parents (starting in pregnancy and continuing through the transition of the child into primary school), including quality early education and childcare.

photo: Bromley by Bow Centre

Figure 6 Inequality in early cognitive development of children in the 1970 British Cohort Study, at ages 22 months to 10 years

Average position
 in distribution

High Q at 22m

Low Q at 22m

Months

- High socioeconomic status
- Low socioeconomic status

Note: Q = cognitive score
Source: 1970 British Cohort Study[17]

Policy Objective B
Enable all children, young people and adults to maximise their capabilities and have control over their lives

Priority objectives

1 Reduce the social gradient in skills and qualifications.

2 Ensure that schools, families and communities work in partnership to reduce the gradient in health, well-being and resilience of children and young people.

3 Improve the access and use of quality lifelong learning across the social gradient.

Policy recommendations

1 Ensure that reducing social inequalities in pupils' educational outcomes is a sustained priority.

2 Prioritise reducing social inequalities in life skills, by:
— Extending the role of schools in supporting families and communities and taking a 'whole child' approach to education
— Consistently implementing 'full service' extended school approaches
— Developing the school-based workforce to build their skills in working across school–home boundaries and addressing social and emotional development, physical and mental health and well-being.

3 Increase access and use of quality lifelong learning opportunities across the social gradient, by:
— Providing easily accessible support and advice for 16–25 year olds on life skills, training and employment opportunities
— Providing work-based learning, including apprenticeships, for young people and those changing jobs/careers
— Increasing availability of non-vocational lifelong learning across the life course.

If there is no education there are no jobs these days, so it is really worrying. If your children don't get a good education then what's going to happen to them?
(Focus group participant)

Inequalities in education and skills

Inequalities in educational outcomes affect physical and mental health, as well as income, employment and quality of life. The graded relationship between socioeconomic position and educational outcome has significant implications for subsequent employment, income, living standards, behaviours, and mental and physical health (Figure 7).

To achieve equity from the start, investment in the early years is crucial. However, maintaining the reduction of inequalities across the gradient also requires a sustained commitment to children and young people through the years of education. Central to this is the acquisition of cognitive and non-cognitive skills, which are strongly associated with educational achievement and with a whole range of other outcomes including better employment, income and physical and mental health.

Success in education brings many advantages. If we are serious about reducing both social and health inequalities, we must maintain our focus on improving educational outcomes across the gradient.

What can be done to reduce inequalities in education and skills?

Inequalities in educational outcomes are as persistent as those for health and are subject to a similar social gradient. Despite many decades of policies aimed at equalising educational opportunities, the attainment gap remains. As with health inequalities, reducing educational inequalities involves understanding the interaction between the social determinants of educational outcomes, including family background, neighbourhood and relationships with peers, as well as what goes on in schools. Indeed, evidence on the most important factors influencing educational attainment suggests that it is families, rather than schools, that have the most influence. Closer links between schools, the family, and the local community are needed.

Investing in the early years, thereby improving early cognitive and non-cognitive development and children's readiness for school, is vital for later educational outcomes. Once at school, it is important that children and young people are able to develop skills for life and for work as well as attain qualifications.

Closer links between schools, the family, and the local community are important steps to this achievement. The development of extended services in and around schools is important, but more is needed to develop the skills of teaching and non-teaching staff to work across home–school boundaries and develop the broader life skills of children and young people.

For those who leave school at 16, further support is vital in the form of skills development for work and training, management of relationships, and advice on substance misuse, debt, continuing education, housing concerns and pregnancy and parenting. Such training and support should be developed and located in every community, designed specifically for this age group.

Central to our vision is the full development of people's capabilities across the social gradient. Without life skills and readiness for work, as well as educational achievement, young people will not be able to fulfil their full potential, to flourish and take control over their lives.

photo: Image Source

Figure 7 Standardised limiting illness rates in 2001 at ages 16–74, by education level recorded in 2001

Percent ill

Qualifications
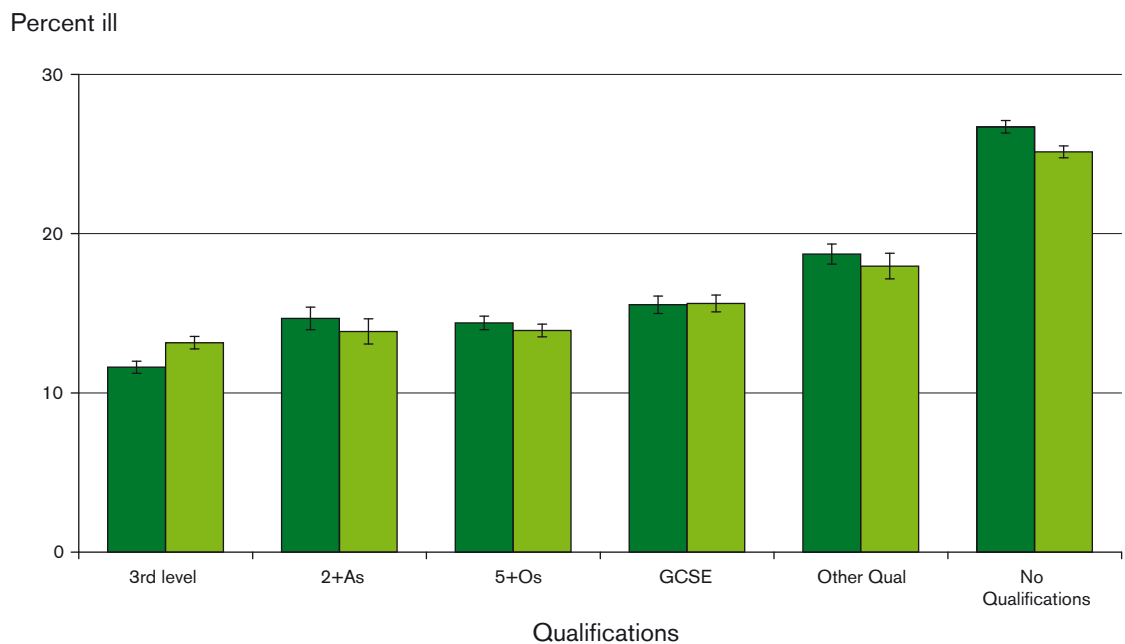
■ Males
■ Females

Note: Vertical bars (I) represent confidence intervals
Source: Office for National Statistics Longitudinal Study[18]

Policy Objective C
Create fair employment and good work for all

Priority objectives

1 Improve access to good jobs and reduce long-term unemployment across the social gradient.

2 Make it easier for people who are disadvantaged in the labour market to obtain and keep work.

3 Improve quality of jobs across the social gradient.

Policy recommendations

1 Prioritise active labour market programmes to achieve timely interventions to reduce long-term unemployment.

2 Encourage, incentivise and, where appropriate, enforce the implementation of measures to improve the quality of jobs across the social gradient, by:
— Ensuring public and private sector employers adhere to equality guidance and legislation
— Implementing guidance on stress management and the effective promotion of well-being and physical and mental health at work.

3 Develop greater security and flexibility in employment, by:
— Prioritising greater flexibility of retirement age
— Encouraging and incentivising employers to create or adapt jobs that are suitable for lone parents, carers and people with mental and physical health problems.

The only [things] I am concerned [about] are the future of my children, the lack of opportunities for the younger generation and the lack of employment – that is very daunting.
(Focus group participant)

Inequalities in work and employment

Being in good employment is protective of health. Conversely, unemployment contributes to poor health. Getting people into work is therefore of critical importance for reducing health inequalities. However, jobs need to be sustainable and offer a minimum level of quality, to include not only a decent living wage, but also opportunities for in-work development, the flexibility to enable people to balance work and family life, and protection from adverse working conditions that can damage health.

Patterns of employment both reflect and reinforce the social gradient and there are serious inequalities of access to labour market opportunities. Rates of unemployment are highest among those with no or few qualifications and skills, people with disabilities and mental ill-health, those with caring responsibilities, lone parents, those from some ethnic minority groups, older workers and, in particular, young people. When in work, these same groups are more likely to be in low-paid, poor quality jobs with few opportunities for advancement, often working in conditions that are harmful to health. Many are trapped in a cycle of low-paid, poor quality work and unemployment.

The dramatic increase in unemployment in the United Kingdom during the early 1980s stimulated research on the link between unemployment and health. Figure 8 shows the social gradient in the subsequent mortality of those that experienced unemployment in the early 1980s. For each occupational class, the unemployed have higher mortality than the employed.

Insecure and poor quality employment is also associated with increased risks of poor physical and mental health. There is a graded relationship between a person's status at work and how much control and support they have there. These factors, in turn, have biological effects and are related to increased risk of ill-health.

Work is good – and unemployment bad – for physical and mental health, but the quality of work matters. Getting people off benefits and into low paid, insecure and health-damaging work is not a desirable option.

photo: NHS South West

Standardised
Mortality Rate

Employed in 1981   Unemployed in 1981

Social Class

Source: Office for National Statistics
Longitudinal Study[19]

Policy Objective D
Ensure a healthy standard of living for all

I'm one person who would be better off not working with two kids. I would have more money if I didn't work.

(Focus group participant)

Inequalities in income

Having insufficient money to lead a healthy life is a highly significant cause of health inequalities.[20]

As a society becomes richer, the levels of income and resources that are considered to be adequate also rise. The calculation of Minimum Income for Healthy Living (MIHL) includes the level of income needed for adequate nutrition, physical activity, housing, social interactions, transport, medical care and hygiene. In England there are gaps between a minimum income for healthy living and the level of state benefit payments that many groups receive.

Despite important steps made by the Government to tackle child poverty, the proportion of the UK population living in poverty remains stubbornly high, above the European Union average and worse than in France, Germany, the Netherlands and the Nordic countries. Employment policy has helped, but the UK benefits system remains inadequate.

Figure 9 shows that, after taking account of both direct and indirect tax, the taxation system in Britain disadvantages those on lower incomes. The benefits of lower direct tax rates for those on lower incomes are cancelled out by the effects of indirect taxation. People on low incomes spend a larger proportion of their money on commodities that attract indirect taxes. As a result, overall tax, as a proportion of disposable income, is highest in the bottom quintile.

What can be done to reduce income inequalities?

State benefits increase the incomes of the worst off. Since 1998 tax credits have lifted 500,000 children out of poverty. It is imperative that the system of benefits does not act as a disincentive to enter employment. Over two million workers in Britain stand to lose more than half of any increase in earnings to taxes and reduced benefits. Some 160,000 would keep less than 10p of each extra £1 they earned. Lone parents face some of the weakest incentives to work and earn more, because many will be, or worry they will be, subject to withdrawal of a tax credit or means-tested benefit as their earnings rise.

The current tax and benefit system needs overhauling to strengthen incentives to work for people on low incomes and increase simplicity and certainty for families. The Government could do more to redistribute income and reduce poverty without harming the economy by delivering a net tax cut to people who currently face weak incentives to enter work or to increase their low levels of pay. A more progressive tax system is needed, one that includes the direct and indirect incomes that make up a person's income.

photo: NHS South West

Figure 9 Taxes as a percentage of gross income, by quintile, 2007/8

Percent

Quintile of household equivalised disposable income
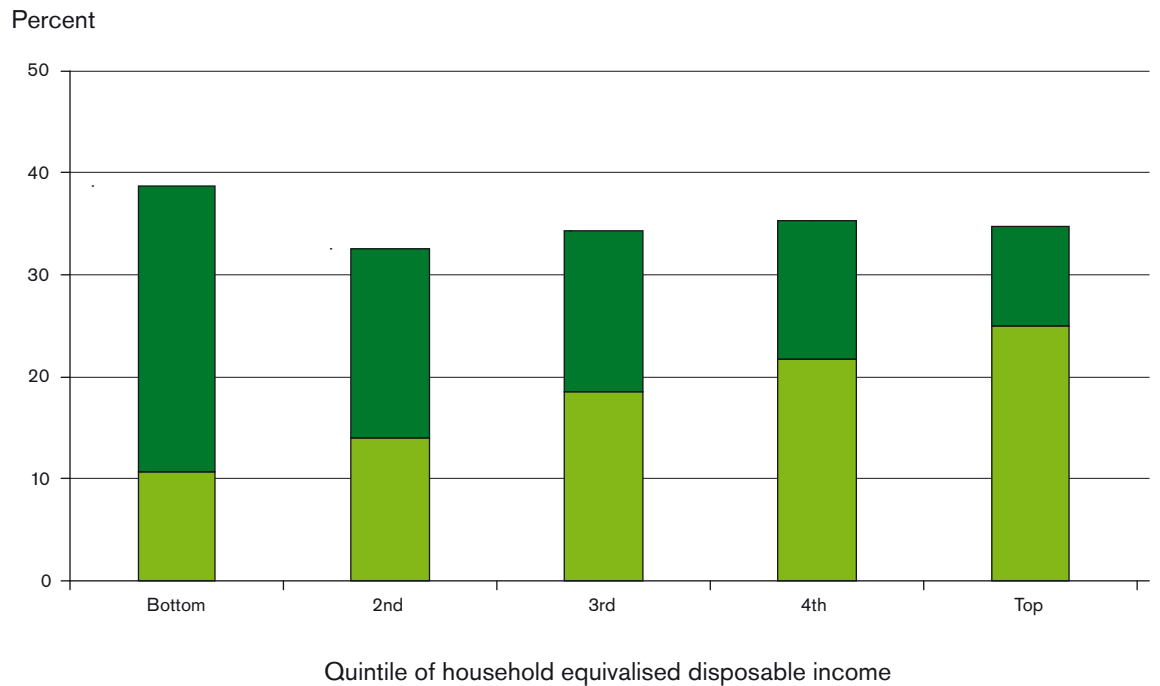
■ All indirect taxes
■ All direct taxes

Source: Office for National Statistics[21]

Policy Objective E
Create and develop healthy and sustainable places and communities

1 Develop common policies to reduce the scale and impact of climate change and health inequalities.

2 Improve community capital and reduce social isolation across the social gradient.

Policy recommendations

1 Prioritise policies and interventions that reduce both health inequalities and mitigate climate change, by:
— Improving active travel across the social gradient
— Improving the availability of good quality open and green spaces across the social gradient
— Improving the food environment in local areas across the social gradient
— Improving energy efficiency of housing across the social gradient.

2 Fully integrate the planning, transport, housing, environmental and health systems to address the social determinants of health in each locality.

3 Support locally developed and evidence-based community regeneration programmes that:
— Remove barriers to community participation and action
— Reduce social isolation.

You can see the deprivation. All you have to do is look outside. It is in your face every day – litter everywhere, rats and rubbish, it is a dump… It feels like people around you have no meaning to life. I keep my curtains closed at times. It doesn't give you a purpose to do anything.

(Focus group participant)

Inequalities in neighbourhoods and communities

Communities are important for physical and mental health and well-being. The physical and social characteristics of communities, and the degree to which they enable and promote healthy behaviours, all make a contribution to social inequalities in health. However, there is a clear social gradient in 'healthy' community characteristics (Figure 10).

People want to get involved with that, people will want to support that, people will want to volunteer for that, people want to get education to fit the role so that can grow and I don't want people from outside of the community to do that, I want people from inside the community to do that because it's up to us. We care about it.

(Focus group participant)

What can be done to reduce community inequalities?

Social capital describes the links between individuals: links that bind and connect people within and between communities. It provides a source of resilience, a buffer against risks of poor health, through social support which is critical to physical and mental well-being, and through the networks that help people find work, or get through economic and other material difficulties. The extent of people's participation in their communities and the added control over their lives that this brings has the potential to contribute to their psychosocial well-being and, as a result, to other health outcomes.

It is vital to build social capital at a local level to ensure that policies are both owned by those most affected and are shaped by their experiences.

Building healthier and more sustainable communities involves choosing to invest differently. For example, the Commission for Architecture and the Built Environment estimates that the budget for new road building, if used differently, could provide 1,000 new parks at an initial capital cost of £10 million each – two parks in each local authority in England. One thousand new parks could save approximately 74,000 tonnes of carbon, based on a 10 hectare park with 200 trees.[22]

Much of what we recommend for reducing health inequalities – active travel (for example walking or cycling), public transport, energy-efficient houses, availability of green space, healthy eating, reduced carbon-based pollution – will also benefit the sustainability agenda.

photo: Gary Sludden/Getty Images

Figure 10 Populations living in areas with, in relative terms, the least favourable environmental conditions, 2001–6

Percentage of the population

Least deprived areas ← Level of deprivation → Most deprived areas
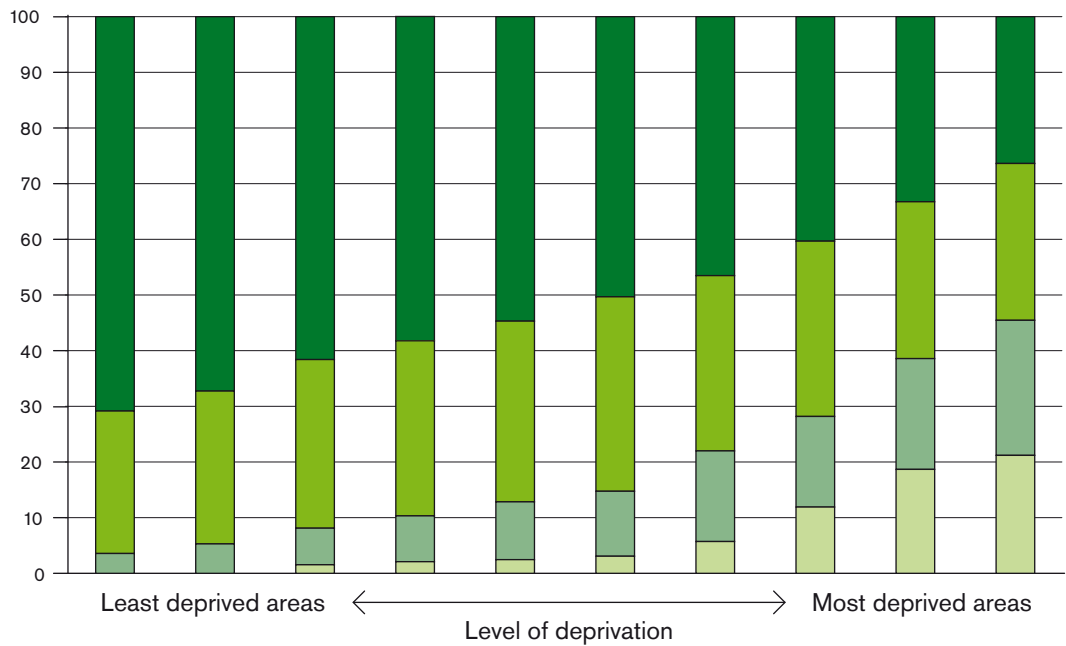
■ No conditions ■ 1 condition ■ 2 conditions ■ 3 or more conditions

Environmental conditions: river water quality, air quality, green space, habitat favourable to biodiversity, flood risk, litter, detritus, housing conditions, road accidents, regulated sites (e.g. landfill)

Source: Department for Environment, Food and Rural Affairs[23]

Policy Objective F
Strengthen the role and impact of ill-health prevention

Priority objectives

1 Prioritise prevention and early detection of those conditions most strongly related to health inequalities.

2 Increase availability of long-term and sustainable funding in ill health prevention across the social gradient.

Policy recommendations

1 Prioritise investment in ill health prevention and health promotion across government departments to reduce the social gradient.

2 Implement an evidence-based programme of ill health preventive interventions that are effective across the social gradient by:
— Increasing and improving the scale and quality of medical drug treatment programmes
— Focusing public health interventions such as smoking cessation programmes and alcohol reduction on reducing the social gradient
— Improving programmes to address the causes of obesity across the social gradient.

3 Focus core efforts of public health departments on interventions related to the social determinants of health proportionately across the gradient.

Many of the key health behaviours significant to the development of chronic disease follow the social gradient: smoking, obesity, lack of physical activity, unhealthy nutrition. An example is shown for obesity in Figure 11. Each of the five policy areas of our recommendations are targeted at preventing the social gradient in incidence of illness. In addition, reducing health inequalities requires a focus on these health behaviours.

The importance of investing in the early years is key to preventing ill health later in life, as is investing in healthy schools and healthy employment as well as more traditional forms of ill-health prevention such as drug treatment and smoking cessation programmes. The accumulation of experiences a child receives shapes the outcomes and choices they will make when they become adults.

Prevention of ill health has traditionally been the responsibility of the NHS, but we put prevention in the context of the social determinants of health. Hence, all our recommendations require involvement of a range of stakeholders. Local and national decisions made in schools, the workplace, at home, and in government services all have the potential to help or hinder ill-health prevention.

At present only 4 per cent of NHS funding is spent on prevention. Yet, the evidence shows that partnership working between primary care, local authorities and the third sector to deliver effective universal and targeted preventive interventions can bring important benefits.

photo: Bromley by Bow Centre

Figure 11 Prevalence of obesity (>95th centile), by region and deprivation quintile, children aged 10–11 years, 2007/8
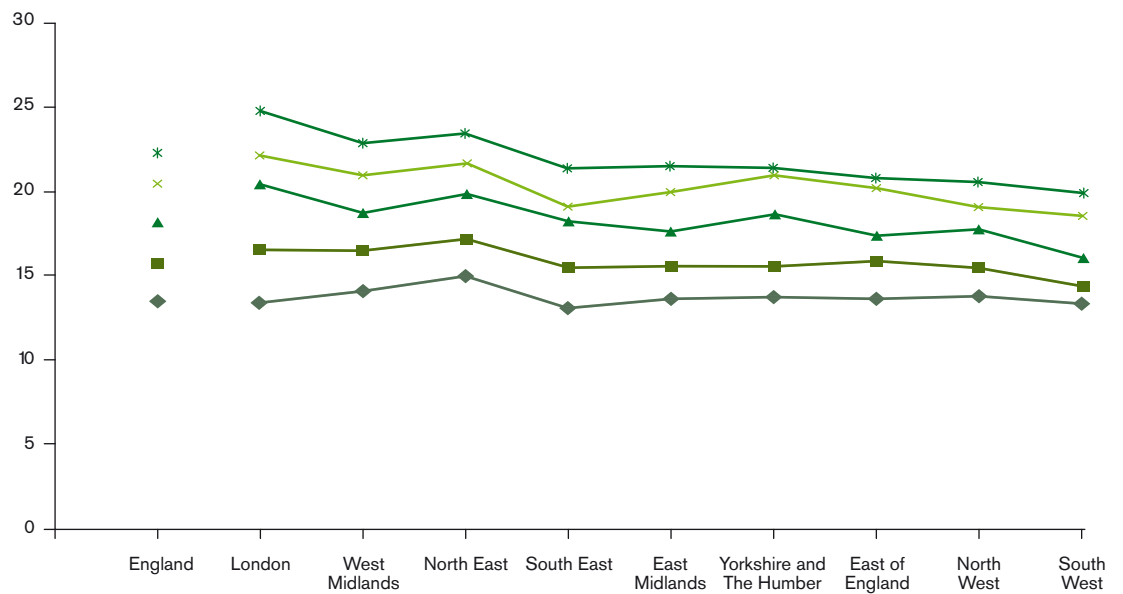
Prevalence of obesity

Region of residence

◆ Quintile 1 (least deprived)
■ Quintile 2
▲ Quintile 3
× Quintile 4
⁕ Quintile 5 (most deprived)

Source: National Obesity Observatory, based on National Child Measurement Programme[24]

Delivery systems

Even backed by the best evidence and with the most carefully designed and well resourced interventions, national policies will not reduce inequalities if local delivery systems cannot deliver them. The recommendations we make depend both on local partnerships and on national cross-cutting government policies.

Central direction, local delivery

Where does responsibility for action lie? There is no question that central, regional, and local government all have crucial roles to play. As we conducted this Review, we formed partnerships with the North West region of England, and with London; both regions are seeking to put the reduction of health inequalities at the centre of their strategy and actions.[25] They will be joined by several other local governments, Primary Care Trusts, and third sector organisations.

The argument was put to us that local practitioners want principles for action rather than detailed, specific recommendations. Local areas suggested they will exercise the freedom to develop locally appropriate plans for reducing health inequalities. The policy proposals made in this Review are intended to provide evidence of interventions that will reduce health inequalities and to give directions of travel without detailed prescription of exactly how policies should be developed and implemented. Similarly, the Review has proposed a national framework of indicators, within which local areas develop those needed for monitoring local performance improvement in their own areas.

Individual and community empowerment

Linked to the question of whether action should be central or local is the role of individual responsibility, often juxtaposed against the responsibility of government. This Review puts empowerment of individuals and communities at the centre of action to reduce health inequalities. But achieving individual empowerment requires social action. Our vision is of creating conditions for individuals to take control of their own lives. For some communities this will mean removing structural barriers to participation, for others facilitating and developing capacity and capability through personal and community development.

There needs to be a more systematic approach to engaging communities by Local Strategic Partnerships at both district and neighbourhood levels, moving beyond often routine, brief consultations to effective participation in which individuals and communities define the problems and develop community solutions. Without such participation and a shift of power towards individuals and communities it will be difficult to achieve the penetration of interventions needed to impact effectively on health inequalities.

Strategic policy should be underpinned by a limited number of aspirational targets that support the intended strategic direction, to improve and reduce inequalities in life and health expectancy and monitor child development and social inclusion across the social gradient.

National health outcome targets across the social gradient

It is proposed that national targets in the immediate future should cover:
— **Life expectancy (to capture years of life)**
— **Health expectancy (to capture the quality of those years).**
Once an indicator of well-being is developed that is suitable for large-scale implementation, this should be included as a third national target on health inequality.

National targets for child development across the social gradient

It is proposed that national targets should cover:
— **Readiness for school (to capture early years development)**
— **Young people not in education, employment or training (to capture skill development during the school years and the control that school leavers have over their lives).**

National target for social inclusion

It is proposed that there be a national target that progressively increases the proportion of households that have an income, after tax and benefits, that is sufficient for healthy living.

National and regional leadership should promote awareness of the underlying social causes of health inequalities and build understanding across the NHS, local government, third sector and private sector services of the need to scale up interventions and sustain intensity using mainstream funding. Interventions should have an evidenced-based evaluation framework and a health equity impact assessment. This would help delivery organisations shape effective interventions, understand impacts of other policies on health distributions and avoid drift into small-scale projects focused on individual behaviours and lifestyle.

Conclusion

Social justice is a matter of life and death. It affects the way people live, their consequent chances of illness and their risk of premature death.

This is the opinion of the Commission on Social Determinants of Health set up by the World Health Organisation. Theirs was a global remit and we can all easily recognise the health inequalities experienced by people living in poor countries, people for whom absolute poverty is a daily reality.

It is harder for many people to accept that serious health inequalities exist here in England. We have a highly valued NHS and the overall health of the population in this country has improved greatly over the past 50 years. Yet in the wealthiest part of London, one ward in Kensington and Chelsea, a man can expect to live to 88 years, while a few kilometres away in Tottenham Green, one of the capital's poorer wards, male life expectancy is 71. Dramatic health inequalities are still a dominant feature of health in England across all regions.

But health inequalities are not inevitable and can be significantly reduced. They stem from avoidable inequalities in society: of income, education, employment and neighbourhood circumstances. Inequalities present before birth set the scene for poorer health and other outcomes accumulating throughout the life course.

The central tenet of this Review is that avoidable health inequalities are unfair and putting them right is a matter of social justice. There will be those who say that our recommendations cannot be afforded, particularly in the current economic climate. We say that it is *inaction* that cannot be afforded, for the human and economic costs are too high. The health and well-being of today's children depend on us having the courage and imagination to rise to the challenge of doing things differently, to put sustainability and well-being before economic growth and bring about a more equal and fair society.

Chapter 1
Introduction

1.1   The central themes for the Review

1.1.1   Health inequalities are a matter of social justice

Inequalities are a matter of life and death, of health and sickness, of well-being and misery. The fact that in England today people from different socio-economic groups experience avoidable differences in health, well-being and length of life is, quite simply, unfair and unacceptable. The aim of this Review is to assemble the evidence to show how to put them right.

The healthiest people in England now enjoy remarkably good health. For example, in the wealthiest part of London, one ward in Kensington and Chelsea, a man now has a life expectancy of 88 years. But the contrast is stark. A few kilometres away in Tottenham Green, one of the capital's poorer wards, male life expectancy is 71. Similar differences are seen all over the country, for both men and women.

There will always be inequalities in society. However, the scale of these dramatic health inequalities, which are still a dominant feature of health in England, are not inevitable and can be prevented.

Globally, concern with inequalities in health is commonly focused on the health of the poorest. In low-income countries, high levels of infant mortality result from material deprivation: lack of access to food, clean water, sanitation and shelter. Such absolute poverty is now rare in this country. Yet we still have large inequalities in health. In the poorest neighbourhoods of England, life expectancy is 67, similar to the national average in Egypt or Thailand, and lower than the average in Ecuador, China and Belize, all countries that have a lower Gross Domestic Product and do not have a national health service.[26] The diseases that contribute to dramatically shortened lives and worse health of those in disadvantage in England are not those associated with absolute destitution. They are heart disease, cancers, diseases related to drugs, alcohol, smoking, poor nutrition and obesity, accidental and violent deaths and mental illness.

1.1.2   There is a social gradient in health and health inequalities

Not only are there dramatic differences between the best-off and worst-off in England, but the relationship between social circumstances and health is also a graded one: the higher a person's social position, the better his or her health is. Figure 1.1 illustrates the relationship between the gradient in neighbourhood income and life expectancy. In England, people living in the poorest neighbourhoods will, on average, die seven years earlier than people living in the richest (the top curve in Figure 1.1). Even more disturbingly, there is a greater variation in the length of time people can expect to live in good health (their health expectancy). For example, the average difference in disability-free life expectancy is 17 years (the bottom curve in Figure 1.1). In other words, people in poorer areas not only die sooner, but spend more of their shorter lives with a disability. To illustrate the importance of the gradient, even excluding the poorest five per cent and the richest five per cent, the gap in life expectancy between low and high income is six years, and in disability-free life expectancy 13 years.

Such systematic differences in health do not arise by chance, and they cannot be attributed simply to genetic makeup, 'bad' behaviour, or difficulties in access to medical care, important as these factors may be. Social and economic differences in health status reflect, and are caused by, social and economic inequalities in society. The Commission on Social Determinants of Health (CSDH), set up by the World Health Organisation, concluded that social inequalities in health arise because of inequalities in the conditions of daily life – the conditions in which people are born, grow, live, work and age – and the fundamental drivers that give rise to them: inequities in power, money and resources.[27]

1.1.3   Addressing health inequalities is a matter of fairness

The starting point for this Review is that health inequalities that are preventable by reasonable means are unfair. Putting them right is a matter of social justice. A debate about how to close the health gap has to be a debate about what sort of society people want to live in.

Most people in this country have a strong sense of fairness and most deem the inequalities in society that give rise to health inequalities as unfair. In the 2009 British Social Attitudes Survey, more than 90 per cent of respondents agreed with the proposition that 'in a fair society every person should have an equal opportunity'.[28] The public also thinks that differences in income in Britain are too large. Surveys have shown that the majority of people estimate that the chair of a large company earns 15 times as much as an unskilled factory worker (a gross underestimate of the actual differential), but thought that the ratio should be six times. This publicly acceptable difference in earnings between top and bottom earners has changed little in two decades: it was five times in 1987, and six times in 1999.

As this Review makes clear, we do not think inequalities in income are the sole reason for inequalities in health. But inequalities in income are linked to inequalities in life chances in a number of salient ways. As the economist Amartya Sen argues, income inequalities affect the lives people are able to lead. It is not just what you have but what you can do with what you have that is important. A fair society would give people more equal freedom to lead flourishing lives. The central ambition of this Review is to create the conditions for people to take control over their own lives. If the conditions of daily life are favourable, and more equitably distributed, then they will have more control over their lives in ways that will influence their and their families' health and health behaviours.

1.1.4   The economic context

We are aware that we are reporting into an adverse economic climate. Inevitably, the question will be raised: can our recommendations be afforded? Our case for action is principally a moral one. The fact that people on low incomes lose 17 years of disability-free life because they live in worse conditions than people on high incomes is reason enough to act. However, it would be naive to fail to recognise the challenges of the current economic environment.

The benefits of reducing health inequalities are economic as well as social. The cost of health inequalities can be measured in both human terms – lost years of life and active life, and in economic terms – the cost to the economy of additional illness.

This is discussed in more detail in Chapter 2 and on the Marmot Review website (www.ucl.ac.uk/gheg/marmotreview).

If everyone in England had the same death rates as the most advantaged, a total of between 1.3 and 2.5 million extra years of life would be enjoyed by those dying prematurely each year as a result of health inequalitites.[29] They would, in addition, have had a further 2.8 million years free of limiting illness or disability.[30] The estimated costs of these illnesses accounts, per year, for productivity losses of £31–33 billion[31] and lost taxes and higher welfare payments in the range of £20–32 billion.[32] The additional NHS healthcare costs in England are well in excess of £5.5 billion.[33]

As further illustration, we have drawn on Figure 1.1 a line at 68 years – the pensionable age to which England is moving. With the levels of disability shown, more than three-quarters of the population do not have disability-free life expectancy as long as 68. If society wishes to have a healthy population, working until 68 years, it is essential to take action to both raise the general level of health and flatten the social gradient.

Figure 1.1 Life expectancy and disability-free life expectancy (DFLE) at birth, persons by neighbourhood income level, England, 1999–2003

Age

Neighbourhood Income Deprivation (Population Percentiles)

Most deprived ← → Least deprived

- Life expectancy
- DFLE
- Pension age increase 2026–2046

Source: Office for National Statistics[34]
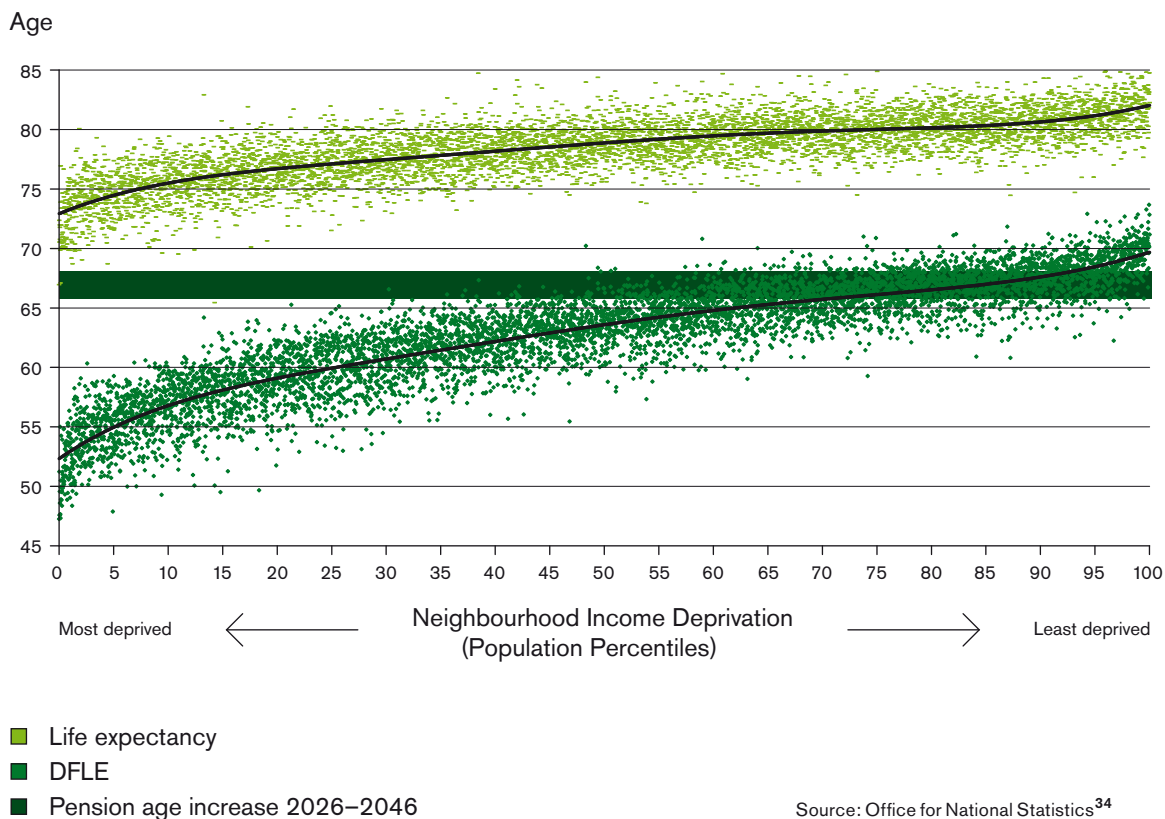
1.1.5 Tackling health inequalities involves tackling social inequalities

In recent years, understanding about the social determinants of ill health, or the causes of the causes of ill health, has deepened (see discussion in Chapter 2).[35] There is clear evidence that:

— The conditions in which people are born, grow, live, work, and age are responsible for health inequalities.
— Early childhood, in particular, impacts on health and disadvantage throughout life.
— The cumulative effects of hazards and disadvantage through life produce a finely graded social patterning of disease and ill health.
— Negative health outcomes are linked to the stress people experience and the levels of control people have over their lives and this stress and control is socially graded.
— Mental well-being has a profound role in shaping physical health and contributing to life chances, as well as being important to individuals and as a societal measure.

As the CSDH report showed, the distribution of health and well-being needs to be understood in relation to a range of factors that interact in complex ways. These factors include: material circumstances, for example whether you live in a decent house with enough money to live healthily; social cohesion, for example whether you live in a safe neighbourhood without fear of crime; psychosocial factors, for example whether you have good support from family and friends; behaviours, for example whether you smoke, eat healthily or take exercise; and biological factors, for example whether you have a history of particular illnesses in your family. In turn, these factors are influenced by social position, itself shaped by education, occupation, income, gender, ethnicity and race. All these influences are affected by the socio-political and cultural and social context in which they sit.[36]

As shown in Chapter 2, there are persistent inequalities across many of these key determinants of health. It is therefore not a mystery why, despite significant overall improvements in health, there continue to be health inequalities. Efforts to reduce health inequalities must address the wider social and economic determinants of health – inequalities in society – and how these play out in the quality of early years experiences, of education, economic status, employment and quality of work, of housing and environment and effective systems for preventing ill health. Chapter 4 of this report outlines our recommendations for reducing inequalities in these social determinants of health.

Social inequalities exist across a wide range of domains: age, gender, race, ethnicity, religion, language, physical and mental health and sexual orientation. There are also some groups in society who are particularly disadvantaged: for example people who are homeless, refugees and asylum seekers, including those who receive no financial support and for whom absolute poverty remains a reality. These inequalities interact in complex ways with socioeconomic position in shaping people's health status. For instance, people with physical and learning disabilities are more likely to suffer discrimination, poor access to some health services and worse employment prospects as a result of their disabilities, all of which impact negatively on their health.

While worse health outcomes for some ethnic groups are associated with their socioeconomic status, for others outcomes are worse than would be expected from their economic status.[37] There are also systematic gender differences in health outcomes. Many of the consultation responses submitted to the Review documented particular exposures and discriminatory practices that compound existing socioeconomic disadvantage.[38] Some of the evidence of these inequalities and their consequences are given in Chapter 2. For specific groups who face particular disadvantage and exclusion, additional efforts and investments and diversified provisions will be needed to reach them and to try to reduce the multiple disadvantages they experience.

1.1.6 Tackling health inequalities means tackling climate change

There is a close relationship between the challenges of climate change and the challenges of health inequalities: not least because both impact most on the poor and disadvantaged. Both health inequalities and the negative impacts of climate change give extra urgency to putting sustainable development at the heart of creating a fairer society. Just as steps necessary for sustainable development must take health inequalities into account, so recommendations that we make must be put into the context of sustainable development.

Our recommendations address the need for a sustainable economy, food system, transport systems, and use of green spaces. Many measures to address climate change also bring health benefits such as more active travel (for instance walking and cycling), which, in addition to reducing carbon emissions, also increases physical activity, and reduces air pollution and traffic accidents. These complementary recommendations are described in more detail in Chapter 4. Figure 1.2 depicts the guiding principles for sustainable development, which are reflected in the Review's conceptual framework, Figure 1.3.

1.2 Conceptual framework and action on the social determinants of health inequalities

1.2.1 A framework for the Review's recommendations

The CSDH developed a conceptual framework that showed how the causes of health inequalities operate at the societal as well as the individual level. In translating the CSDH framework and recommendations to England, we convened nine task groups, to cover these societal causes – the main social determinants – of health inequalities. The task groups began with the CSDH report and then reviewed the evidence

Figure 1.2 Guiding principles for sustainable development

Living Within Environmental Limits

Respecting the limits of the planet's environment, resources and biodiversity – to improve our environment and ensure that the natural resources needed for life are unimpaired and remain so for future generations.

Ensuring a Strong, Healthy and Just Society

Meeting the diverse needs of all people in existing and future communities, promoting personal wellbeing, social cohesion and inclusion and creating equal opportunity for all.

Achieving a Sustainable Economy

Building a strong, stable and sustainable economy which provides prosperity and opportunities for all, and in which environmental and social costs fall on those who impose them (polluter pays), and efficient resource use is incentivised.

Promoting Good Governance

Actively promoting effective participation systems of governance in all levels of society – engaging people's creativity, energy and diversity.

Using Sound Science Responsibly

Ensuring policy is developed and implemented on the basis of strong scientific evidence, whilst taking into account scientific uncertainty (through the precautionary principle) as well as public attitudes and values.

Source: Department for Environment, Food and Rural Affairs for National Statistics[40]

relevant to a high income country, such as England and other parts of the UK, about what could be done to take action on the social determinants of health. Based on these reports and a wide range of discussions and consultations, our framework for action was developed, as shown in Figure 1.3.

The framework sets out the overall aim of the Review – to reduce health inequalities and improve health and well being for all. To achieve this we have two overarching policy goals:

1   Create an enabling society that maximises individual and community potential.

2   Ensure social justice, health and sustainability are at the heart of all policy-making.

These two goals are the central principles which, the Review advocates, should guide policy interventions and approaches to reduce health inequalities throughout the life course and across the social gradient. Beneath the two policy goals are six policy objectives, relating to the main social determinants of health, outlined in more detail in Chapter 4. Underpinning these is the need for equality and effectiveness to be embedded in all policies and the development of delivery systems to deliver the policies and interventions advocated here (described in Chapter 5).

1.2.2   Policy objectives and the life course

The recommendations of the Review are set out in Chapter 4 under the six policy objectives as outlined in the framework above. These recommendations also need to be viewed in the context of a life course approach, Figures 1.4. A life course approach is needed because:

1   Individual development takes place from birth to death.

—   Social and biological influences on development start at conception, or earlier, in terms of genetic effects.[39] These accumulate through pregnancy to influence the health of the child at birth. From the time of birth, the individual is exposed to a wide range of experiences – social, economic, psychological and environmental – and these change as they progress through the different stages of life – pre-school, school, employment/ training, family-building and retirement.

—   It is the accumulation of these influences, their effects and the interactions that 'cast a long shadow' over subsequent social development, behaviour, health and well-being of the individual. These effects may be either protective – increasing esteem, life skills, resilience and resistance to ill health and encouraging 'healthy behaviours' – or hazardous – destroying self-regard, undermining social skills and the ability to learn and creating the conditions for mental and physical ill health.

2   The logic that underpins the proposals in this report is to take action across each stage of the life course, as depicted in Figure 1.5, with two related purposes:

— To affect the ways in which socially determined influences impact on the individual, with the aim of accentuating the positive effects and minimising negative effects. Some actions and factors (those affecting early years, work and employment) will be focused on specific stages of the life course. Others (skills development) will span several and others still (community, place and standard of living) will impact in different ways, but at every stage of life.
— To prevent the risks to health that have already accumulated over previous stages of the life course. This is in recognition of the need to improve the health and well-being of existing generations, including the oldest, who have a lifetime of accumulated experience and risks to health.

1.2.3   Policy objectives and the social gradient
The social gradient in health has profound implications for understanding causes of inequalities but it also implies the need for different approaches to address them. As Figure 1.1 illustrates, everyone beneath the very best-off experiences some effect of health inequalities. If the focus were only on those most in need and social action were successful in improving their plight, what about those just above the bottom or at the median, who have worse health than those above them? All must be included in actions to create a fairer society.

Many of the social policies implemented to address inequalities over recent years have been targeted at the most disadvantaged groups or areas. In our recommendations we propose actions of sufficient scale and intensity to be universal but also proportionately targeted to reduce the steepness of the gradient. We call this *proportionate universalism*.

The ambition of this Review is to take a new approach and reduce the gradient in health inequalities. Figure 1.6 depicts different steepness of gradients for life expectancy in two different regions of England. Flattening the gradient is the ambition of proportionate universalism and of the recommended policies that we outline in Chapters 4 and 5.

1.2.4   Health and well-being
The focus of much work on health inequalities in England, in particular the current Public Service Agreement (PSA) target, has been on inequalities in mortality. However, measures of mortality focus policy too narrowly on increased treatment of the disease-related causes of death, such as the late consequences of hypertension, at the expense of more upstream interventions that would prevent the onset of medical problems. They capture inequalities in life-threatening ill health, but not necessarily in the experience of good health and well-being across life.[41]

Figure 1.3 The conceptual framework
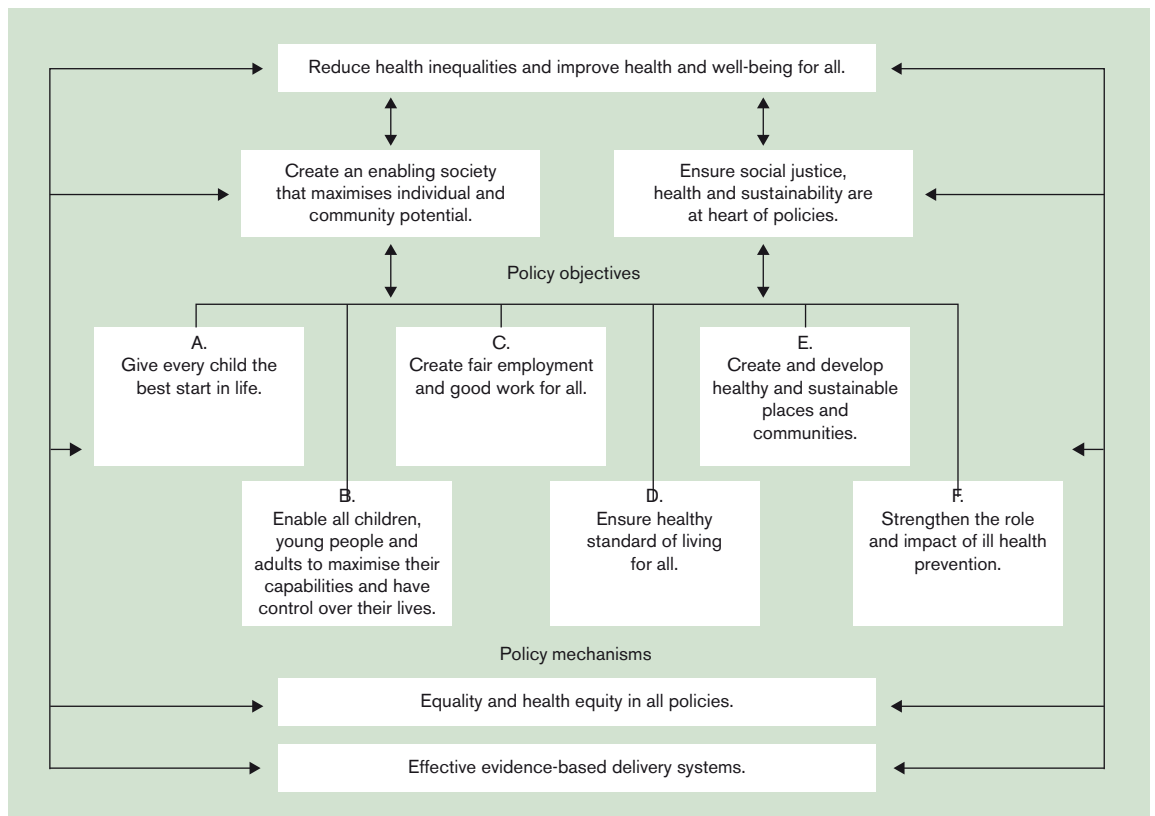
Figure 1.4 Stages of the life course and the accumulation of effects

Life Course

Accumulation of positive and negative effects on health and wellbeing

| Prenatal | Pre-School | School | Training | Employment | Retirement |

Family Building

Life course stages
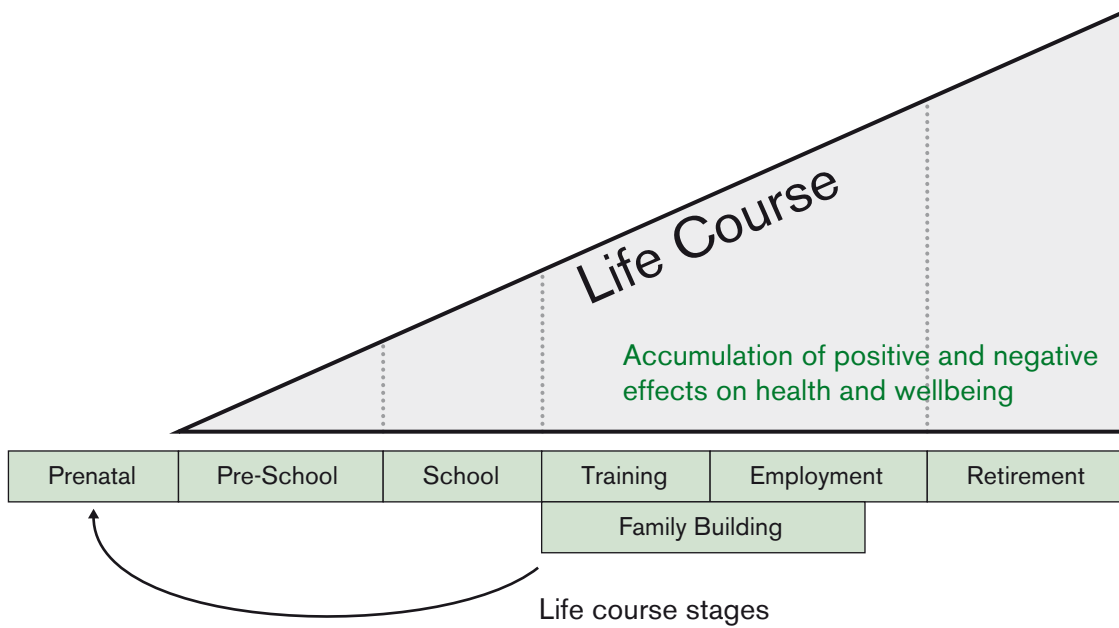
Figure 1.5 Actions across the life course

Areas of action

Sustainable communities and places

Healthy Standard of Living

Early Years

Skills Development

Employment and Work

Prevention

Life Course

Accumulation of positive and negative effects on health and wellbeing

| Prenatal | Pre-School | School | Training | Employment | Retirement |

Family Building

Life course stages
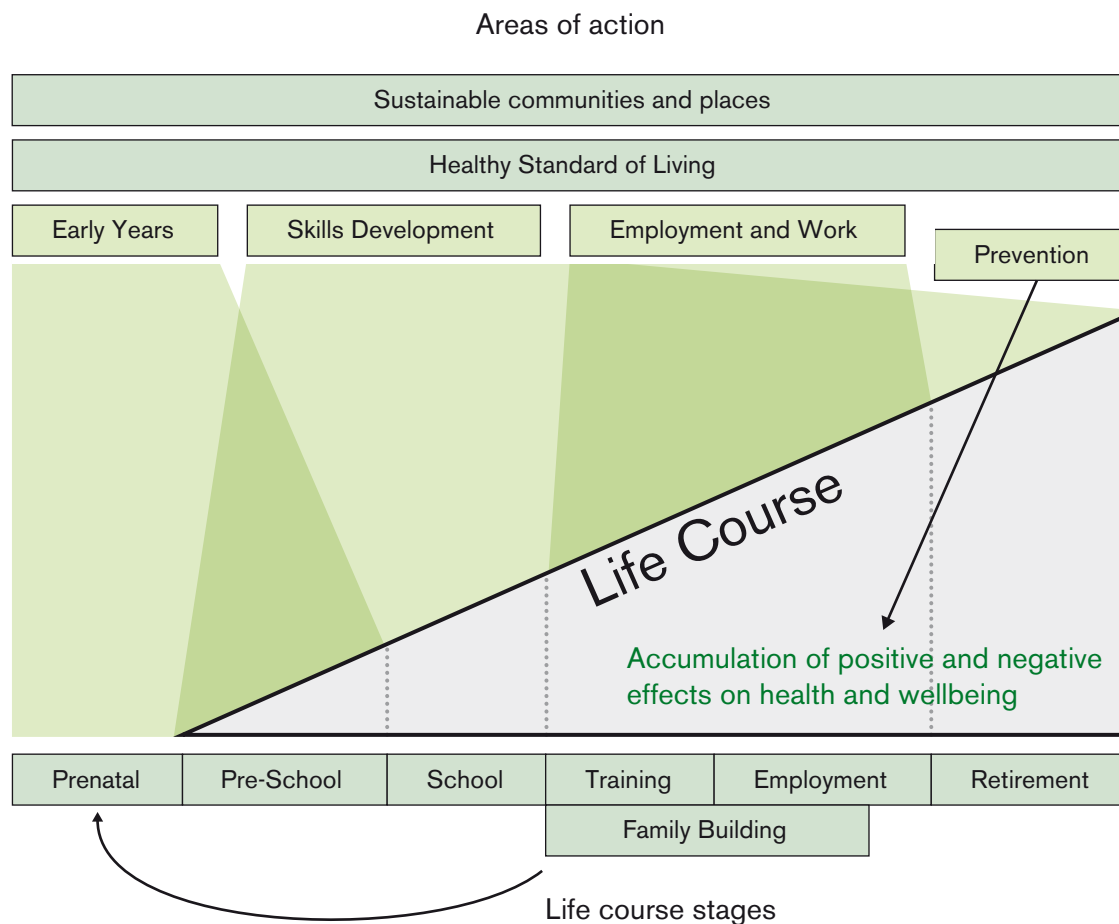
Physical and mental health are important indicators of well-being but there are other measures and part of our aim is to promote and sustain fair distribution of well-being as well as health. Our concern with health and well-being as 'outcomes' relates to a broader movement to evaluate societal performance using a richer array of measures than simply Gross Domestic Product. The Commission on the Measurement of Economic Performance and Social Progress, set up by President Sarkozy and chaired by Joseph Stiglitz, emphasised the need to measure social progress in other than narrow economic terms and to focus on well-being as a measure of social progress.[42] In Chapter 5 we explore how new measures of well-being and adding years to life could galvanise action to reduce health inequalities.

1.2.5   Summary

It is sometimes difficult for many people to accept that serious and persistent health inequalities exist in England. We have a highly valued National Health Service and the overall health of the population has improved greatly over the past 50 years. Dramatic health inequalities are still a dominant feature of health in England. Chapter 2 describes in detail some of these inequalities in health and the inequalities in life chances that give rise to them.

All the major political parties express concern over health inequalities and the need to create a fairer society. The present government, in power for 12 years, has done much in the name of social justice and there are few areas of social policy that have not been affected by concern to improve social justice and equity. While it is clear that progress has been made, the results have not met the level of ambition. This is partly due to powerful counteracting social and economic forces. But the nature, sustainability and intensity of policies pursued have also played their part. In Chapter 3, we outline lessons to be learned from recent health inequalities strategies, from the types of policies and interventions pursued, from how those policies have been developed, and how they have been delivered and measured. The recommendations in Chapters 4 and 5 attempt to learn from these lessons and advocate a new practical and conceptual approach to reducing health inequalities.

The economic, as well as the health and well-being of today's children depends on us having the courage and imagination to rise to the challenge to do things differently, to put sustainability and well-being alongside economic growth and bring about a more equal and fair society.

Figure 1.6 Age standardised mortality rates by socioeconomic classification (NS-SEC) in the North East and South West regions, men aged 25−64, 2001−2003

Mortality rate
per 100,000

■ North East
▲ South West

Note: NS-SEC = National Statistics Socio-economic Classification
Source: Office for National Statistics[43]
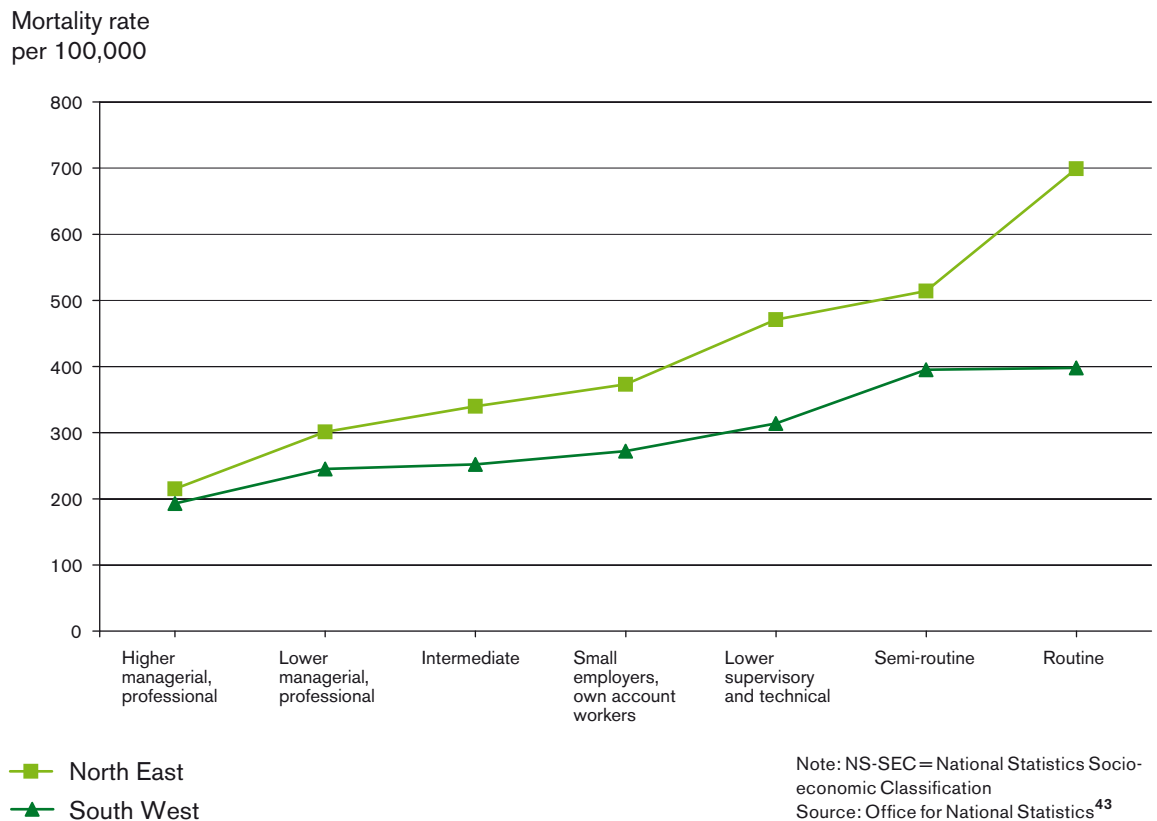
Figure 2.1 Life expectancy at birth by social class, a) males and b) females, England and Wales, 1972–2005

a) Males

Years
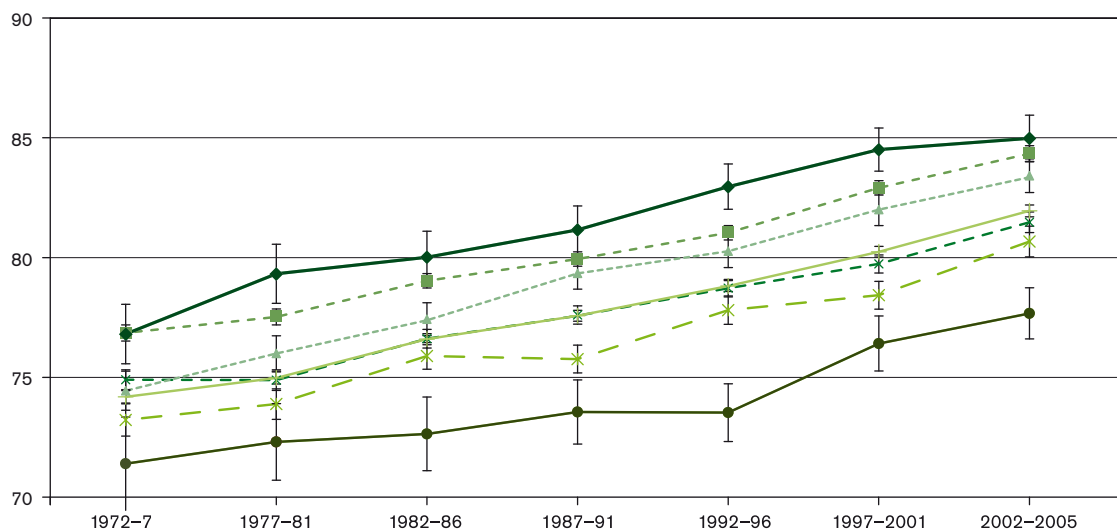
b) Females

Years
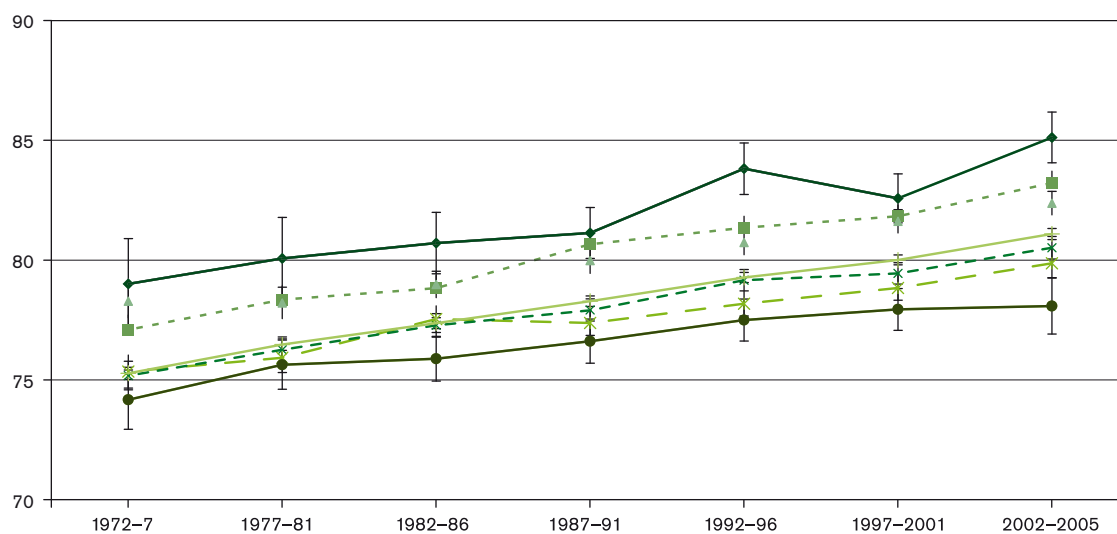
Social Class

I
II
IIIN
IIIM
IV
V
All

Chapter 2
Health inequalities and the social determinants of health

2.1 Health inequalities in England – the figures

In England, inequalities in health exist across a range of social and demographic indicators, including income, social class, occupation and parental occupation, level of education, housing condition, neighbourhood quality, geographic region, gender and ethnicity. Inequalities are evident in many health outcomes, including mortality, morbidity, self-reported health, mental health, death and injury from accidents and violence.[44] In this chapter, inequalities in a variety of health outcomes are set out, followed by descriptions and analysis of inequalities in the social determinants of health. Finally, we provide estimates of the human and economic costs of inequalities.

Figure 2.1 illustrates the point made in Chapter 1 that, although life expectancy increased for everyone between 1971 and 2005, the gap in life expectancy by social class for both men and women has persisted, with some widening taking place in the 1980s and 1990s. These figures show clearly, for women as well as men, the graded nature of the relationship between social class and life expectancy – an observation similar to that shown with income in Figure 1.1. In 2002–5 the gap was about seven years for both sexes.

2.2 The current PSA target

A national health inequalities Public Service Agreement (PSA) target was set in 2001. The aim of the target was to reduce inequalities in health outcomes in infant mortality and life expectancy by 2010. Updated in 2004, it was supported by two more detailed objectives around infant mortality and life expectancy. As well as this target, a range of PSA targets and national indicators support the broader health and social exclusion agendas.

The *infant mortality (IM) target* is, starting with children under one year, by 2010 to reduce by at least 10 per cent the gap in mortality between the routine and manual occupation group and the population as a whole.

The *life expectancy (LE) target* is, starting with local authorities, by 2010 to reduce by at least 10 per cent the gap between the fifth of areas with the worst health and deprivation indicators (the 'spearhead' group) and the population as a whole.

The data for the two targets show substantial improvements in life expectancy and infant mortality for all groups, including those in disadvantaged groups and areas, compared with the baseline periods.[47] However, the gaps in infant mortality and male

Figure 2.2 Relative difference in infant mortality rates between babies with fathers in routine and manual occupations and all with parents married or jointly registered, 1994/6–2005/7

Percentage difference in rates
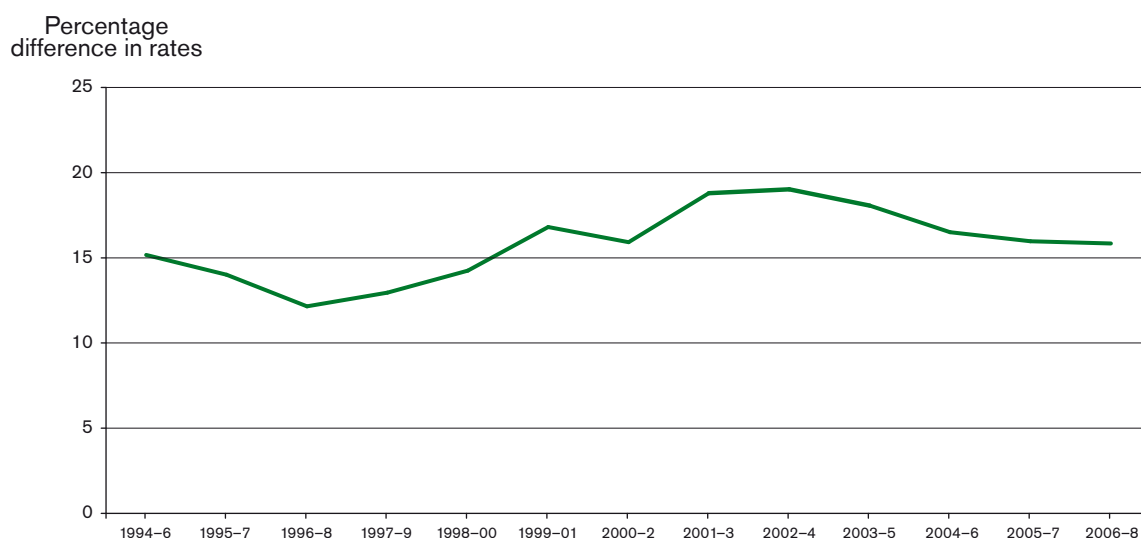
Source: Department of Health[46]

and female life expectancy remain. The infant mortality gap reached a peak of 19 per cent in 2002–4 and narrowed slightly in each of the subsequent periods to 16 per cent in 2006–8 (see Figure 2.2).

However, this latest figure is still wider than the 13 per cent baseline in 1997–9. Projecting the long-term trend since the baseline year suggests a 25 per cent widening in the gap by 2009–11. On the other hand, if the recent narrowing of the gap were to continue, the target would be exceeded.

The targets were set as relative differences. The headline of a widening gap does not convey the full picture, however. Figure 2.3 shows that infant mortality rates have been declining both in lower socioeconomic groups (routine and manual) and for the average. The absolute difference widened a little and then narrowed.

The spearhead group of areas used for the life expectancy target represents almost, but not quite, the most disadvantaged quintile of local authorities. Specifically, they are those in the bottom quintile nationally on three out of five factors: male and female life expectancy, cancer and cardiovascular mortality at ages under 75, and Index of Multiple Deprivation (IMD) score.

A similar observation – to that for infant mortality – can be made with regard to life expectancy. Figure 2.4 compares the spearhead areas with the average for England. Life expectancy has improved as much in the spearheads as in the average, but there has been no narrowing of the gap. The concentration of spearhead areas at the lower end of the life expectancy spectrum makes it quite difficult to assess whether life expectancy improvements in spearhead areas differ markedly from progress in other areas.

The gap in male life expectancy between spearhead and non-spearhead areas in 2006–8 widened slightly, by 2 per cent since the 1995–7 target baseline; for females the gap grew by 11 per cent. As shown in Figure 2.4, the health inequality target for narrowing the gap between spearheads and the England average is unlikely to be met.

For males, there is some evidence – see Figure 2.5 – that between baseline measurement in 1995–7 and setting up of the spearhead areas in 2004, there was most improvement in life expectancy in areas that had lower life expectancy initially, more so than in areas where there was higher life expectancy (a form of 'regression to the mean'). This was true for both spearhead and non-spearhead areas – but spearhead areas benefited most as they had lower initial life expectancy.

Since the establishment of the spearhead initiative, there has been no evidence for males of there being greater improvement in life expectancy in spearhead areas than in non-spearhead areas. The picture is slightly different for females – see Figure 2.5. Improvements for non-spearhead areas followed a similar pattern to those for males. However, for spearhead areas, improvements both before and after they were set up were on average less than for non-spearhead areas – with no evidence that this

<figure>
Figure 2.3 Trends in the infant mortality PSA target indicator 1997/9 to 2006/8 and projections to 2009/11
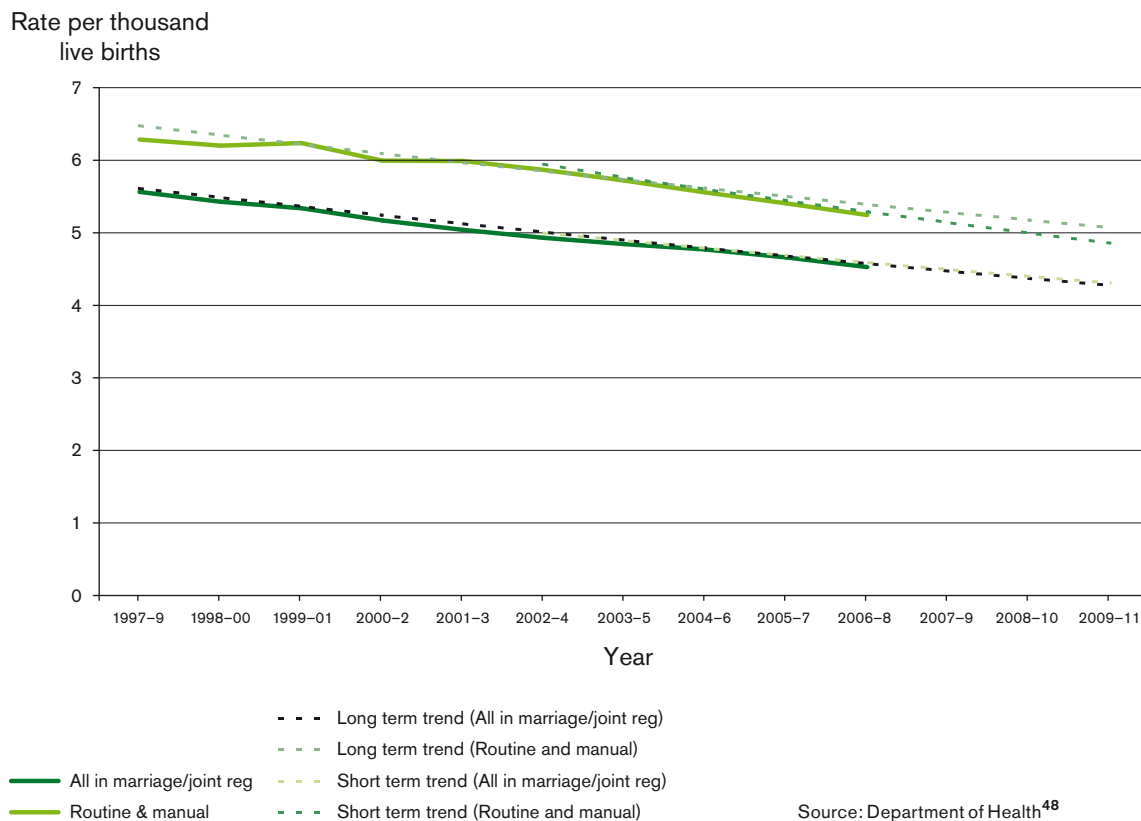
Rate per thousand live births

Year

- - - Long term trend (All in marriage/joint reg)
- - - Long term trend (Routine and manual)
— All in marriage/joint reg   - - - Short term trend (All in marriage/joint reg)
— Routine & manual   - - - Short term trend (Routine and manual)   Source: Department of Health[48]
</figure>

(a) Males

Life expectancy (years)
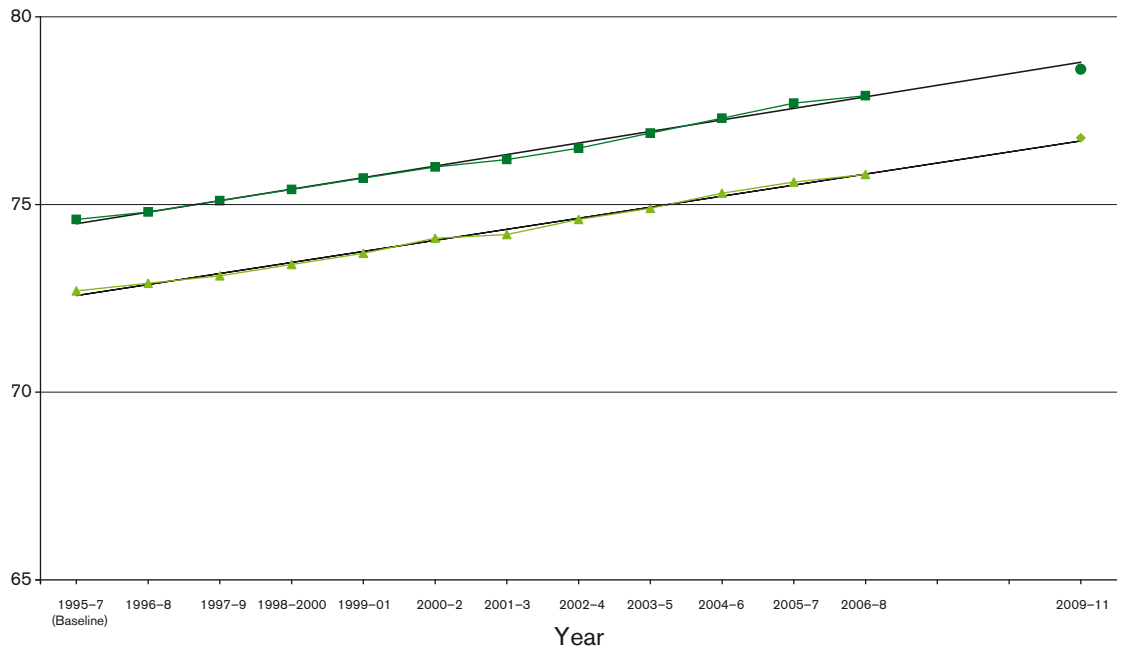
(b) Females

Life expectancy (years)

England ▪   Spearhead ▲
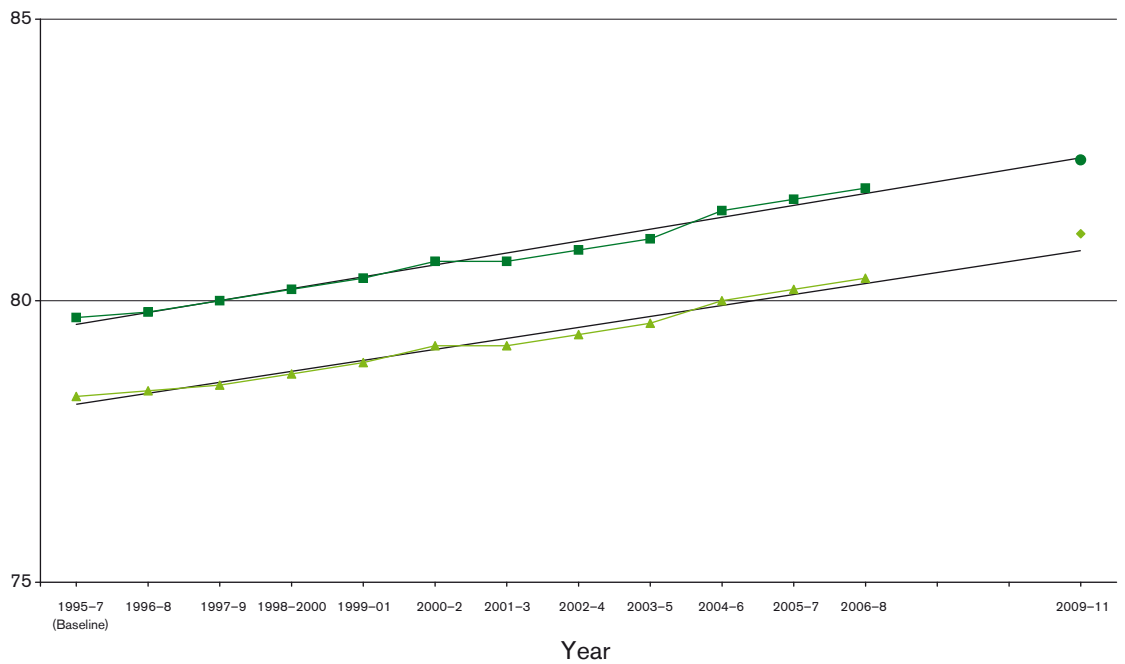
● England target   ◆ Spearhead target

—— Trendline (England)   —— Trendline (Spearhead)   Source: Department of Health[49]

was related to the lower initial life expectancy in spearhead areas. So, life expectancy for women in spearhead areas has shown either no improvement or worse outcomes compared with non-spearhead areas.

Taken together, the data show welcome improvements in everyone's health, including the worst-off, but no narrowing of the gap, and little evidence that establishment of spearhead areas and consequent action made any difference to health inequalities.

2.3   Regional variation in mortality

Figure 2.6 shows how the social gradient in mortality varied by region in 2001–3. Gradients in the South and East of England, excluding London, were less steep than the national average, and those in the North West and North East were considerably wider. Those in managerial and professional classes have similar, and lower, levels of mortality wherever they live. However, there are significant regional variations among those in other socioeconomic classes, which widen the further down the social gradient one moves.

Figure 2.5 Difference between (a) male and (b) female life expectancy in 1995/7 and that in (i) 2002/4 and (ii) 2006/8 for spearhead and non-spearhead local authorities, by level of life expectancy in 1995/7

(a) Males
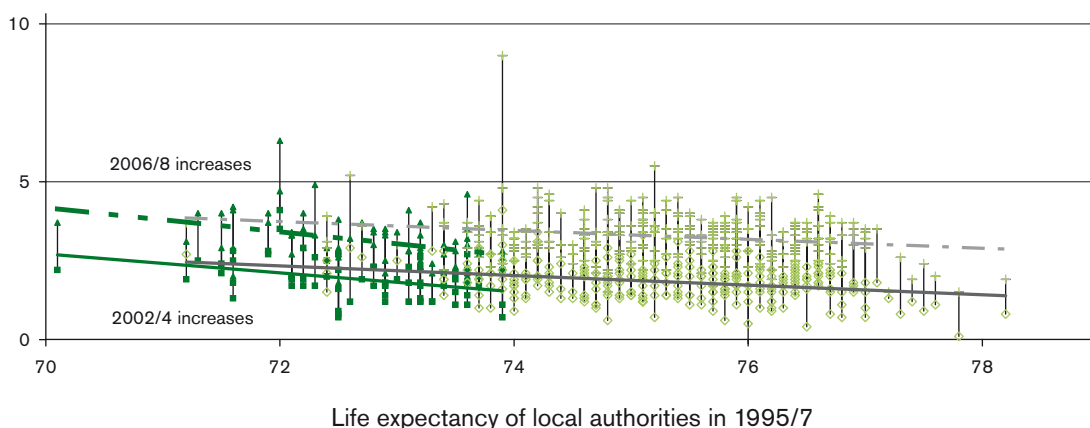
(b) Females
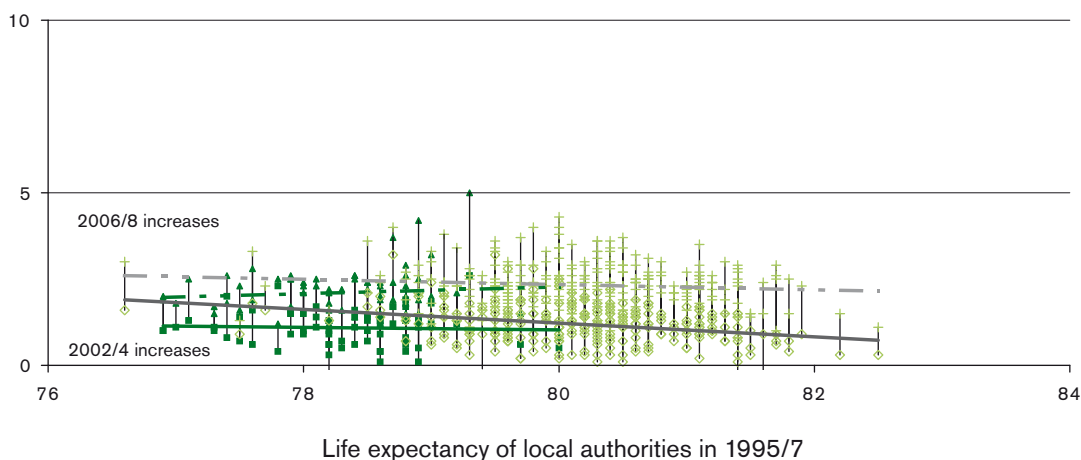
Source: Office for National Statistics[50]

NHS Portsmouth City PCT

Figure 2.6 Age standardised mortality rates by socioeconomic classification (NS-SEC) and region, men aged 25–64, 2001–2003

Mortality rate per 100,000

Region

- Routine
- Semi-routine
- Lower supervisory & technical
- Small employers, own account workers
- Intermediate
- Lower managerial, professional
- Higher managerial, professional

Source: Office for National Statistics[51]
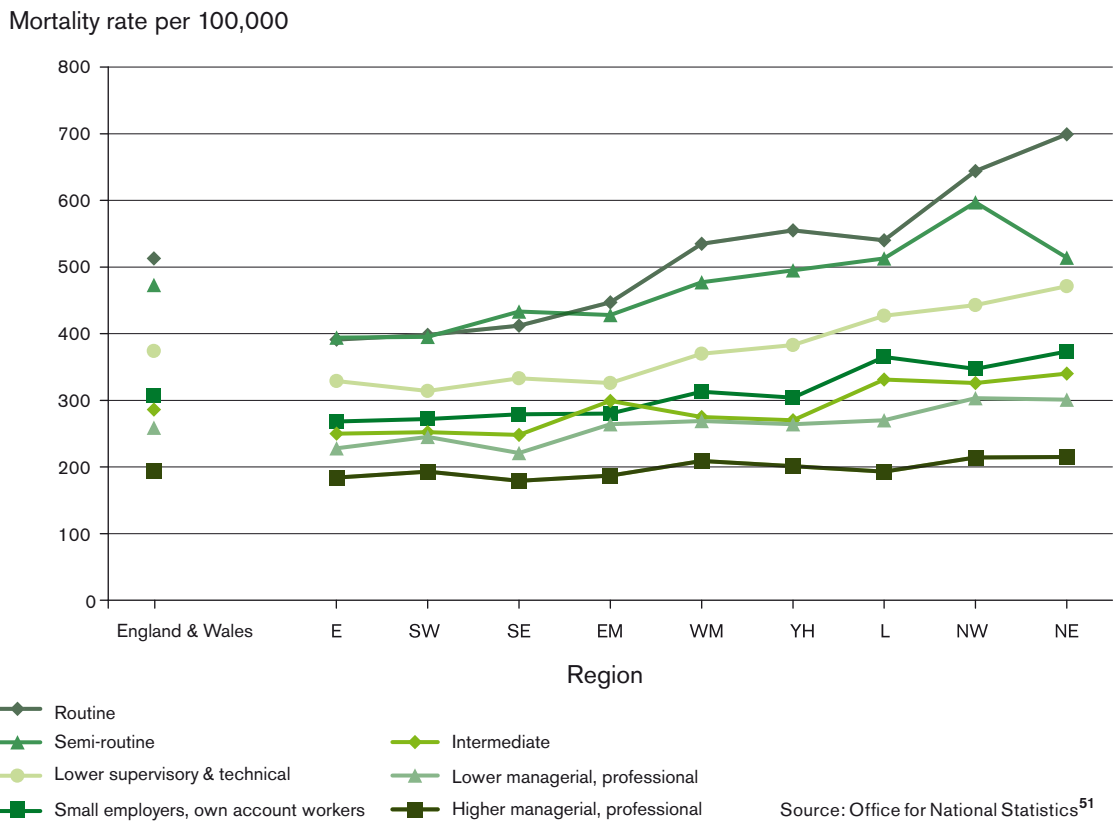
Figure 2.7 Percentage of (a) males and (b) females with limiting long-term illness, by age and socioeconomic classification (NS-SEC), 2007

(a) Males

Percent
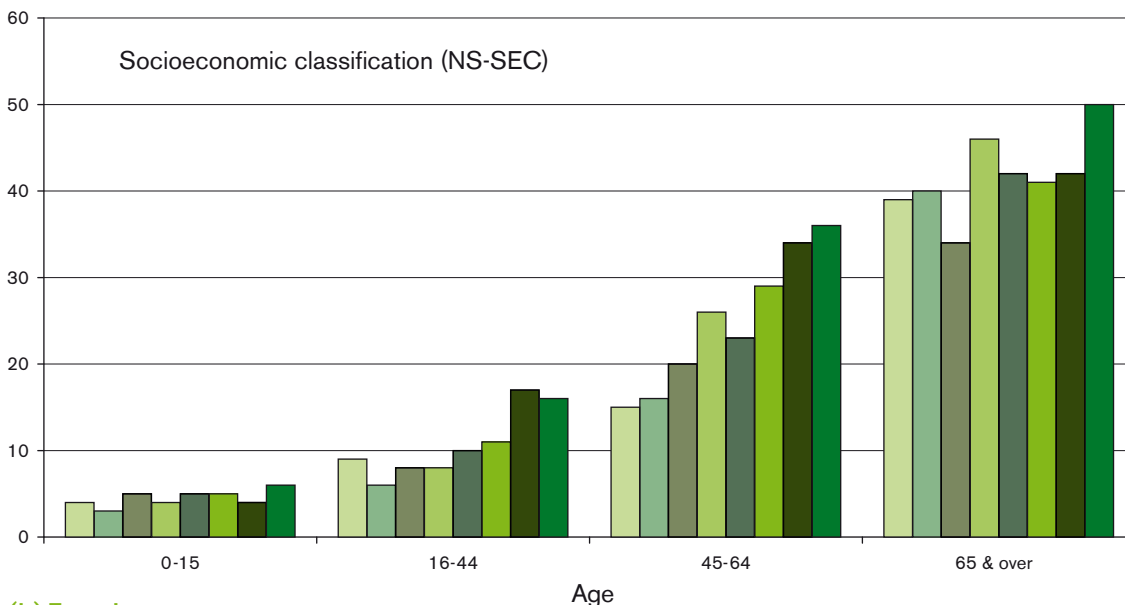
Age

(b) Females

Percent

Age
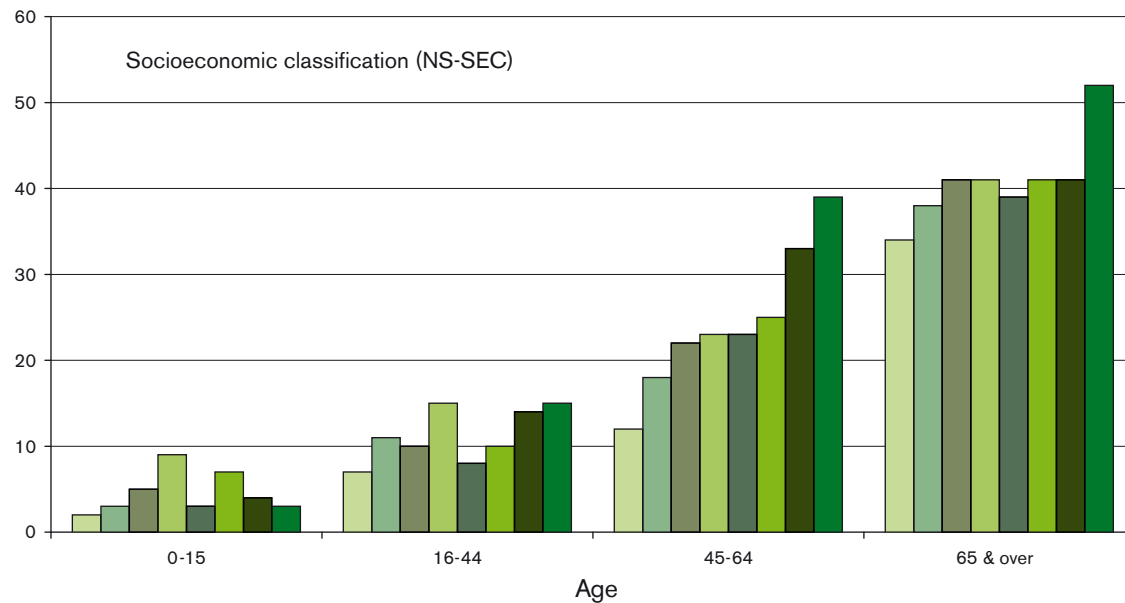
Legend:
- Large employers and higher managerial
- Higher professional
- Lower managerial and professional
- Intermediate
- Small employers and own account
- Lower supervisory and technical
- Semi-routine
- Routine

Note: NS-SEC=National Statistics Socio-economic Classification
Source: Office for National Statistics General Household Survey[52]

2.4 Other indicators of health

As indicated in Chapter 1, there are significant social gradients in morbidity. This is illustrated by Figure 2.7, which shows limiting long-term illness rates by age and socioeconomic classification. The social gradient is steepest at ages 45 to 64, with those in routine and semi-routine jobs at this age having illness rates comparable to those aged 65 and over in some of the managerial and professional classes. So steep is the social gradient, in fact, that the lowest groups at age 45–64 have illness rates comparable to higher socioeconomic groups aged 65 and over. The Whitehall II study, similarly, suggested that decline in physical functioning occurs about 12 years earlier in men and women in lower employment grades compared with those in higher grades.[53]

Disability-free life expectancy (DFLE) is derived using information on limiting long-term illness and mortality. As can be seen from the above (and as illustrated in Chapter 1, Figure 1.1), DFLE is clearly closely related to socioeconomic status, with a steeper socioeconomic gradient (based on neighbourhood income deprivation) than for life expectancy.

Figure 2.8 indicates that inequalities in the number of years spent free of disability are greater than those based simply on total years of life. In other words, people in lower socioeconomic groups not only have shorter lives but they also spend more of their later years with a disability. In Chapter 5 we consider the implications of the steep gradient in DFLE for measuring and monitoring inequalities in health and well-being.

Despite the steep gradient in DFLE based on neighbourhood income deprivation, there is considerable variation in DFLE (and in the number of years spent with a disability) between neighbourhoods with the same level of income deprivation. Much of this variation is associated with regional variation in both mortality and disability. Trend lines for DFLE by region are shown in Figure 2.9. At each level of neighbourhood income deprivation, DFLE is (on average) highest in London, where it is around five years more than in the North East and North West, which have the lowest average levels.

Figure 2.8 Number of years from birth spent with disability, persons by neighbourhood income level, England, 2001

Years

Most deprived ⟵ Neighbourhood Income Deprivation ⟶ Least deprived
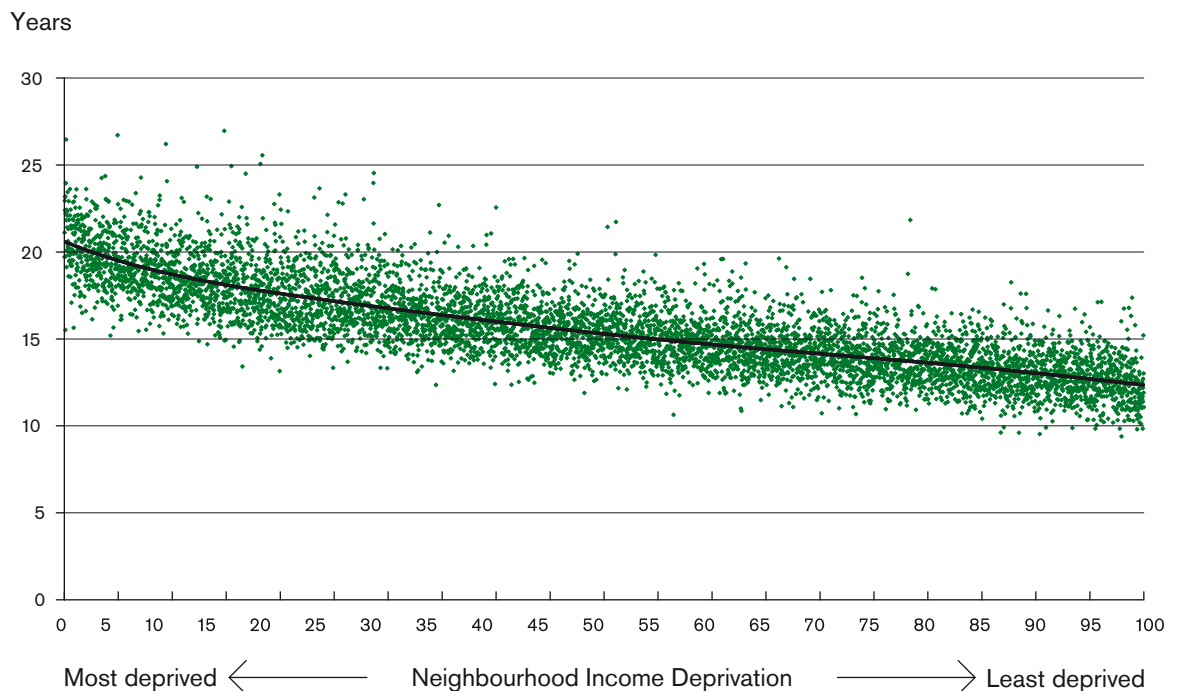
2.5   Health risks

There are steep social gradients in the incidence of both cancer and circulatory disease. For example, education status is related to lung cancer incidence, with people with low levels of education having a higher incidence of this cancer.[55] In terms of disease burden, vascular disease affects 4.1 million people, kills 170,000 every year and is responsible for a fifth of all hospital admissions. It is the largest single cause of long-term ill health and disability and accounts for more than half the mortality gap between rich and poor. Mortality and morbidity from cardiovascular disease (CVD) and cancer are also higher among people with poor mental health, after controlling for socioeconomic variables.[56]

In 2001–3 there were 2.7 times more deaths from CVD among men in the most deprived twentieth compared with the least deprived twentieth of the population[57] – see Figure 2.10. However, by 2006–8 the death rate from circulatory disease between the spearhead areas and non-spearhead areas had narrowed by 38 per cent, with a 2010 target of 40 per cent.

Risk factors for cancer and circulatory diseases, such as smoking, physical inactivity and obesity, are elevated along the social gradient.[58] The burden of disease falls disproportionately on people living in deprived conditions, and for some health conditions falls particularly heavily on certain ethnic groups.

Figure 2.9 Disability-free life expectancy at birth, persons: regional averages at each neighbourhood income level, England, 1999–2003

Age

Most deprived ← Neighbourhood Income Deprivation → Least deprived
(Population Percentiles)

- - Yorkshire/Humber average
···· South West average
— East of England average
— East Midlands average
— North West average
— West Midlands average
— South East average
— North East average
— London average

Source: Office for National Statistics[59]
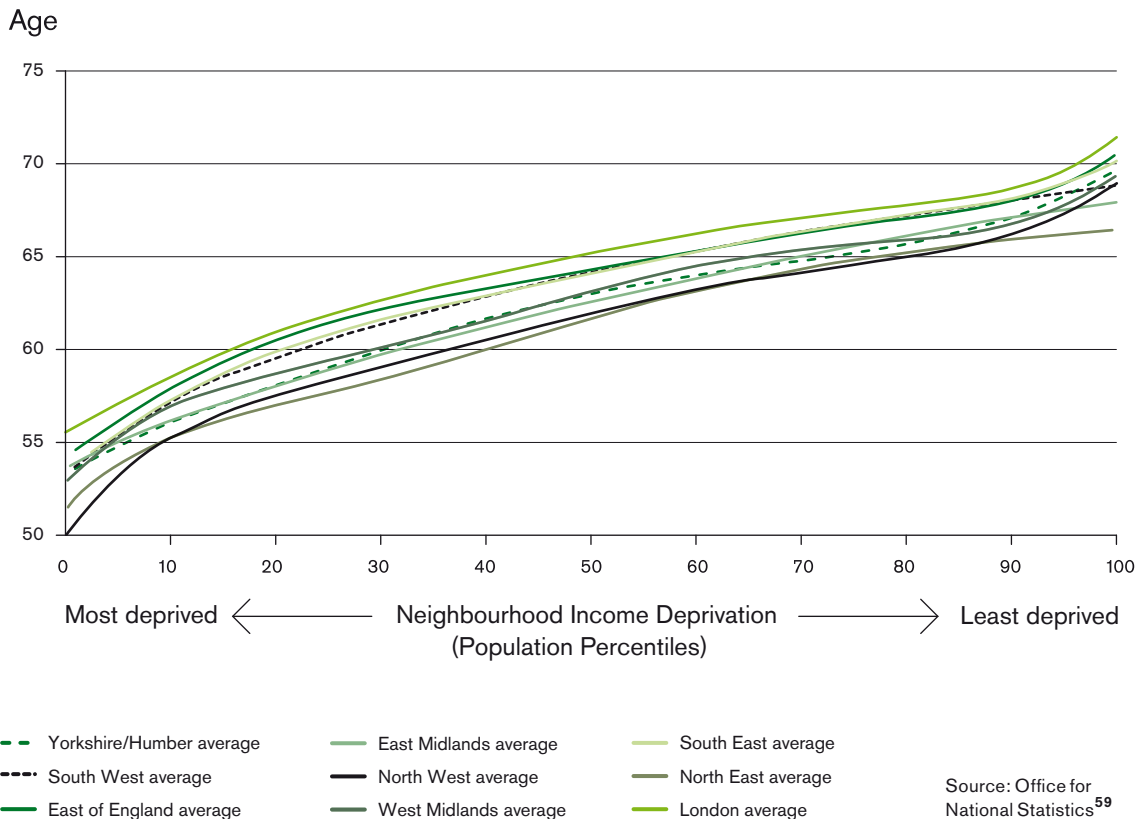
Figure 2.10 Age standardised (a) circulatory disease and (b) cancer death rates at ages under 75, by local ward deprivation level, 1999 and 2001–2003

(a) Circulatory disease

Rate per 100,000 population

Least deprived ← Deprivation twentieths → Most deprived
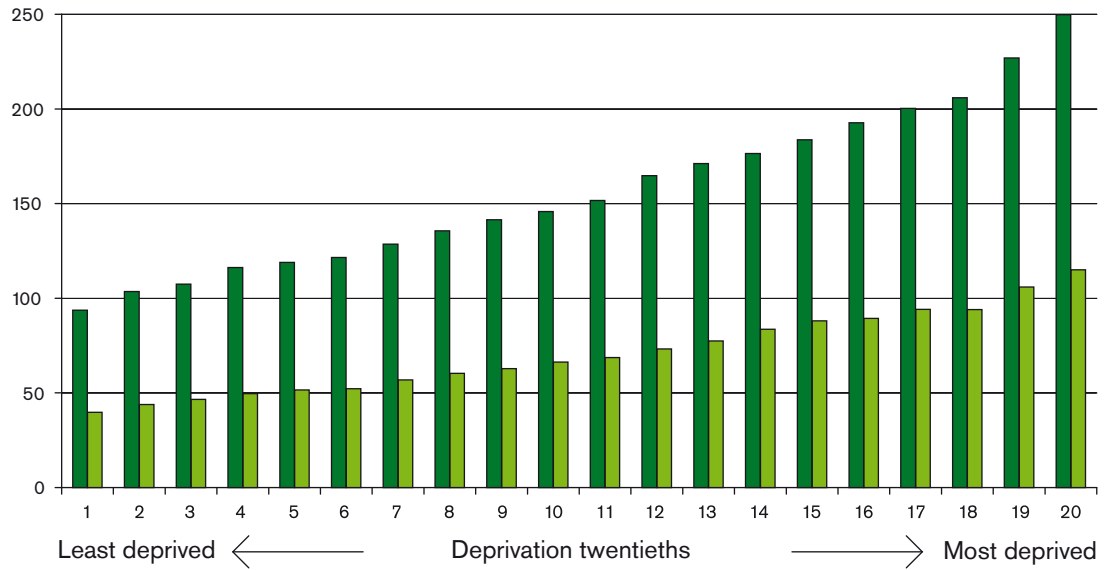
(b) Cancer

Rate per 100,000 population

Least deprived ← Deprivation twentieths → Most deprived
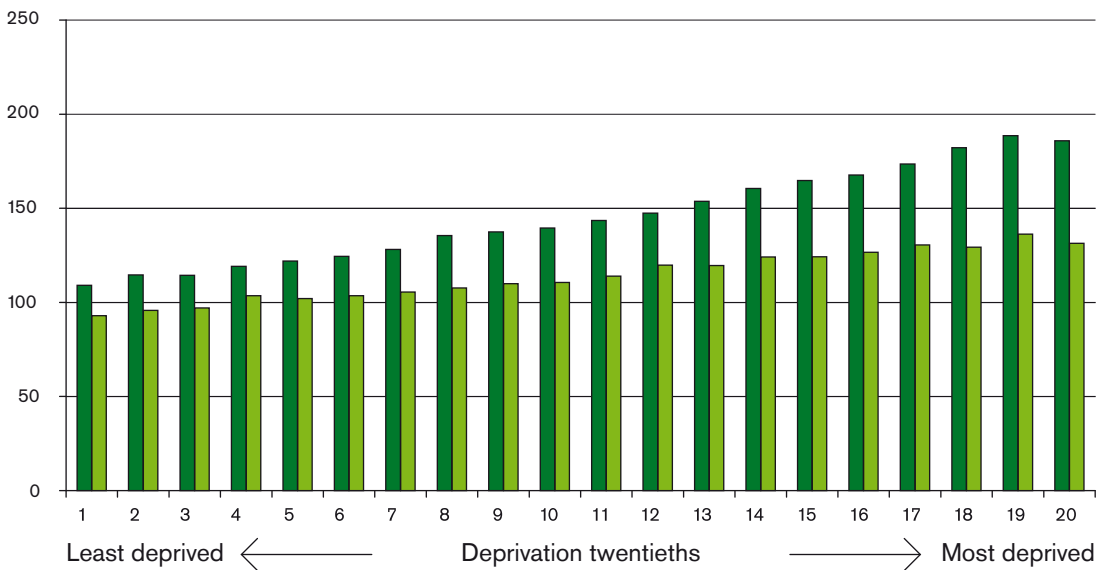
- ■ Males
- ■ Females

Source: Office for National Statistics Health Statistics Quarterly[60]

A number of surveys include questions on wider health and well-being. Figure 2.11 shows how answers to one of these, the General Health Questionnaire (GHQ), is related to deprivation for women in England in 2001 and 2006. A high GHQ score is indicative of poor psychological well-being.

Mental health is very closely related to many forms of inequality. The social gradient is particularly pronounced for severe mental illness.[61] For example, in the case of psychotic disorders the prevalence among the lowest quintile of household income is nine times higher than in the highest. While the particularly high rate of psychotic disorder in the lowest quintile may, to some extent, result from downward social drift, this is unlikely to account for the social gradient. In particular, the social gradient is also evident for common mental health problems, with a two-fold variation between the highest and lowest quintiles.[62] Figure 2.12 shows the strength of the social class gradient in rates of poor social/emotional adjustment at ages 7, 11 and 16.

In the following sections we describe inequalities in some of the main behavioural risk factors for ill health. In Chapter 4, Policy Objective F, we advocate particular approaches and interventions to reduce these risk factors proportionately across the social gradient.

Figure 2.11 Age standardised percentage of women with a General Health Questionnaire (GHQ) score of 4 or more by deprivation quintile, 2001 and 2006

Percent

■ 2001
■ 2006

Source: Health Survey for England[63]

photo: NHS Hull
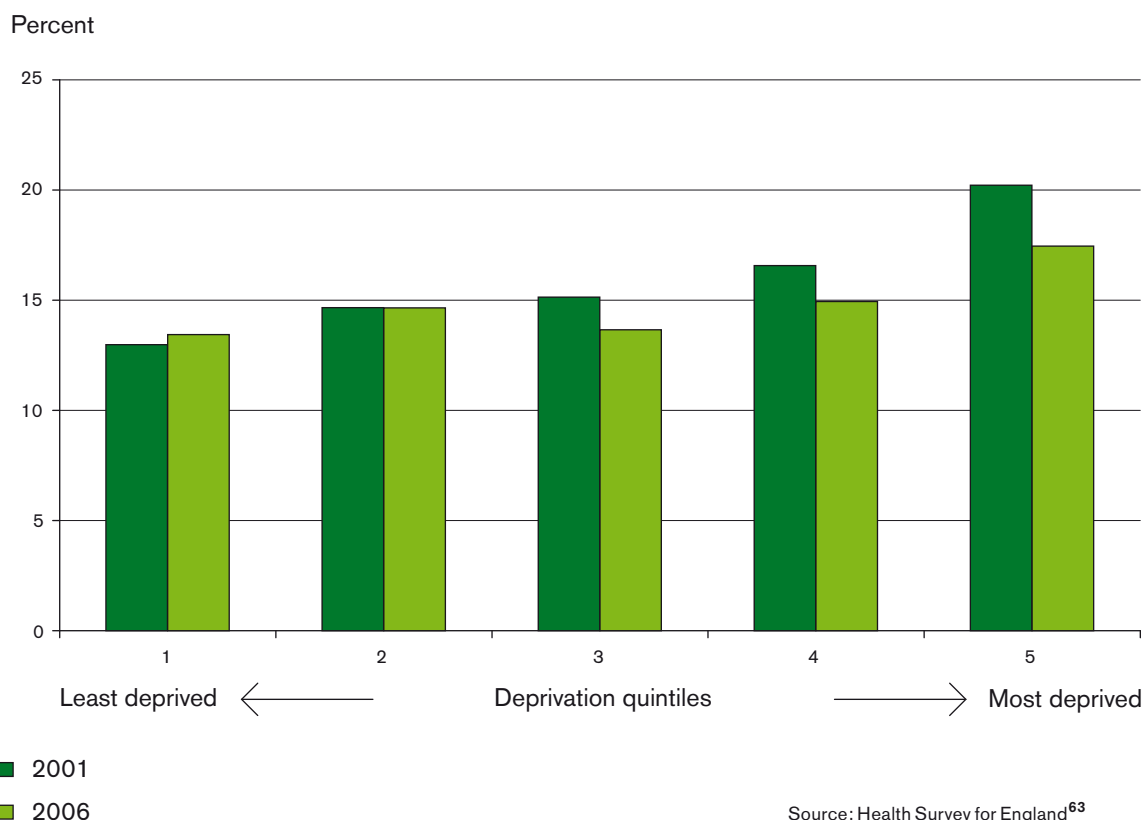
Figure 2.12 Rates of poor social/emotional adjustment at ages 7, 11 and 16, by father's social class at birth, 1958 National Child Development Study

Percent poor adjustment

Social class at birth

- Aged 7
- Aged 11
- Aged 16
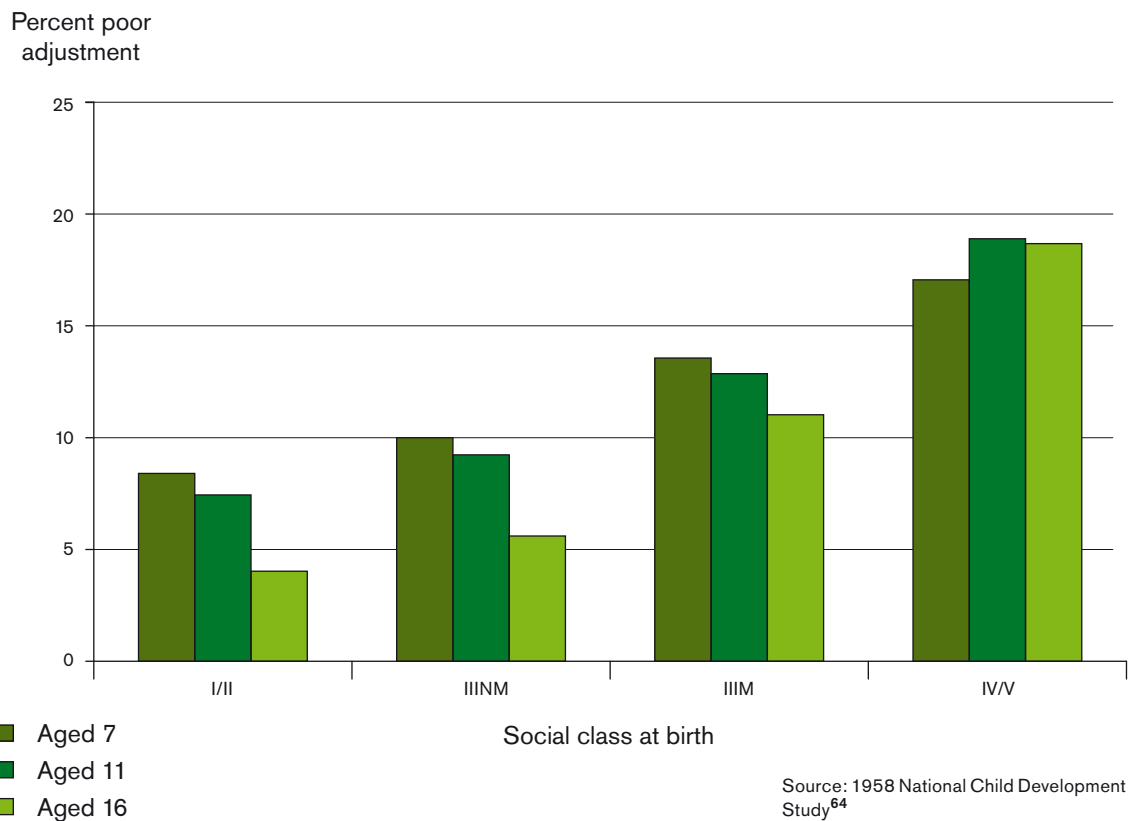
Figure 2.13 Percentage of (a) males and (b) females smoking, by socioeconomic class (NS-SEC), 2001–7

(a) Males

Percent

Year

(b) Females

Percent

Year
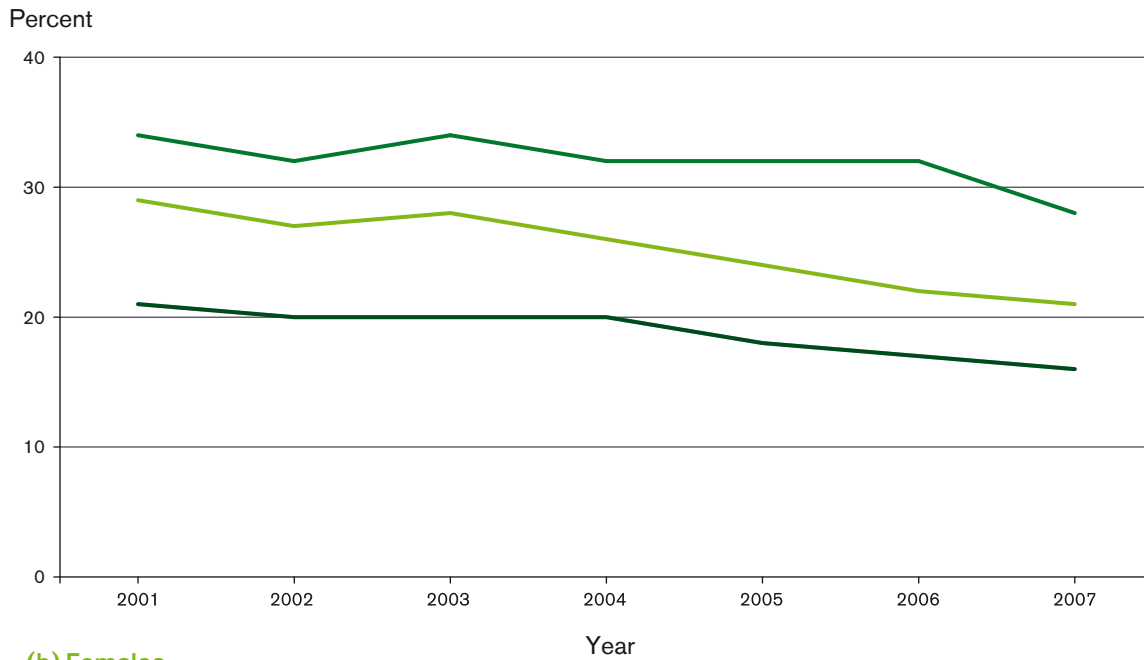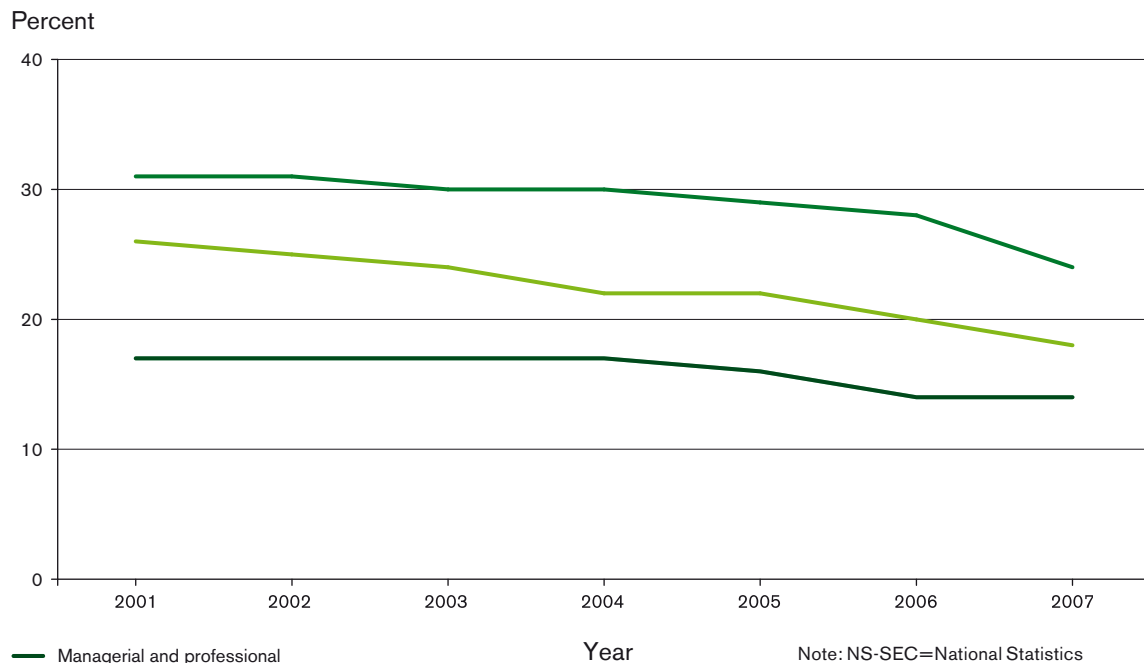
- Managerial and professional
- Intermediate
- Routine and manual

Note: NS-SEC=National Statistics Socioeconomic Classification
Source: Office for National Statistics General Household Survey[65]

2.5.1 Smoking

The PSA target for inequality specifically includes an indicator on smoking, with a target to reduce the prevalence of smoking among those in households classified as routine or manual to 26 per cent or lower by 2010. Over the period 2001 to 2007, the prevalence of cigarette smoking fell by seven percentage points among those in routine and manual households from 33 to 26 per cent. As Figure 2.13 shows, the figure for men fell from 34 to 28 per cent and for women from 31 to 24 per cent. Prevalence in managerial and professional households fell from 21 to 16 per cent for men and from 17 to 14 per cent for women.

Based on the eight category version of NS-SEC, prevalence in 2007 was lowest among those in higher professional households (12 and 10 per cent for men and women, respectively) and highest among those whose household reference person was in a routine occupation (31 and 27 per cent, respectively).

2.5.2 Alcohol

Alcohol consumption, on the other hand, has an inverse social gradient.[66] In particular, as the level of gross weekly household income rises, so does consumption. In 2007, in households with a gross weekly income of over £1,000, 78 per cent drank in the previous week and 21 per cent drank on five or more days, compared with 47 per cent and 13 per cent in households with a gross weekly income of under £200. The proportions of people exceeding the daily benchmark (four units a day for men and three for women) and the proportions of people drinking heavily (more than eight units and six units, respectively) also rises as gross weekly household income rises. However, while people with lower socioeconomic status are more likely to abstain altogether, if they do consume alcohol, they are more likely to have problematic drinking patterns and dependence than people higher up the scale.[67]

In England across all regions, hospital admission for alcohol-specific conditions for both males and females is associated with increased levels of deprivation. Rates of admission for the most deprived quintiles are particularly high, as shown in Figure 2.14. Links between alcohol consumption patterns and socioeconomic status have also been identified. For instance, a survey of 15–16 year olds in the North West reported that although binge drinking was found across all socioeconomic groups it was more common among those living in deprived areas.[68]

Figure 2.14 Alcohol-attributable hospital admissions by small area deprivation quintile in England, 2006–2007
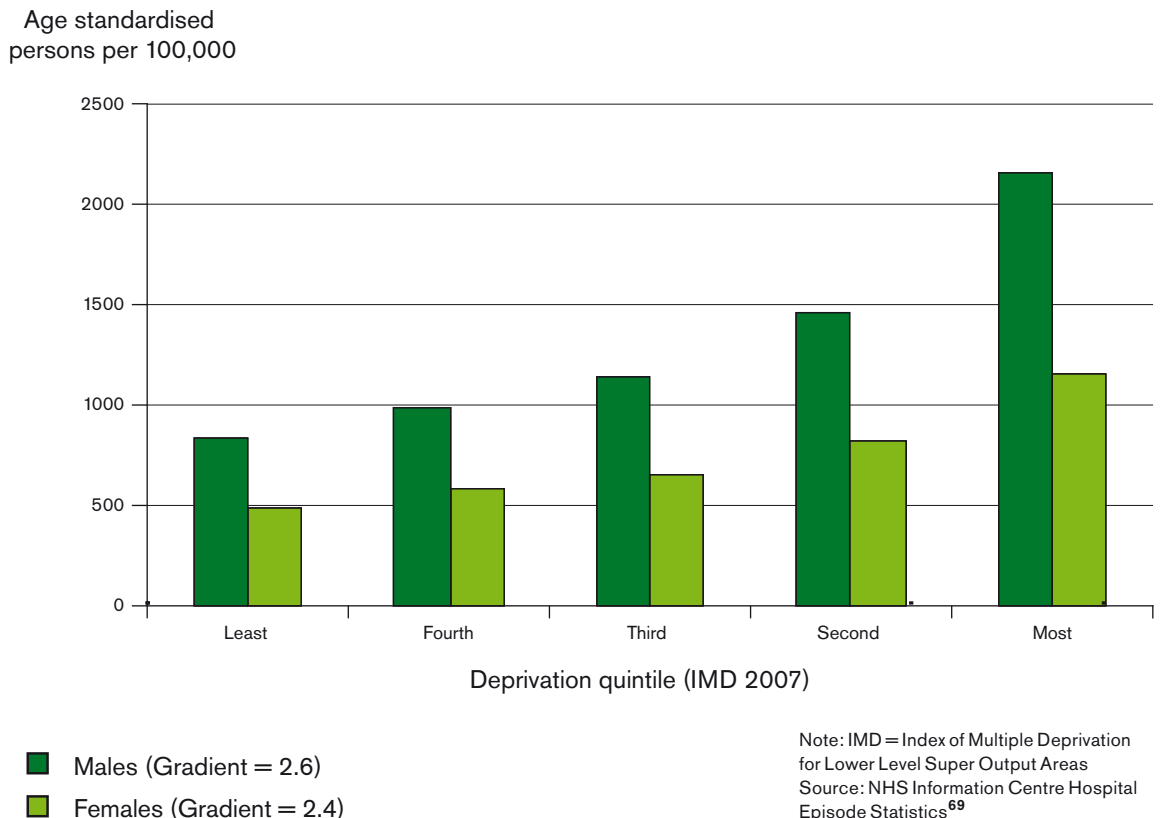
Age standardised persons per 100,000

■ Males (Gradient = 2.6)
■ Females (Gradient = 2.4)

Note: IMD = Index of Multiple Deprivation for Lower Level Super Output Areas
Source: NHS Information Centre Hospital Episode Statistics[69]

(a) Males

Percentage obese
(BMI > 30)

Year

(b) Females

Percentage obese
(BMI > 30)

Year
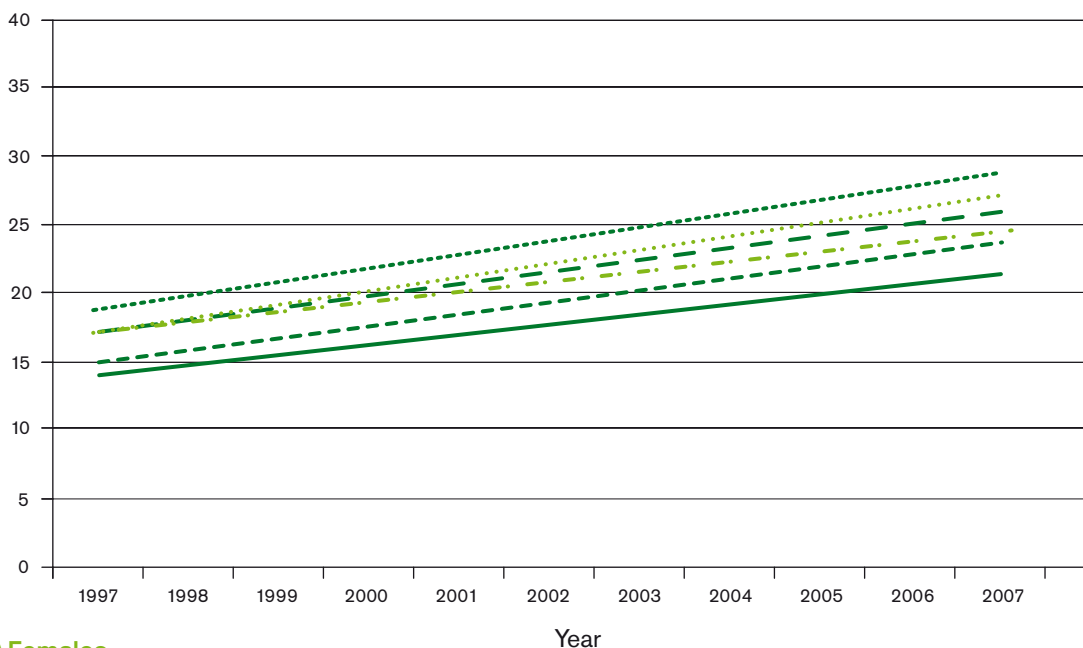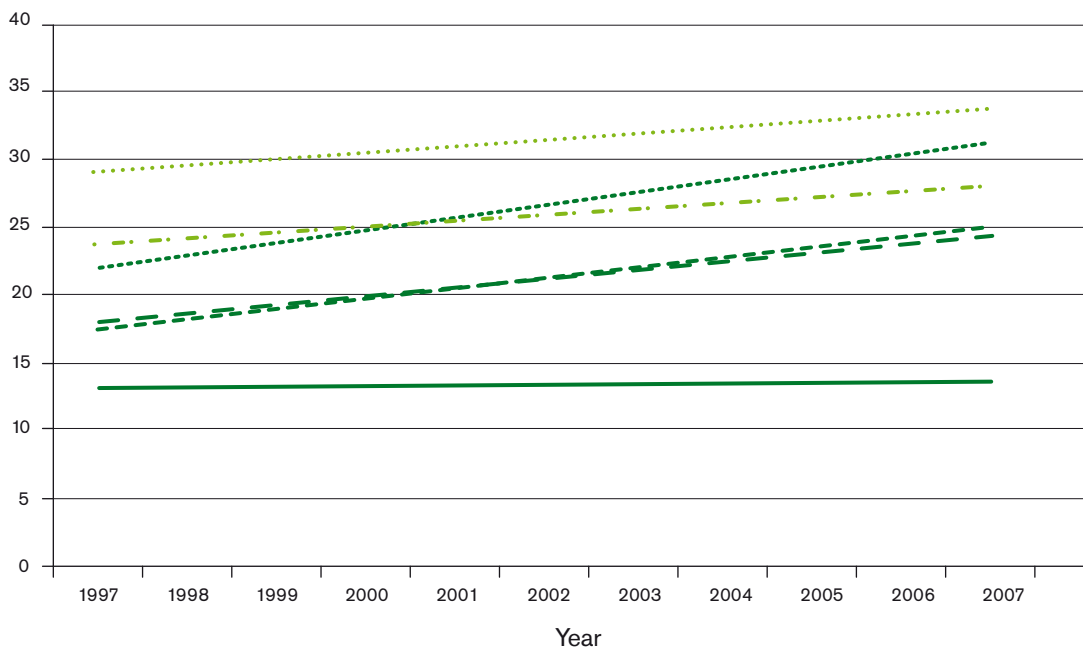
——— I - Professional	·········· IIIM - Skilled manual		
— — II - Managerial, technical	— · — IV - Semi-skilled manual		Source: National Obesity Observatory,
— - — IIIN - Skilled non-manual	········· V - Unskilled manual		based on the Health Survey for England[70]

2.5.3   Obesity

As in other high-income countries, in England, obesity is associated with social and economic deprivation across all age ranges and is becoming increasingly common. Figure 2.15 shows the steady increase in levels of obesity that has occurred among adults in each social class since 1997, with the exception of women in professional classes.

London still has the largest inequalities in levels of obesity, even when the analysis is confined to the white British population – see Figure 2.16.

2.5.4   Drug use

There is a significant positive correlation between the prevalence of problematic drug users aged 15–64 years and the deprivation indices of a local authority – see Figure 2.17. Similarly, admission rates for drug-specific conditions for both males and females show a strong positive association with deprivation.[71]

At local authority level in England, there was a significant positive association between the number of individuals in contact with structured drug treatment services per 1,000 population and the level of deprivation of each local authority.[72]

Figure 2.16 Prevalence of obesity (>95th centile) by region and deprivation quintile for children aged 10–11 years, 2007/8

Prevalence of obesity

Region of residence

◆ Quintile 1 (least deprived)
■ Quintile 2
▲ Quintile 3
× Quintile 4
✳ Quintile 5 (most deprived)

Source: National Obesity Observatory, based on the Health Survey for England[73]

Rate per 1,000

IMD Score 2007

IMD = Index of Multiple Deprivation
Source: North West Public Health
Observatory[80]

2.6 The social determinants of health

As indicated in Chapter 1, understanding about the 'causes of the causes' of ill health has deepened in recent years. The Review takes six areas as particularly powerful in shaping health and health inequalities. In this section, examples are presented to illustrate the evidence for inequalities in health and the determinants of health.

2.6.1 Early years and health status

What a child experiences during the early years lays down a foundation for the whole of their life. A child's physical, social, and cognitive development during the early years strongly influences their school-readiness and educational attainment, economic participation and health.[74] Development begins before birth when the health of a baby is crucially affected by the health and well-being of their mother. Low birth weight in particular is associated with poorer long-term health and educational outcomes.[75]

The literature on 'foetal programming' demonstrates that in-utero environments affect adult health.[76] Barker, for example, has shown that when human foetuses have to adapt to a limited supply of nutrients, they permanently change their structure and metabolism. These 'programmed' changes may be the origins of a number of diseases in later life, including coronary heart disease and the related disorders of stroke, diabetes and hypertension.[77] Low birth weight in particular is associated with poorer long-term health outcomes and the evidence also suggests that maternal health is related to socioeconomic status.[78] In particular, disadvantaged mothers are more likely to have babies of low birth weight.[79]

Socially graded inequalities are present prenatally and increase through early childhood. Maternal health, including stress, diet, drug, alcohol and tobacco use during pregnancy, has significant influence on foetal and early brain development. The biological effects of birth weight on brain development interact with other influences associated with social position to influence cognitive development, as illustrated in Figure 2.18.

Lower birth weight, earlier gestation and being small for gestational age are associated with infant mortality. In a study of all infant deaths in England and Wales (excluding multiple births), deprivation, births outside marriage, non-white ethnicity of the infant, maternal age under the age of 20 and male gender of the infant were all independently associated with an increased risk of infant mortality. A trend of increasing risk of death with increasing deprivation persisted after adjustment for these other factors.

Based on this analysis, one quarter of all deaths under the age of one would potentially be avoided if all births had the same level of risk as those to women with the lowest level of deprivation – Figure 2.19.

Score

I and II < 2,5kg

I and II > 2,5kg

IV and V < 2.5kg

IV and V > 2.5kg

Notes: Both sexes combined; class IV and V includes individuals with no male heads of household; score calculated as a z score
Source: 1958 National Child Development Study[81]
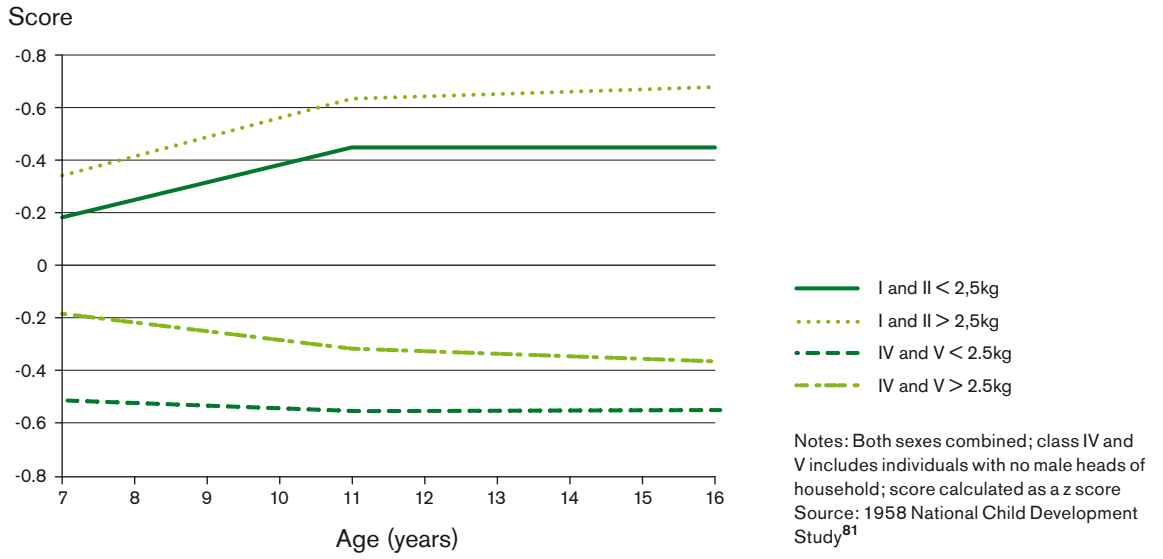
Figure 2.19 Estimated number of infant deaths that would be avoided if all quintiles had the same level of mortality as the least deprived, 2005–6

Pre-term births

1 (least deprived) ← → 5 (most deprived)

Quintile

Full-term births

1 (least deprived) ← → 5 (most deprived)

Quintile

Neonatal

Postneonatal

Infant

Source: Office for National Statistics Health Statistics Quarterly[82]
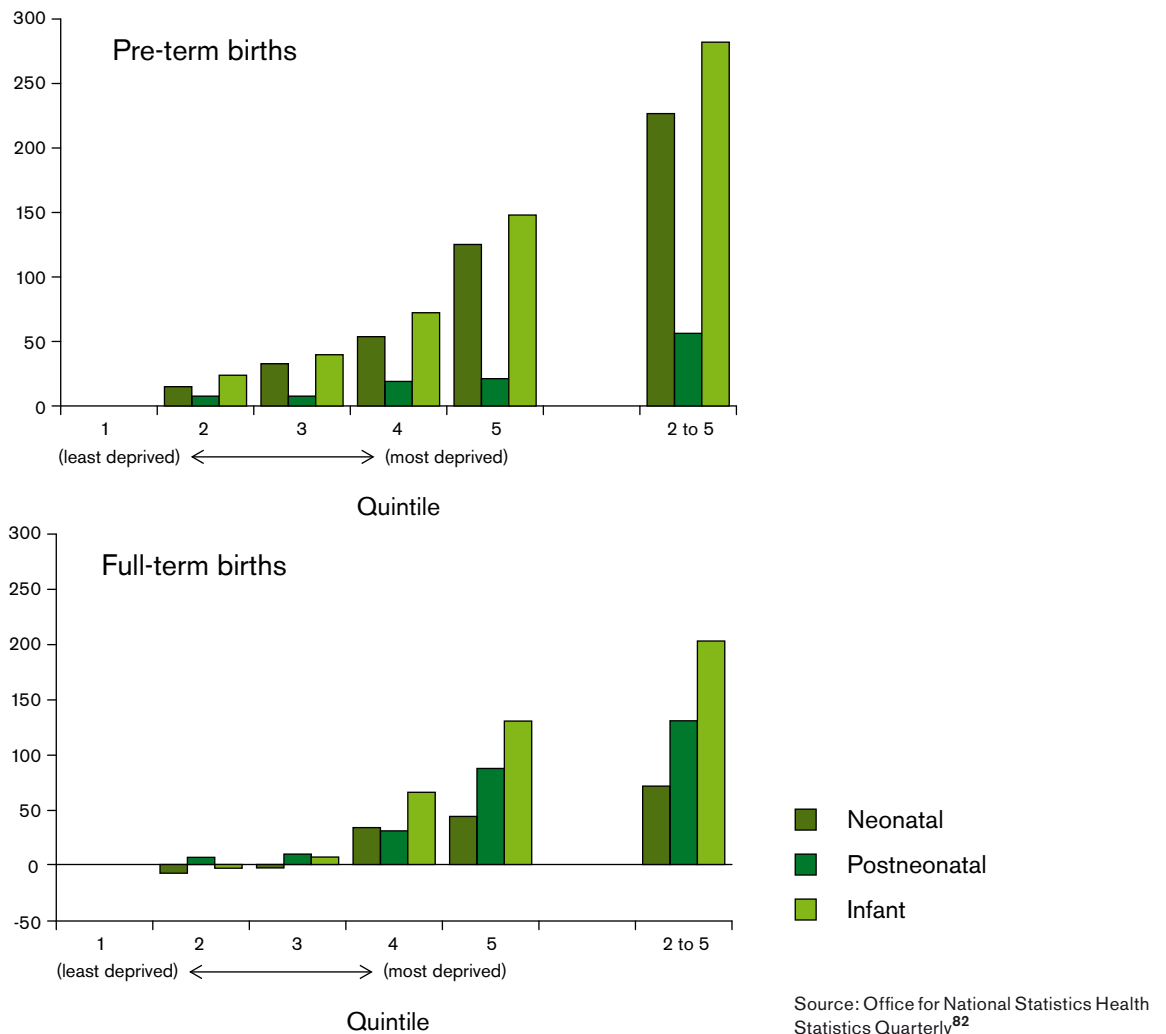
The first year of life is crucial for neuro-development to provide the foundations for children's cognitive capacities.[83] There is good evidence to show that if children fall behind in early cognitive development, they are more likely to fall further behind at subsequent educational stages.[84] The evidence also shows that the development of early cognitive ability is strongly associated with later educational success, income and better health.[85] The early years are also important for the development of non-cognitive skills such as application, self-regulation and empathy. These are the emotional and social capabilities that enable children to make and sustain positive relationships and succeed both at school and in later life.[86]

There is an unequal distribution of resources across families in terms of wealth, living conditions, levels of education, supportive family and community networks, social capital and parenting skills. Abundant evidence suggests that socioeconomic status is associated with a multitude of developmental outcomes for children[87] – see Figure 2.20. Furthermore, the literature suggests strongly that socioeconomic gradients in early childhood replicate themselves throughout the life course.[88]

Pre-school influences remain evident even after five years spent full time in primary school, as Figure 2.21 shows. A child's physical, social, emotional and cognitive development during the early years strongly influences her or his school-readiness and educational attainment, economic participation and health.[89] Children with a high cognitive score at 22 months but with parents of low socioeconomic status do less well (in terms of subsequent cognitive development) than children with low initial scores but with parents of high socioeconomic status. Children of educated or wealthy parents can score poorly in early tests but still catch up, whereas children of worse-off parents are extremely unlikely to do so. There is no evidence that entry into schooling reverses this pattern.[90]

In view of the differences described above, it is unsurprising that educational outcomes at school are strongly related to relative deprivation.

The acquisition of cognitive skills is strongly associated with better outcomes across the life course over a range of domains including employment, income and health. A range of empirical studies provide evidence that cognitive ability is a powerful determinant of earnings, propensity to get involved in crime and success in many aspects of social and economic life[91] as well as health[92] across the social gradient.

Figure 2.20 Links between socioeconomic status and factors affecting child development, 2003–4

Source: Department for Children, Schools and Families[93]
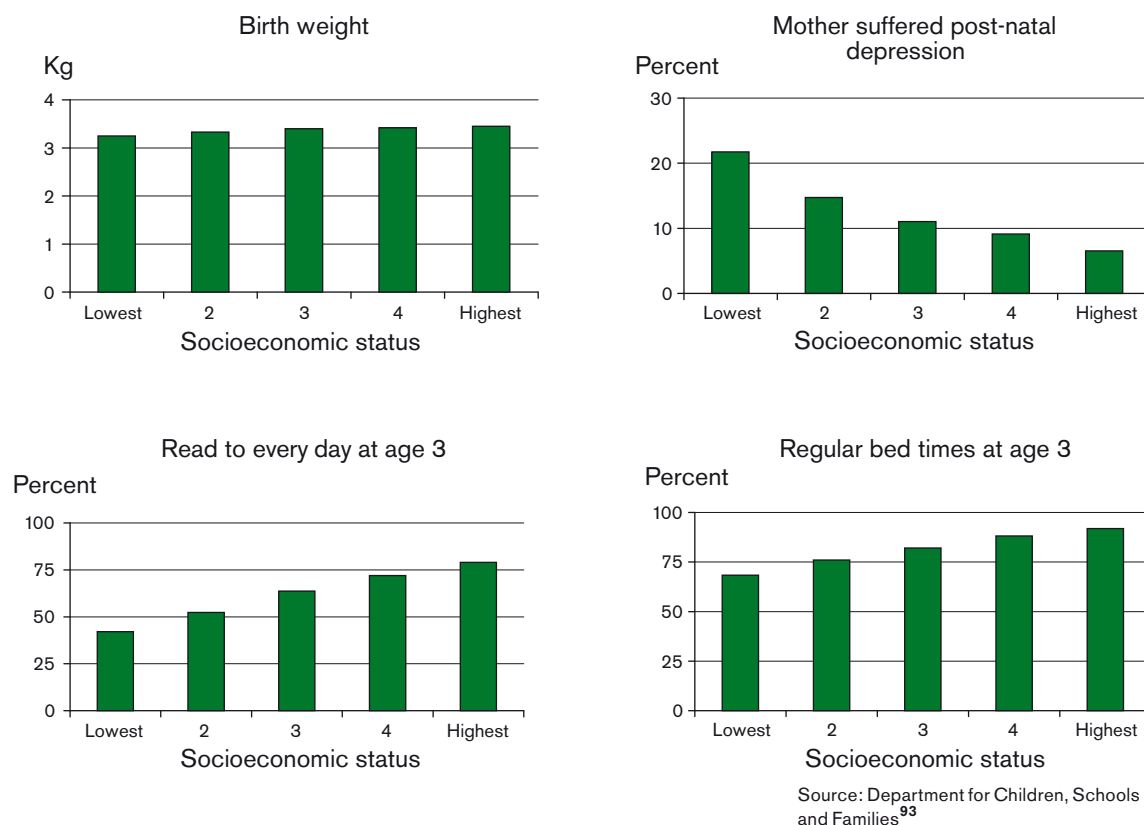
2.6.2   Education and health

A range of interacting factors impact on educational outcomes:

— Distal factors: background socio-demographic features, such as income, parental education, and so on
— Proximal factors: parental support and parent/child relationships
— School-peer factors: the nature of the school and its population
— Individual child factors: individual children's ability, measured primarily in terms of prior attainment.[94]

As the Review's task group on early years points out, the interaction between these factors is complex and there is no linear causal relationship between any set of factors and educational outcomes.[95] That said, the factors shown in Figure 2.20 – birth weight, postnatal depression, being read to every day, and having a regular bed time at age 3 – are all likely to relate to a child's chance of doing well in school. These predictors and subsequent attainment of children and young people are strongly influenced by parental income, education and socioeconomic status. The social position of parents accounts for a large proportion of the difference in educational attainment between higher and lower achievers. These differences emerge in early childhood and tend to increase as children get older.[96]

National Equality Panel (NEP)

The independent NEP was set up by the Minister for Women and Equality, to assess the best evidence on the relationship between inequalities in economic outcomes and differences related to people's characteristics, such as gender, ethnicity, age, disability status, sexual orientation, religion or belief, and housing tenure, occupational social class and area deprivation. Their report, in January 2010, provides evidence on inequalities in education, employment, earnings, income and wealth, and the relative position of different groups. It concluded that:

— Inequalities in earnings and income are still high in Britain, compared with industrialised countries and with a generation ago, although, over recent decades, earnings inequality has narrowed and income inequality has stabilised;
— Some of the widest gaps between social groups have narrowed in the last decade, but deep-seated and systematic differences in economic outcomes between social groups remain;
— Inequalities between the more and less advantaged within each social group are much greater than inequalities between groups;
— Economic inequalities accumulate across the life cycle, from cradle to crave, especially those related to socio-economic background.

Figure 2.21: Inequality in early cognitive development of children in the 1970 British Cohort Study, at ages 22 months to 10 years

Average position in distribution

High Q at 22m

Low Q at 22m

Months

■— High socioeconomic status
■— Low socioeconomic status

Note: Q = cognitive score
Source: 1970 British Cohort Study[97]
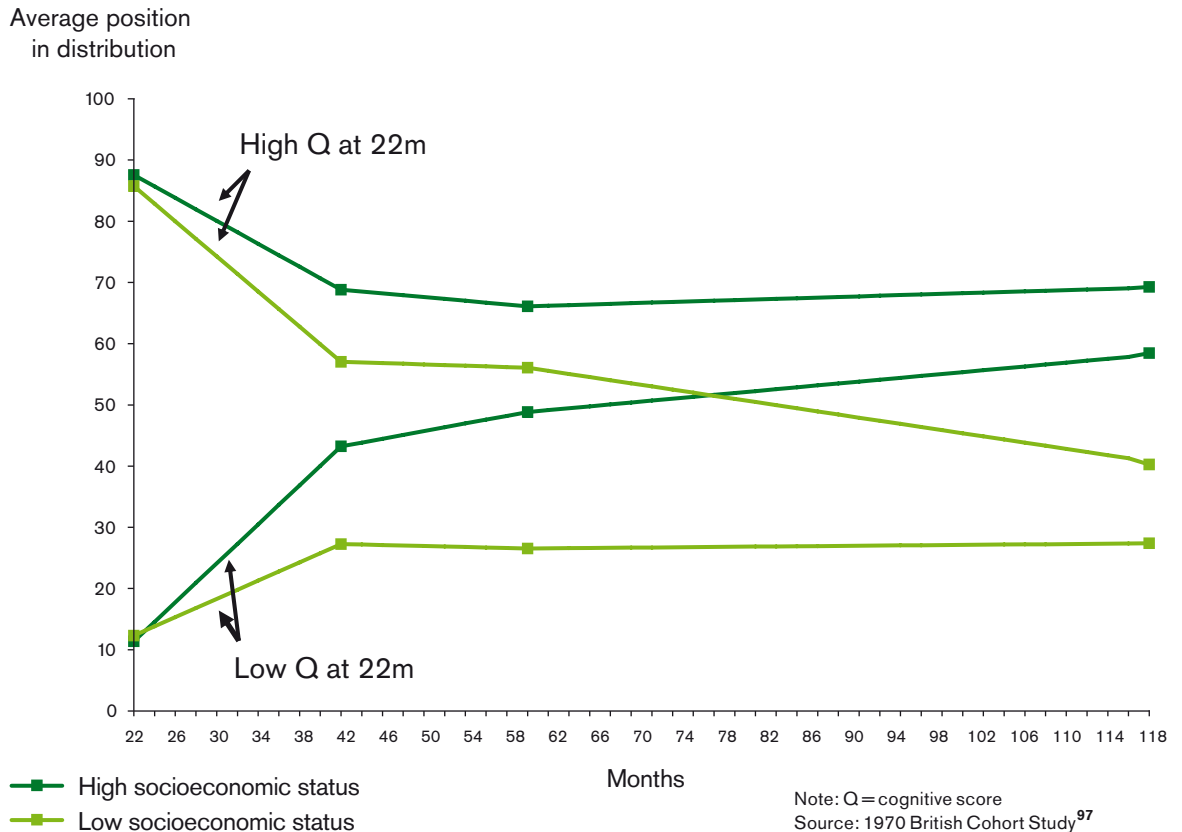
Children from disadvantaged backgrounds are more likely to begin primary school with lower personal, social and emotional development and communication, language and literacy skills than their peers[98] – Figure 2.22. These children are also at significantly increased risk of developing conduct disorders that could lead to difficulties in all areas of their lives, including educational attainment, relationships and longer-term mental health.[99] There are clear socio-economic gradients in all these factors.

As Figure 2.23 shows, receipt of free school meals is a powerful indicator of how socioeconomic deprivation has an adverse impact at each stage of educational development.

There are significant differences in attainment according to gender and ethnicity. The extent of the differences varies by eligibility for free school meals.[100] Girls do better than boys at both foundation stage and at GCSE within each ethnic group. At foundation stage, Chinese, white and children with mixed ethnicity do best. However, as Figure 2.24 shows, by the time they take their GCSEs Chinese girls out-perform other groups whether they are eligible for free school meals or not.

There are significant differences in attainment within the Asian community, with boys and girls not eligible for free school meals and from an Indian background doing as well as those from a Chinese background. Meanwhile, children from Gypsy, Roma and Traveller backgrounds do worse than anyone else. Boys eligible for free school meals who

are from white British, Irish and some, but not all, black communities also fare worse than other groups. Girls eligible for free school meals from white British and Irish backgrounds do only marginally better than their male counterparts.

There is a strong relationship between the level of deprivation in a geographical area and educational attainment, as Figure 2.25 illustrates.

Non-cognitive capabilities are also important predictors of outcomes across the life course. Characteristics such as perseverance, motivation, use of time, risk aversion, self-esteem, self-control and preferences for leisure have direct effects on school achievement, wages, involvement in crime and many other aspects of social and economic life, including health outcomes and behaviours such as teenage pregnancy and smoking.[101] These capabilities are all influenced by parents' socioeconomic position.[102]

Several international studies have shown that higher cognitive scores are associated with both healthier lifestyles and better health outcomes.[103] Recent UK studies found that higher cognitive function implied a reduced risk of cardio-vascular disease.[104] There are similar findings for mental health with longitudinal studies showing that higher cognitive test scores are associated with lower rates of depression and higher intelligence in childhood linked with a decreased risk of psychological distress in adulthood.[105] It might be that cognitive function itself is causal, or that the determinants of cognitive function are causal. Either way, it is likely that a

Figure 2.22 Indicators of school readiness by parental income group, 2008

Average percentile score

Test Score

- Income Q1
- Income Q2
- Income Q3
- Income Q4
- Income Q5
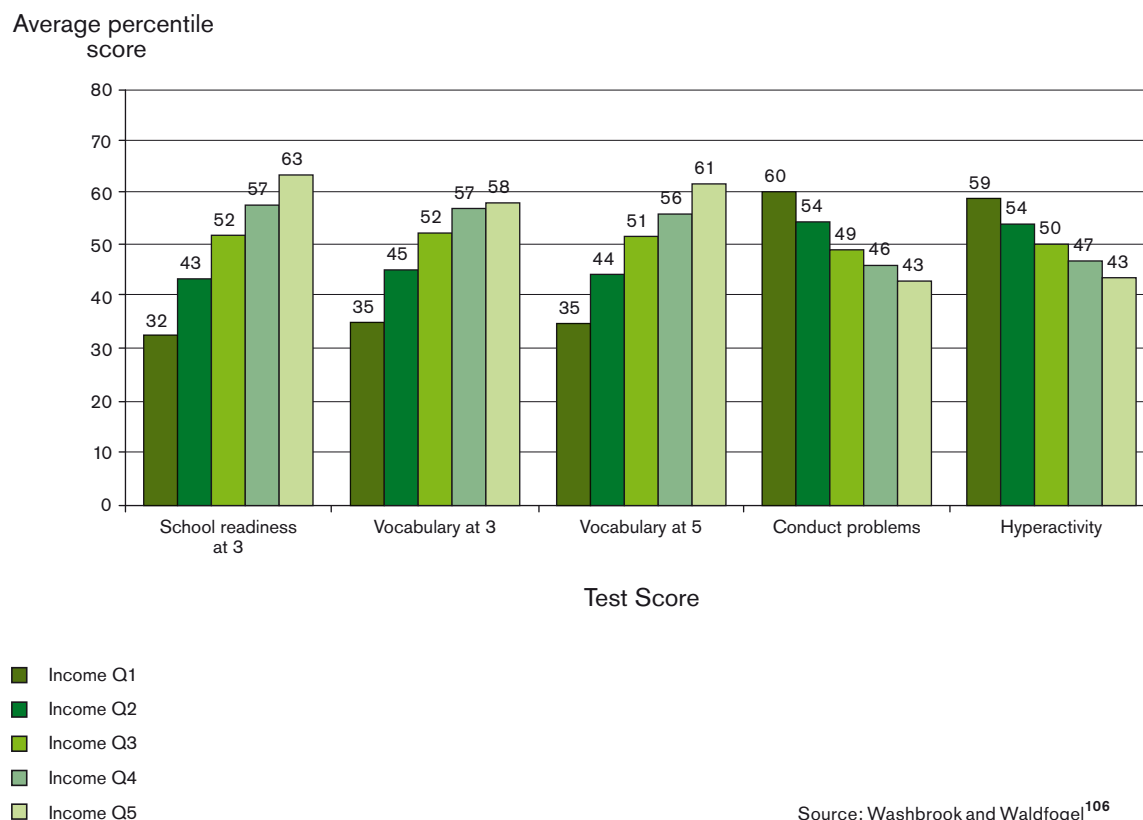
Source: Washbrook and Waldfogel[106]

Figure 2.23 Attainment gap from early years to higher education by eligibility for free school meals, 2009

Percentage reaching
expected level
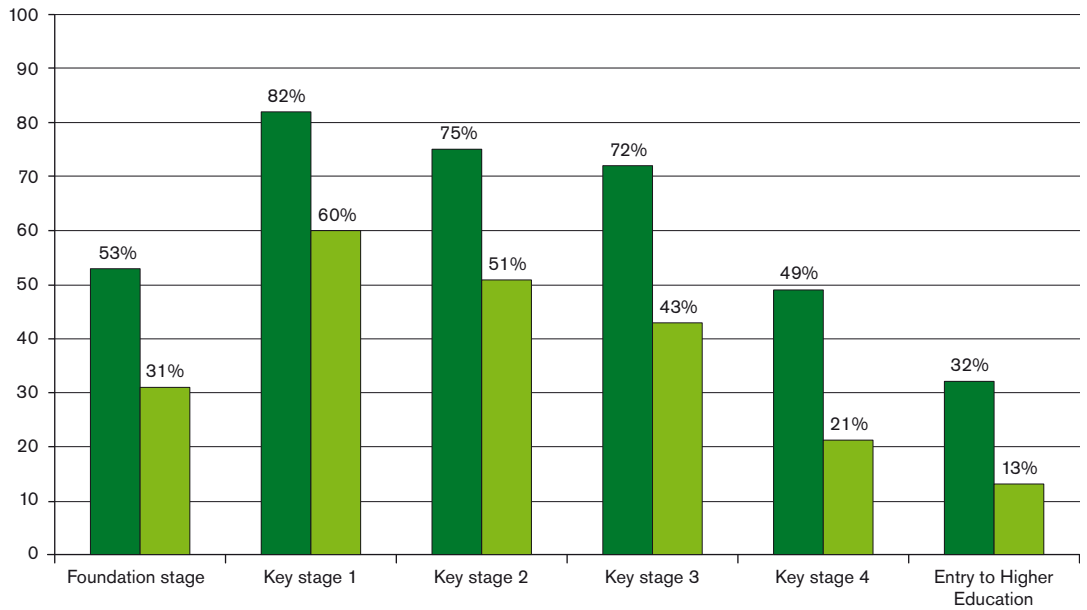
- Not eligible for free school meals
- Eligible for free school meals

Figure 2.24 Percentage of pupils achieving 5 or more A*–C grades at GCSE or equivalent by gender, free school meal eligibility and ethnic group, 2008/9

Per cent
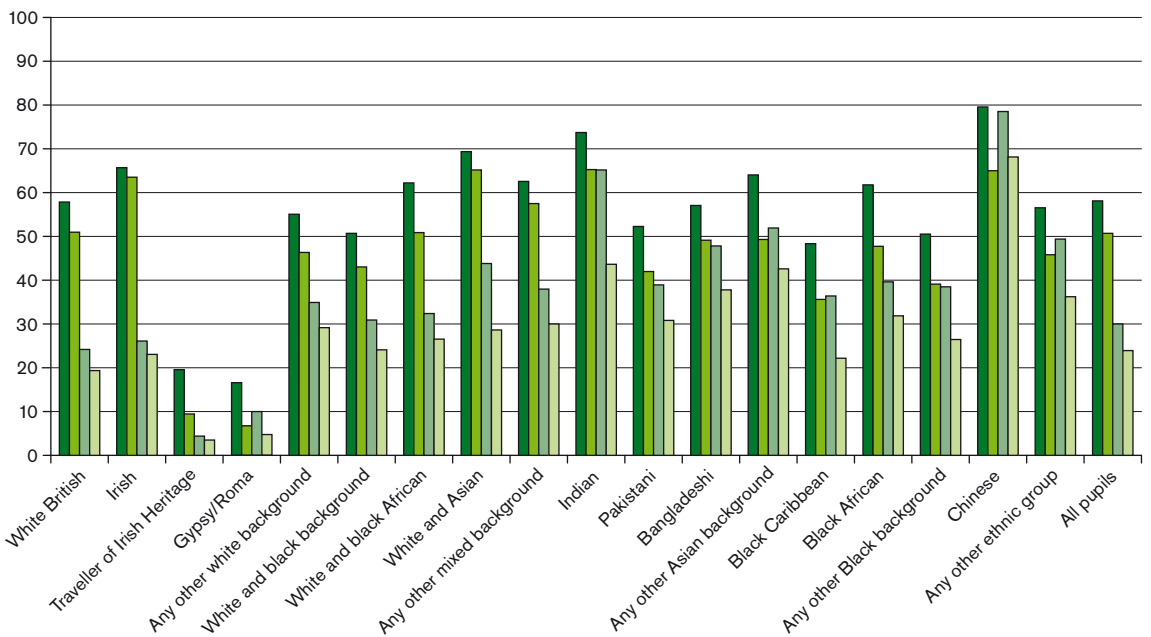
- Girls not eligible for free school meals
- Boys not eligible for free school meals
- Girls known to be eligible for free school meals
- Boys known to be eligible for free school meals

levelling up of cognitive function across the social gradient will be linked to narrower social inequalities in health.

Analysis of data from the 1970 British Birth Cohort Study shows that higher educational attainment is associated with healthier behaviour. Those educated to degree level were shown not only to be more likely to be in full-time employment than those with lower educational attainment, but also less likely to smoke and be over-weight and more likely to exercise regularly and eat healthily.[109]

Figures 2.26 and 2.27 show gradients in limiting illness recorded in the 2001 Census by recorded level of educational attainment.

Comparable gradients are seen for mortality, in common with other European countries.[110]

Figure 2.25 Percentage of pupils achieving 5+ A*–C grades including English and Maths at GCSE by income deprivation of area of residence, England, 2008/9

Percent achieving specified grades
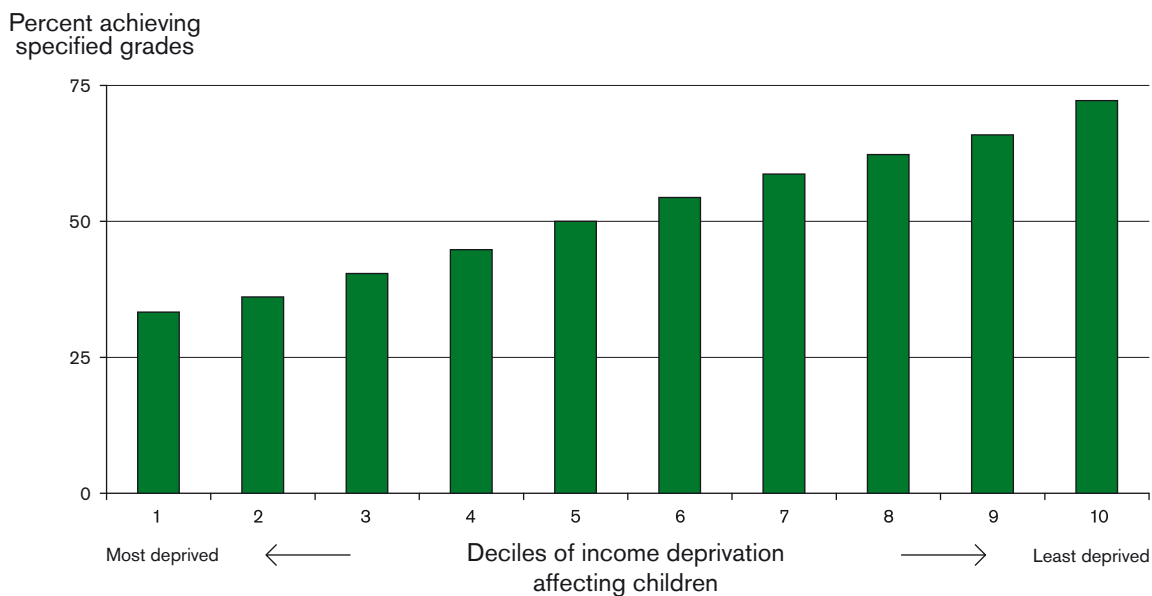
Note: Based on lower super output area of residence
Source: Department for Children, Schools and Families[111]

Figure 2.26 Standardised limiting illness rates in 2001 at ages 16–74, by education level recorded in 2001

Percent ill

Qualifications

■ Males
■ Females
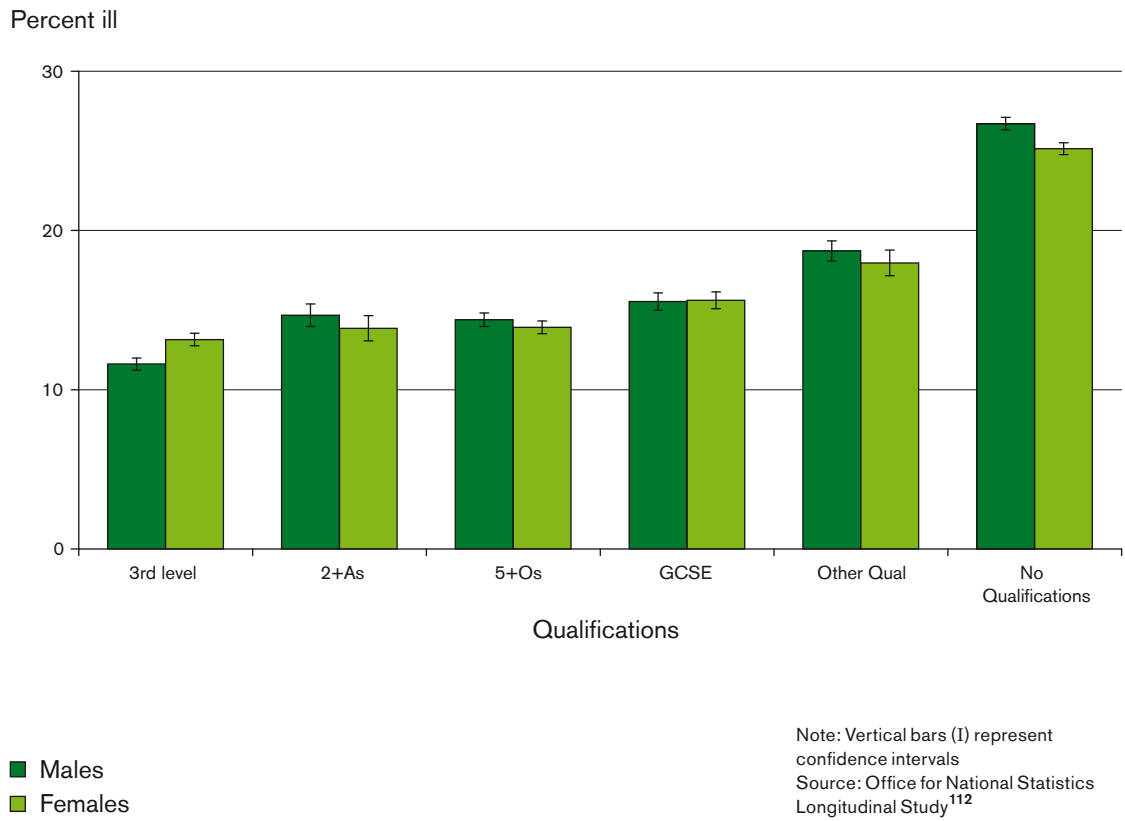
Figure 2.27 Standardised limiting illness rates at ages 55 and over in 2001 by the educational level they had in 1971

Percent ill

Qualifications

■ Males
■ Females
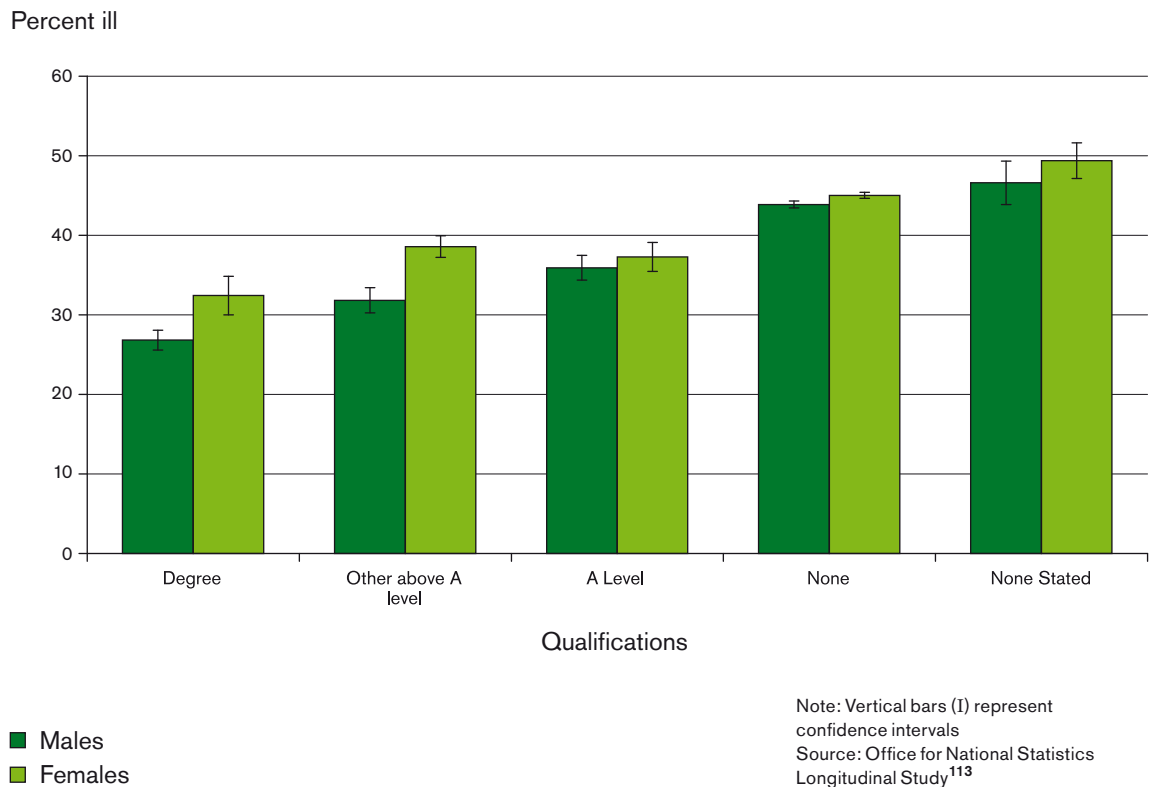
2.6.3 Work, health and well-being

Patterns of employment both reflect and reinforce the social gradient and there is inequality of access to labour market opportunities. Rates of unemployment are highest among those with no or few qualifications and skills, people with disabilities and mental ill health, those with caring responsibilities, lone parents, those from some ethnic minority groups, older workers and, in particular, young people. When in work, these same groups are more likely to be in low-paid, poor quality jobs with few opportunities for advancement, often working in conditions that are harmful to health. Many are trapped in a cycle of low-paid, poor quality work and unemployment.

Insecure and poor quality employment is associated with an increased risk of one's physical and/or mental health worsening, from conditions caused by work that in turn lead to absence due to illness, and worklessness. Principal among work-related ill health are common mental health problems and musculoskeletal disorders.

The relationship between employment and health is close, enduring and multi-dimensional. Being without work is rarely good for one's health, but while 'good work' is linked to positive health outcomes, jobs that are insecure, low-paid and that fail to protect employees from stress and danger make people ill.

Unemployment and health

Patterns of employment both reflect and reinforce the social gradient. As Figure 2.28 shows, unemployment is unequally distributed across society, with those in lower socioeconomic positions at higher risk, thus contributing to the social gradient in health.[114]

The number and type of jobs available to those with low-level skills is becoming increasingly restricted. The steady growth of jobs over the past decade has been predominantly in higher skilled employment while the number of manufacturing and low-skilled jobs has been in decline over a longer period.

Unemployed people incur a multiplicity of elevated health risks. They have increased rates of limiting long-term illness[115], mental illness[116] and cardiovascular disease.[117] The experience of unemployment has also been consistently associated with an increase in overall mortality, and in particular with suicide.[118] The unemployed have much higher use of medication[119] and much worse prognosis and recovery rates.[120]

Unemployment has both short- and long-term effects on health. The immediate negative impact of being made redundant on a person's health outcomes has been frequently reported[121] while other studies emphasise the steady negative effects, proportional to the duration of unemployment, which progressively

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Figure 2.28 Unemployment rate by previous occupation, July–September 2009

Percent

Previous Occupation
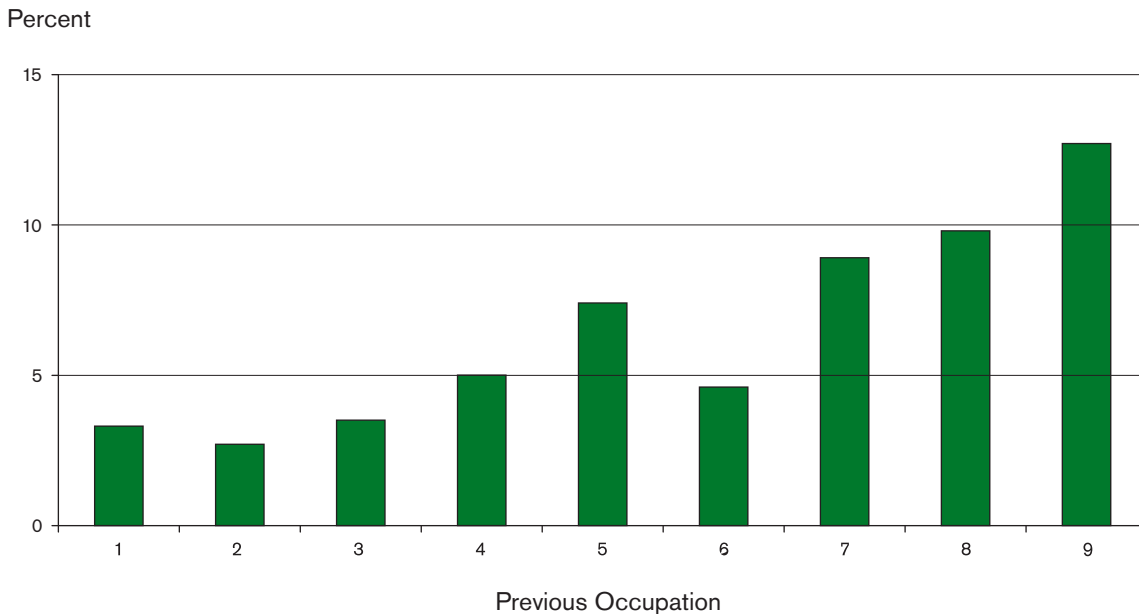
1. Managers and Senior Officials
2. Professional
3. Associate Professional and Technical
4. Administrative and Secretarial
5. Skilled Trades
6. Personal Service
7. Sales and Customer Service
8. Process, Plan and Machine Operatives
9. Elementary

Source: Office for National Statistics
Labour Force Survey[108]

damage health.[123] Therefore adverse effects on health are greatest among those who experience long-term unemployment.[124]

There are three core ways in which unemployment affects levels of morbidity and mortality.

First, financial problems as a consequence of unemployment result in lower living standards, which may in turn reduce social integration and lower self-esteem.[125]

Second, unemployment can trigger distress, anxiety and depression.[126] Many psychosocial stressors contribute to poor health not only among the unemployed themselves, but also among their partners and children.[127] Loss of work results in the loss of a core role which is linked with one's sense of identity, as well as the loss of rewards, social participation and support.

Third, unemployment impacts on health behaviours, being associated with increased smoking and alcohol consumption and decreased physical exercise.[128]

Figure 2.29 shows the familiar social gradient in mortality, but within each social class the unemployed have higher mortality rates than those who were employed.

Figure 2.29 Mortality of men in England and Wales in 1981–92, by social class and employment status at the 1981 Census

Standardised
Mortality Rate

Social Class
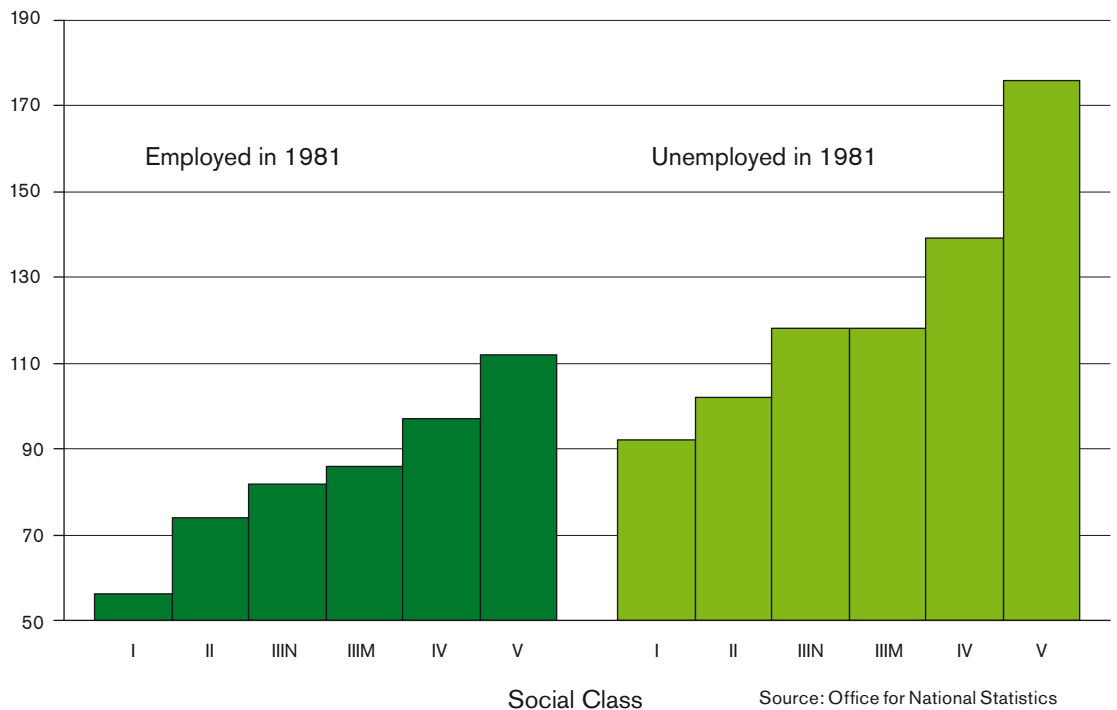
Source: Office for National Statistics
Longitudinal Study[129]

The relationship between unemployment and poor health runs in both directions. Unemployment contributes to ill health and poor health increases the likelihood of unemployment, and the two can become mutually reinforcing.[130] The longer a person is unemployed, the risk of subsequent illness increases greatly, and thereby further reduces the likelihood of returning to employment.[131] As Figure 2.30 indicates, the type of disability affecting an individual also has a vey powerful influence on the likelihood of them being in employment.

The extent to which limiting illness and disability act as a barrier to work is highly dependent on educational qualifications. As overall employment rates have reduced, this problem has become considerably greater – see Figure 2.31. In the 1970s, 77 per cent of men with no qualifications and a limiting longstanding illness were in employment. By 2001–3 this had fallen to 38 per cent. The comparable figures for those with a higher qualification were 93 and 75 per cent respectively.

Recent rises in unemployment and particularly in youth unemployment are likely to significantly worsen health inequalities. Figure 2.32 shows the strikingly high unemployment rate of 16–17 year olds in the recent economic downturn.

It is clear that getting people into employment is an important strategy for improving health; the Review makes its recommendations in this area in Chapter 4 (see Policy Objective C). However, not all work is protective of health.

Figure 2.30 Employment rates among working age adults by type of disability, 2008

Type of impairment

Employment rate (percent)
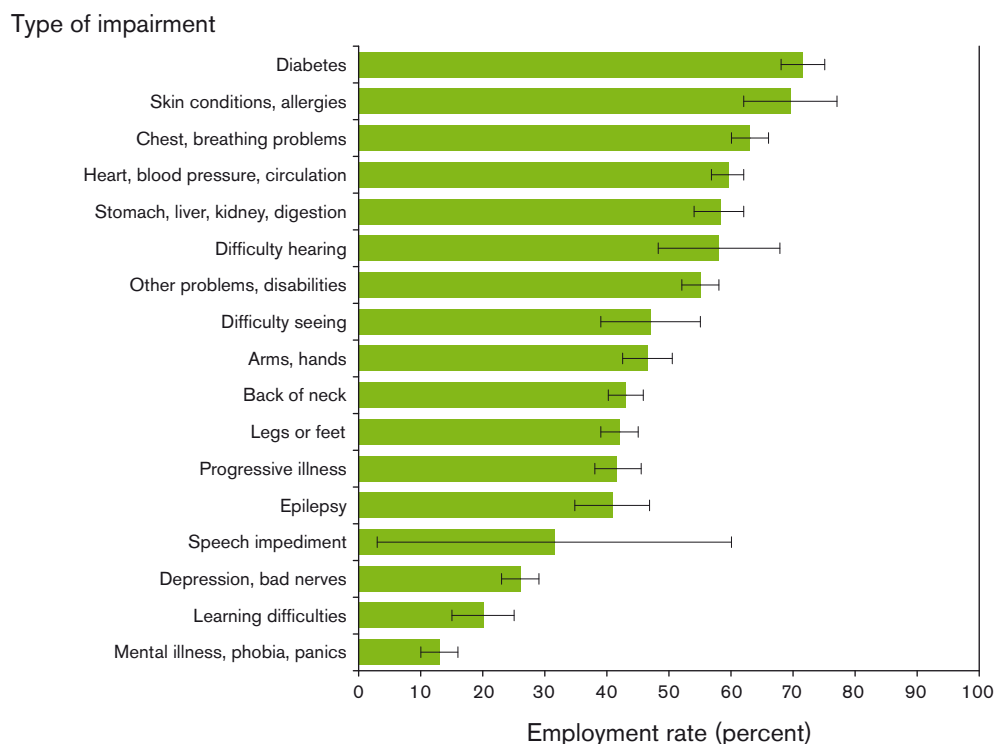
Note: For each disability, the percentage employed are indicated by the solid horizontal bar. Horizontal lines (⊢⊣) indicate the width of the 95 per cent confidence interval.

Source: Office of Disability Issues, based on Labour Force Survey[132]

Figure 2.31 Proportion of men with limiting long-standing illness in work, by educational qualifications, 1974–6, 1988–90, 2001–3

Percent

Legend:
- 1974–76
- 1988–90
- 2001–03
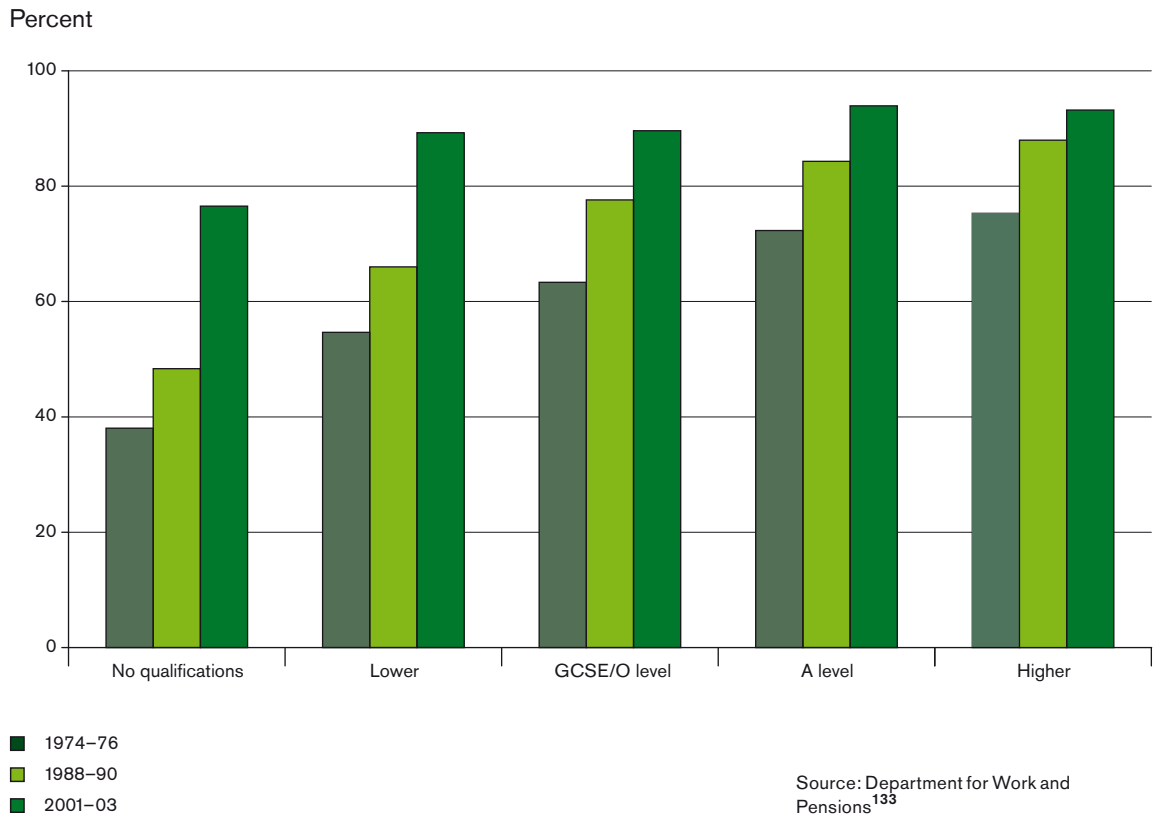
Figure 2.32 Seasonally adjusted trends in unemployment rates for young people in the UK, 1992–2009

Percent

16–17

18–24

All aged 16 and over
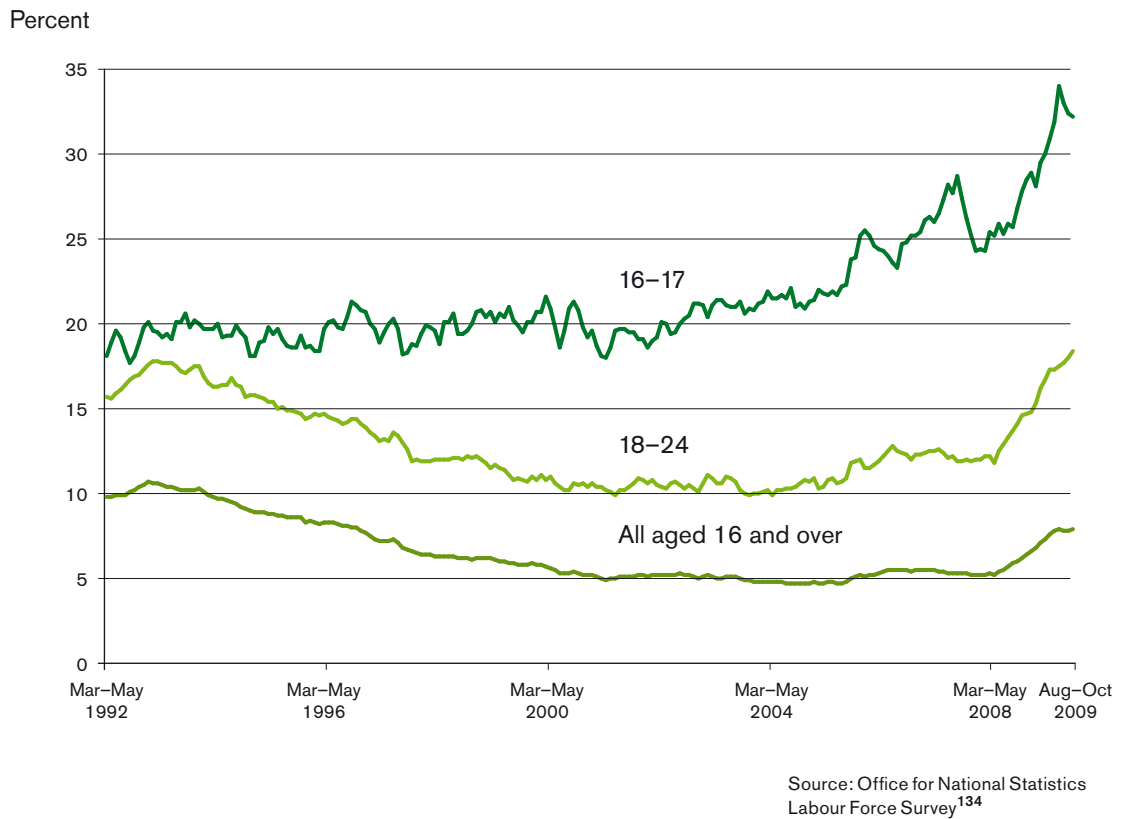
Adverse working conditions damage health

People's health can be damaged at work by factors including exposure to physical hazards, physically demanding or dangerous work, long or irregular working hours, shift work, health-adverse posture, repetitive injury and extended sedentary work.[135]

Technological advances and economic growth in the context of globalised markets have resulted in new types of tasks (for example, information processing, personal services and service centres) leading to a demand for greater flexibility of employment arrangements and contracts, often combined with less job stability and security, more intensive work and longer hours.[136] Related adversities include conflicts within workplace hierarchies, restricted participation of employees in decision-making, and covert or overt discriminatory practices. These types of psychosocial stress in the work place can also cause ill health and have become more widespread as the nature of employment and work has changed. 'Toxic' combinations of these factors are frequent in the current labour market, yet unequally distributed between occupations.

These factors are most prevalent among the most deprived workers, specifically those in 'precarious jobs' that are defined by a lack of safety at work, by exposure to multiple stressors including strenuous tasks which the worker has little control over, low wages and high job instability.[137] There is ample evidence on the adverse effects on health and well-being produced by these conditions. A range of research relates issues such as job security[138], job satisfaction[139] and supervisor and peer support[140] to various psychological and physical health impacts, such as general ill health, depression, cardiovascular disease, coronary heart disease and musculoskeletal disorders.[141]

When the particular psychosocial hazards of low worker control, having a large number of demands and little support at work combine, these factors cause so-called 'isostrain'. Having little control shows a clear social gradient (Figure 2.33) and is linked to increased rates of absence due to illness, mental illness and cardiovascular disease. This social gradient is also reflected in the metabolic syndrome, which is a combination of risk factors for diabetes and heart disease – Figure 2.34. Work stress, as measured by isostrain, has also been shown to increase the risk of this syndrome.[142]

Figure 2.33 The association of civil service grade with job control, Whitehall II study, 1985–88

Score

Civil Service Employment Grades
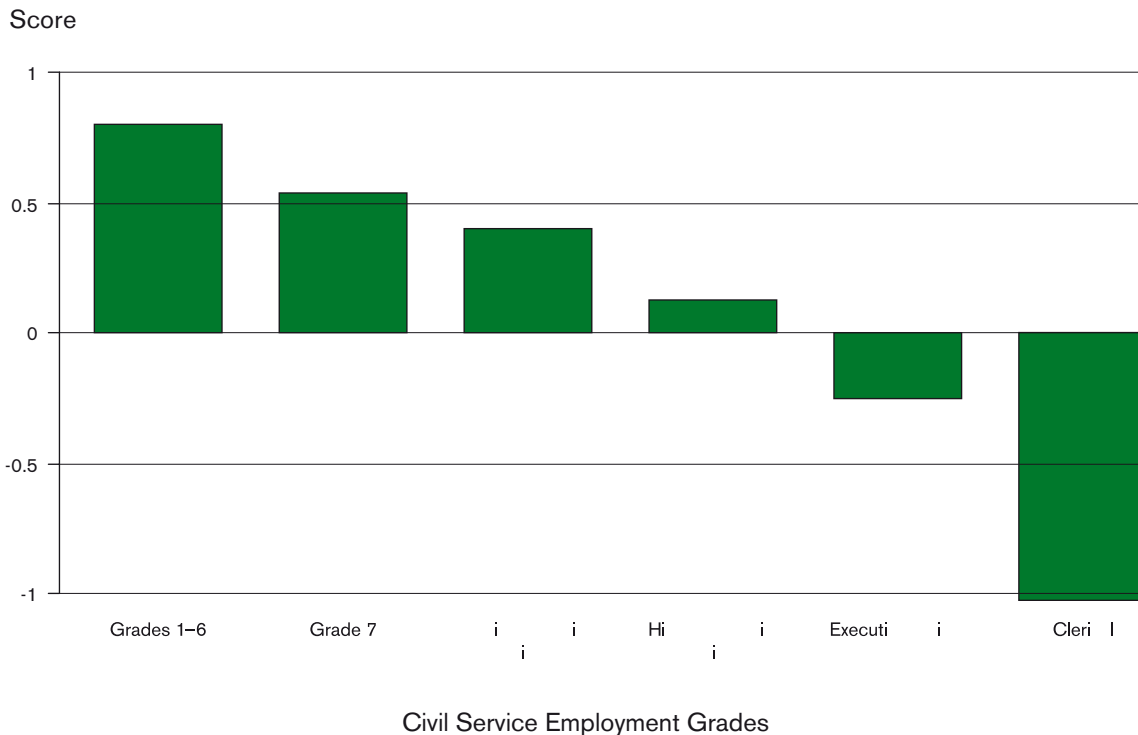
Notes: Score calculated as a z score
Source: Whitehall II Study[143]

Photo: Ronnie Kaufman/LarryHirshowitz/ Getty Images

Figure 2.34 The social gradient in the metabolic syndrome, Whitehall II study, 1991–1993

Odds Ratios

Civil Service Employment Grades
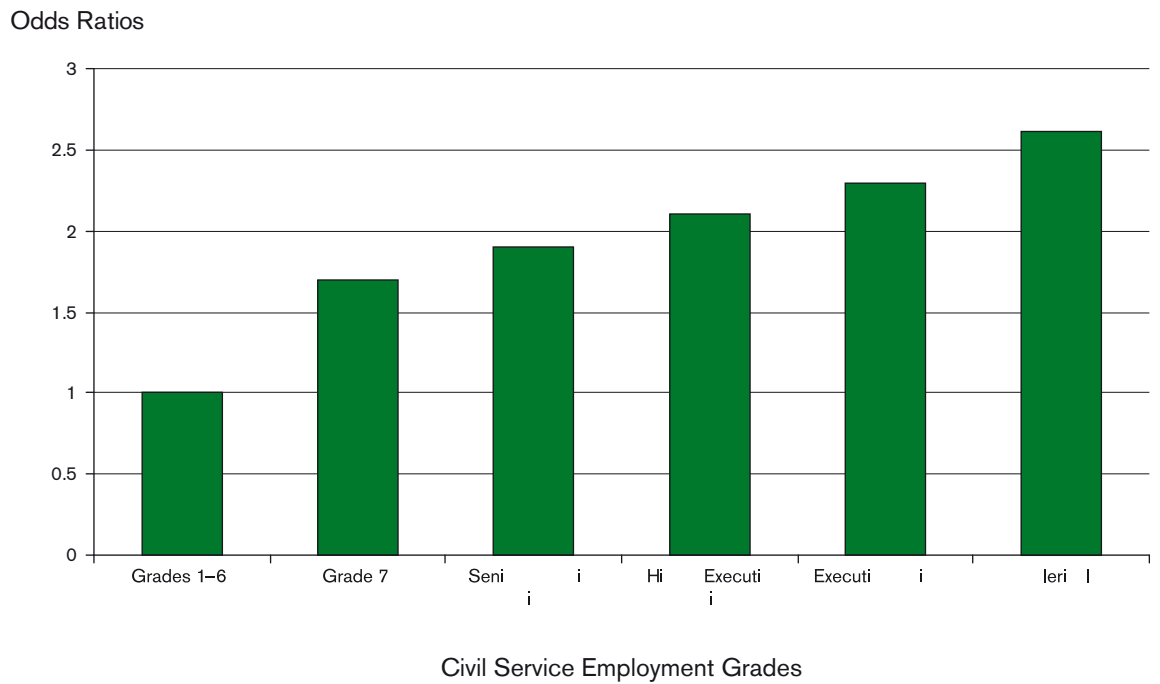
Source: Whitehall II Study[144]

2.6.4   Income and health

The relationship between low income and poor health is well established. It operates in several ways. People on low incomes refrain from purchasing goods and services that maintain or improve health or are forced to purchase cheaper goods and services that may increase health risks. Being on a low income also prevents people from participating in a social life and can leave them feeling they are less worthy or have a lower status in society than the better-off.[145] The relationship can operate in both directions: low income can lead to poor health and ill health can result in a lower earning capacity.

In post-war England there has been a sustained increase in the standard of living but income inequalities have endured. Figure 2.35 indicates the effect that systematic variation in sources of income has on the income gradient in the UK today.

Initial income (from employment, savings and occupational pensions) is strongly differentiated, with a ratio of 16 to 1 between the top and bottom fifths of the distribution. However, direct cash benefits from contributory sources such as retirement pensions and incapacity benefits, income support, child benefit and housing benefit, play a substantial role in reducing the differential in the gross income households receive down to 7 to 1.

The income received by households is affected by taxation – both direct taxes, for example, income tax, National Insurance and council tax, and indirect taxes – for example, VAT and duty on petrol, alcohol,

tobacco and so on. However, taking these two types of tax together, there is no further redistributive effect – the ratio remains 7 to 1. Only if benefits in kind are considered, for example the education and health systems, does the ratio for 'final income' come down to 4 to 1.

The contrasting ways in which the different sources of income, benefits and taxes combine at each point in the gradient are summarised in Figure 2.36. Income tax is, of course, progressive. But indirect taxation is not. Figure 2.36 shows the effect of combining them. People in the lowest quintile pay about 38 per cent of their income in tax. People in the top quintile pay about 35 per cent. The combination of direct and indirect taxation means that the tax system is not progressive. Benefits have been used, as shown above, to offset the regressive nature of the tax system.

The lack of any progressive element to the overall tax system is not a new phenomenon. Figure 2.37 shows that tax has seldom had a redistributive effect in the last 30 years, despite a shift in the share of income that saw the top 20 per cent gaining at the expense of the bottom 60 per cent. In 1978, the bottom 60 per cent received 40 per cent of the share of gross income and the top 20 per cent received 37 per cent. Ten years later this balance had reversed, to 34 and 43 per cent respectively. These shares have remained largely unchanged in the subsequent 20 years.

Figure 2.35 Percentage shares of equivalised income, by quintile groups for all households, 2007/8
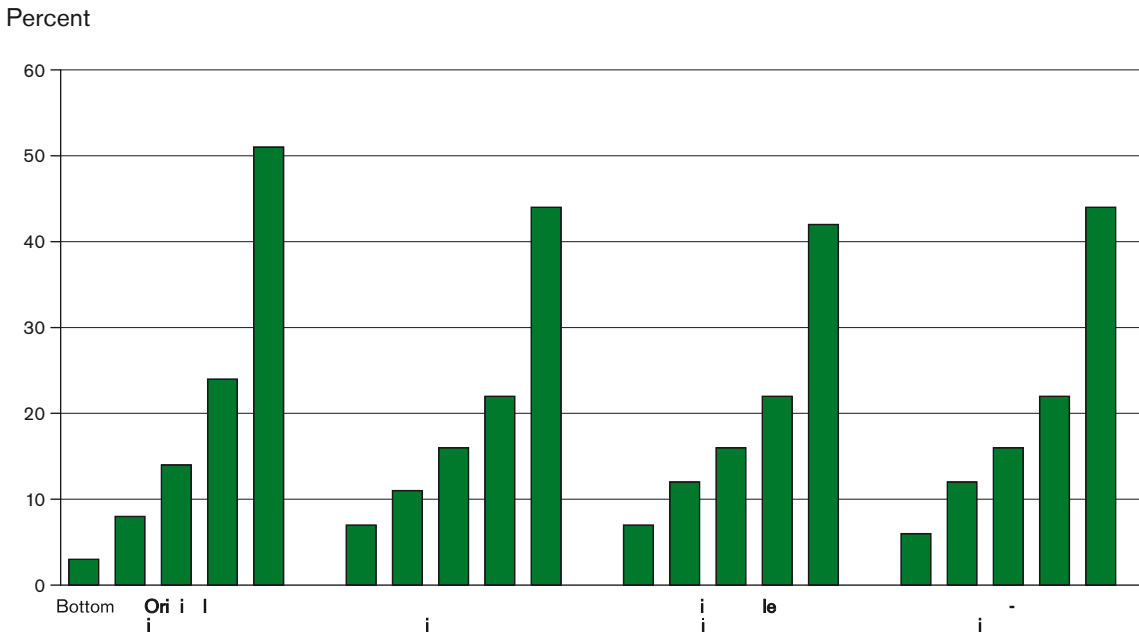
Percent

£ (Thousands)

Income quintile

- Original income
- Direct taxes and employees' NIC
- Indirect taxes
- Cash benefits
- Benefits in kind
- Final income

Source: Office for National Statistics[147]
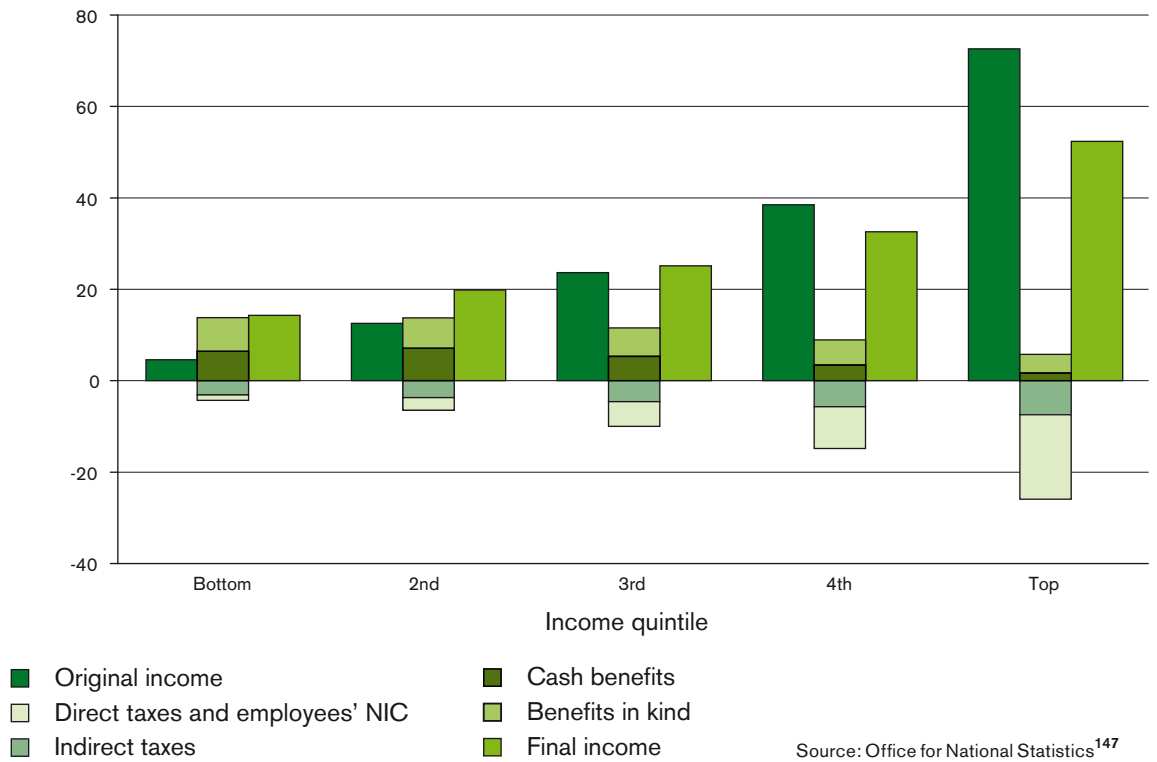
Figure 2.37 Percentage shares of equivalised total gross and post-tax income, by quintile groups for all households, 1978–2007/8

Percent share

Top fifth gross

Top fifth post tax

Fourth

Third

Second

Bottom fifth
Bottom fifth post tax

Year
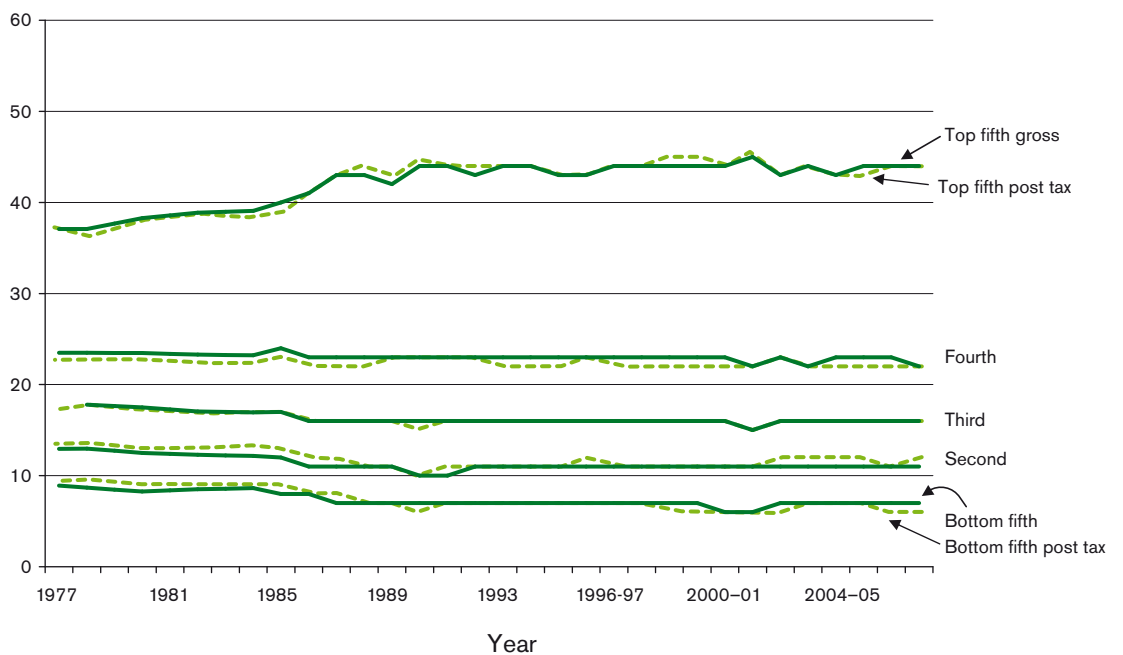
Note: Gross income comprises original income and direct cash benefits (e.g. pensions, child benefit, housing benefit and income support). Post-tax income comprises gross income after direct and indirect taxes (e.g. VAT).

Source: Office for National Statistics[148]

The relationship between income inequality and health outcomes is described in a book by Richard Wilkinson and Kate Pickett, called *The Spirit Level*.[149] The adverse effects on health caused by having a low income have been shown in several studies.[150] The gradient is important to address as it is not always those on the lowest incomes who find it most difficult to make ends meet. Living standards initially fall as income first begins to rise, due to a loss of state benefits, creating a U-shaped profile between income and other measures of living standards; this is what is called the 'cliff edge' in Chapter 4 (see Policy Objective D).

There is wide variation in the living standards of households with incomes of less than £300 per week; among the poorest there are high proportions of households with living standards either far above or far below the average for their income level.[151] Maximum benefit entitlements fall well short of average earnings and this contributes to social exclusion and the health risks associated with that.

Low income

There is substantial evidence that particular social groups are at higher risk of having a low income. Some groups have significantly reduced employment opportunities; they include disabled adults,[152] people with mental health problems,[153] those with caring responsibilities, lone parents[154] and young people. Many of the social and economic problems that lone mothers are exposed to are made worse by exclusion from paid work and lack of income.[155] An increase in income leads to an increase in psychological well-being and a decrease in anxiety and depression.[156] The more debts people have, the more likely they will have a mental disorder.[157]

Helped by the introduction of the National Minimum Wage, full-time hourly wages grew faster at the bottom than in the middle of the social distribution between 1997 and 2002, though wages at the top grew faster still; a period of stagnation across the distribution then followed from 2002.[158] Earnings inequality remains considerably higher in England than in many other EU nations: in 2006, 29 per cent of women and 16 per cent of men were low-paid (earning less than two-thirds of the male median), compared with 10 per cent and five per cent in Finland, for example.[159] The rate of child poverty measured before taxes and transfers actually increased slightly between 1997 and 2006, despite the increases in parental employment.[160] In the absence of progressive taxation, transfers, rather than taxes, account for most redistribution.

Since 1997, therefore, there has been a reduction in the numbers in poverty and poor children are better off in absolute and relative terms.[161] However, more recently these improvements have slowed down: since 2005 there has been no improvement in poor families' relative income and even some decline.[162] Since 2004/5 relative poverty has increased, with pensioner poverty, working-age poverty among childless adults and child poverty also increasing.[163] Additional factors increase costs to low-income households, who pay a premium of about £1,000 a year because they are unable to get advantageous rates for gas, electricity, phones, insurance, access to cash and credit.[164] Thirty-five per cent of people in very low-income households (earning less than £10,000 p.a.) have no insurance of any kind and residents of social housing were more than twice as likely to experience burglary than owner occupiers.[165]

In comparison with 11 EU countries, the UK has higher rates of poverty among lone parents, families with three or more children, and those aged 65 and over. In comparison, Nordic countries have low poverty rates in all three sub-categories.[166]

Particular groups are more likely to rely on state benefits, for example disabled people, those with caring responsibilities and the long-term unemployed. However, the system proves difficult to access for several disadvantaged groups and take-up can be low, for reasons including lack of information and awareness of the system. This varies according to ethnic group. Bangladeshis have particularly low levels of benefit receipt alongside the highest levels of poverty. There is also low-take up among Gypsies and Irish Travellers. Many minority ethnic groups tend only to be eligible for means-tested benefits because their shorter working histories in this country mean they have made fewer National Insurance contributions. Two-fifths of Pakistani and Bangladeshi working couples with children are on means-tested benefits, compared with just 8 per cent of white families.[167]

Health-adverse effects of being on a low income have been shown in several studies.[168] But the relation is a graded one, not confined to those on the lowest incomes. There is evidence that income has a direct impact on parenting and on children's health and well-being. For example, according to Gregg *et al*, 'Holding constant other types of parental capital, income is strongly associated with types of maternal psychological functioning that promote self esteem, positive behaviour and better physical health in children.'[169]

The graded nature of the relationship between income and health is consistent with the fact that a person's relative position on the social hierarchy is important for health. Given that the majority of people in England live above the level of absolute deprivation, it is likely that relative position on the income scale is having a determining effect on the kinds of influences this Review covers.

Income inequality is not just about material deprivation however. There is evidence that the degree of inequality in society, is having a harmful effect on health, not only of the poor, but of society as a whole.[170] Countries, and areas within countries, marked by greater inequality have not only worse health but a higher rate of crime and other adverse social outcomes. Both poverty and inequality may be important for social cohesion, life opportunities and health.

Wealth

The material resources available to individuals and households depends as much on the wealth they have accumulated as it does on their current income. There has been a change in the composition and

distribution of wealth in modern Britain, related to home ownership, new working patterns, growth in personal investment and the accumulation of wealth over the life course.[171] To understand the economic well-being of households and individuals requires more than simply the measurement of income.

In 2006–8 a fifth of households, the top two deciles in Figure 2.38, owned 62 per cent of wealth and the bottom 50 per cent owned 9 per cent. The largest component of household wealth was the accrual of private pension rights, followed by the value of property owned. The least wealthy had negative property and financial wealth, that is they were in debt, but had some possessions and for some private pension rights.

The social gradient in wealth is also substantial – Figure 2.39. Where the head of household was classified as 'large employer or higher managerial', median household wealth was £530,000, compared with £74,000 for routine occupations and £15,000 where the head of the household had never worked or was long-term unemployed.

Income and wealth may be important for health because they are markers of socioeconomic position, and social status is important for health.[172] The evidence suggests, however, that both income and wealth may have a more direct effect on health inequalities and hence are important topics for this Review.

2.6.5 Communities and health
Sustainable communities

Climate change presents unprecedented and potentially catastrophic risks to health and well-being.[173] The global impacts of climate change will directly and indirectly affect England and the health of its population. Climate change is predicted to result in an increase in deaths, disability and injury from extreme temperature and weather conditions, heat-waves, floods and storms including health hazards from chemical and sewage pollution.[174] The heat wave in Britain during the summer of 2003 for example resulted in an estimated 2,000 excess deaths, 17 per cent above the expected number.[175] It is estimated there will be an increase in respiratory problems from the damaging effects of surface ozone during the summer as well as an increase in skin cancers and cataracts.[176] While air pollution is expected to decrease, the increases in ozone concentrations is expected to result in an additional 1,500 deaths per year.[177]

Climate change will also have long-term, less direct impacts such as the effects on mental health of flooding and other climate-related events, which could cause anxiety and depression.[178] Worldwide, food yields, food security and affordability will be increasingly affected.[179] Those likely to be most vulnerable to the impacts of climate change are those already deprived by their level of income, quality of homes, and their health.[180] Although low-income countries will suffer most acutely, in all countries

Figure 2.38 Percentage distribution of total household wealth by component, 2006–8

Percent of total wealth

Decile of household wealth

- Pension wealth
- Posessions
- Financial wealth (net)
- Property wealth (net)

Source: Office for National Statistics
Wealth and Assets Survey[181]
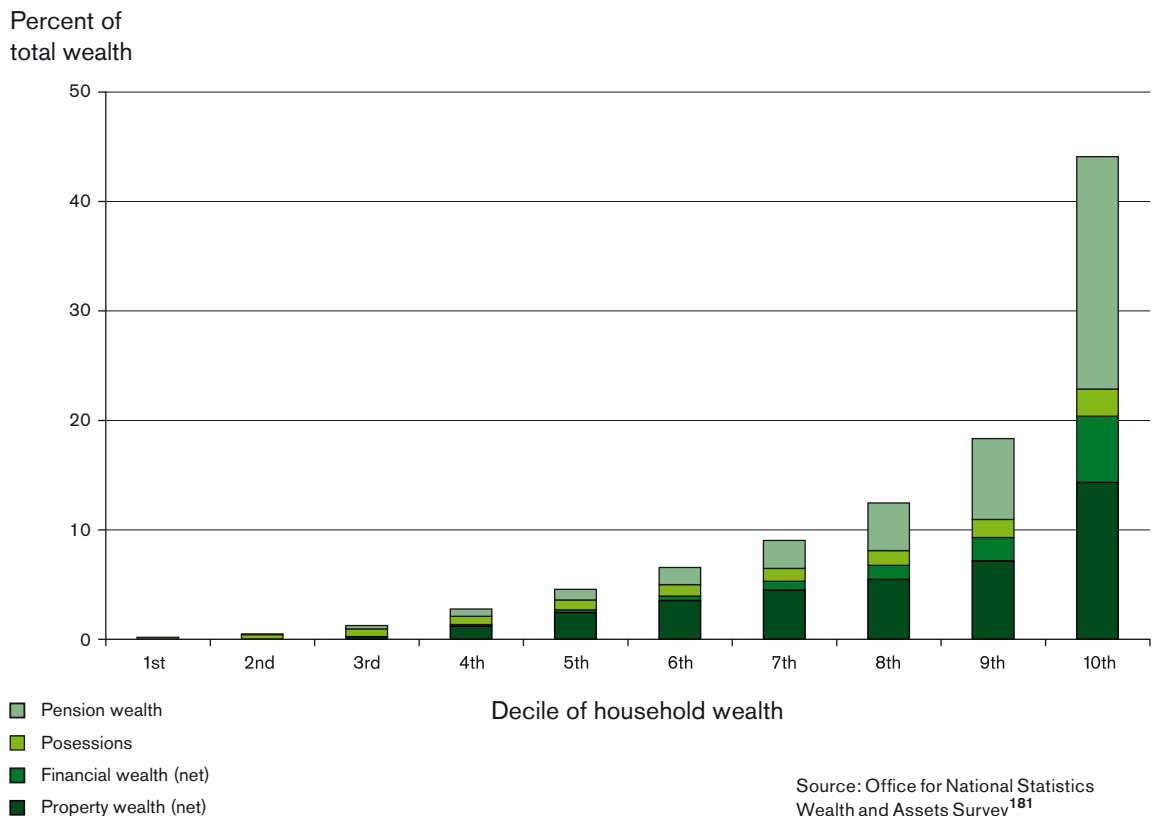
the risks associated with climate change will fall disproportionately on 'the urban poor, the elderly and children, traditional societies, subsistence farmers, and coastal populations.'[182]

People on low incomes in the UK are more likely than the better-off to live in urban areas which will be warmer, and therefore to be at risk of heat stroke.[183] They are more likely to live in homes that are less well protected[184] and in areas that are more exposed to weather extremes and flooding.[185] They are also less likely to have access to insurance against risks associated with climate change such as storm and flood damage.[186]

Policies to tackle climate change therefore have a direct relevance to health and health inequalities. Measures to improve health also have a direct relevance for sustainability. Less sustainable communities also tend to be less healthy. Similarly, measures to address climate change and health inequalities are sometimes compatible and therefore particularly important. These links are discussed in greater detail in Chapter 4, Policy Objective E.

Unhealthy lifestyles, environments that are 'obesogenic' (a term for factors describing conditions which tend to make people obese), and chronic ill health all tend to increase individual carbon footprints. The increasing prevalence of obesity has serious implications not only for health but also for greenhouse gas emissions; people who are overweight and obese eat more food and food production accounts for 20 per cent of global greenhouse gas emissions.[187] Many actions recommended to control obesity are also expected to decrease carbon emissions. People living in neighbourhoods identified as 'walkable' are estimated to generate about 30 per cent less carbon than the average for suburban residents, largely because they drive less (see Chapter 4, Policy Objective E).[188] Investing public funds in measures such as active travel, promoting green spaces and healthy eating will impact positively on health as well as on carbon emissions.[189] England, in common with other countries, must introduce measures to combat climate change, and it is imperative that the likely impact on health inequalities is included in planning and implementation.

The social gradient in places and communities

There is substantial evidence of a social gradient in the quality of neighbourhoods – Figure 2.40. Poorer people are more likely to live in more deprived neighbourhoods. The more deprived the neighbourhood, the more likely it is to have social and environmental characteristics presenting risks to health. These include poor housing, higher rates of crime, poorer air quality, a lack of green spaces and places for children to play and more risks to safety from traffic.

In the 30 years between 1970 and 2000 Britain saw a substantial increase in the geographical concentration and segregation of poverty and wealth. Since 2000 there seems to have been little progress in reducing this.[190] Urban clustering of poverty has increased. In parts of some cities in England, over

Figure 2.39 Median total wealth by socioeconomic classification (NS-SEC), 2006–8

£ (Thousands)

Socioeconomic classification (NS-SEC)

- Large employers and higher managerial
- Higher professional
- Lower managerial & professional
- Intermediate occupations
- Small employers & own account workers
- Lower supervisory and technical
- Semi-routine occupations
- Routine occupations
- Never worked/long term unemployed

Source: Office for National Statistics Wealth and Assets Survey[191]

half of households have incomes of less than 60 per cent of the median while wealthy households have become concentrated on the outskirts and areas surrounding major cities. During the same period, major restructuring of the British economy has led to the loss of manufacturing and traditional industries, with high levels of economic inactivity becoming concentrated in particular localities and neighbourhoods.[192]

Housing and health inequalities

Poorer neighbourhoods are often composed of estates of largely socially rented housing. Nearly half of all social housing is now located in the most deprived fifth of neighbourhoods. Over the last 20 years, the poorest groups have become concentrated in social housing.[193] Although the supply of social housing has decreased over the past 25 years, it still accommodates around 4 million households, protecting affordability and providing security of tenure. While the quality of housing is important for health, part of the health disadvantage relates to the make-up of the population of social housing. Because of the reduced supply, there has been what is termed a 'residualisation' effect in the make-up of social housing tenants, so that as a group they have higher rates of unemployment, ill health and disability than the average for the rest of the popula-tion.[194] This is also due to the make-up of the social housing population being dictated by the explicit role of social housing in supporting disadvantaged groups and allocating according to need.[195] Poverty rates for people living in social housing are double that of the population as a whole with only a third of tenants in full-time employment and fewer than half with any paid work.

Longitudinal analysis of three British Birth Cohort Studies shows that being in social housing as a child increases the risk of multiple disadvantages in adulthood. These risks have increased since the Second World War. In the 1946 cohort social housing in childhood was not a significant risk factor for adult deprivation or worklessness. For the 1958 cohort the risks of social housing in childhood appeared for women, though not for men. For the 1970 cohort, however, there were clear negative outcomes associ-ated with living in social housing for both men and women.[196] This association applies across several domains including health, education, self-efficacy and income.[197] The fact that these disadvantages have increased with the growth of owner occupation suggests that it may not be social housing itself that is harmful, but its relative status in the housing market and the residualisation effect.

Bad housing conditions – including homeless-ness, temporary accommodation, overcrowding, insecurity, and housing in poor physical condition – constitute a risk to health. A study carried out by Shelter in 2006 suggested that children in bad housing conditions are more likely to have mental health problems, such as anxiety and depression, to contract meningitis, have respiratory problems,

Figure 2.40 Populations living in areas with, in relative terms, the least favourable environmental conditions, 2001–6

Percentage of the population

Least deprived areas ⟵ Level of deprivation ⟶ Most deprived areas

■ No conditions   ■ 1 condition   ■ 2 conditions   ■ 3 or more conditions
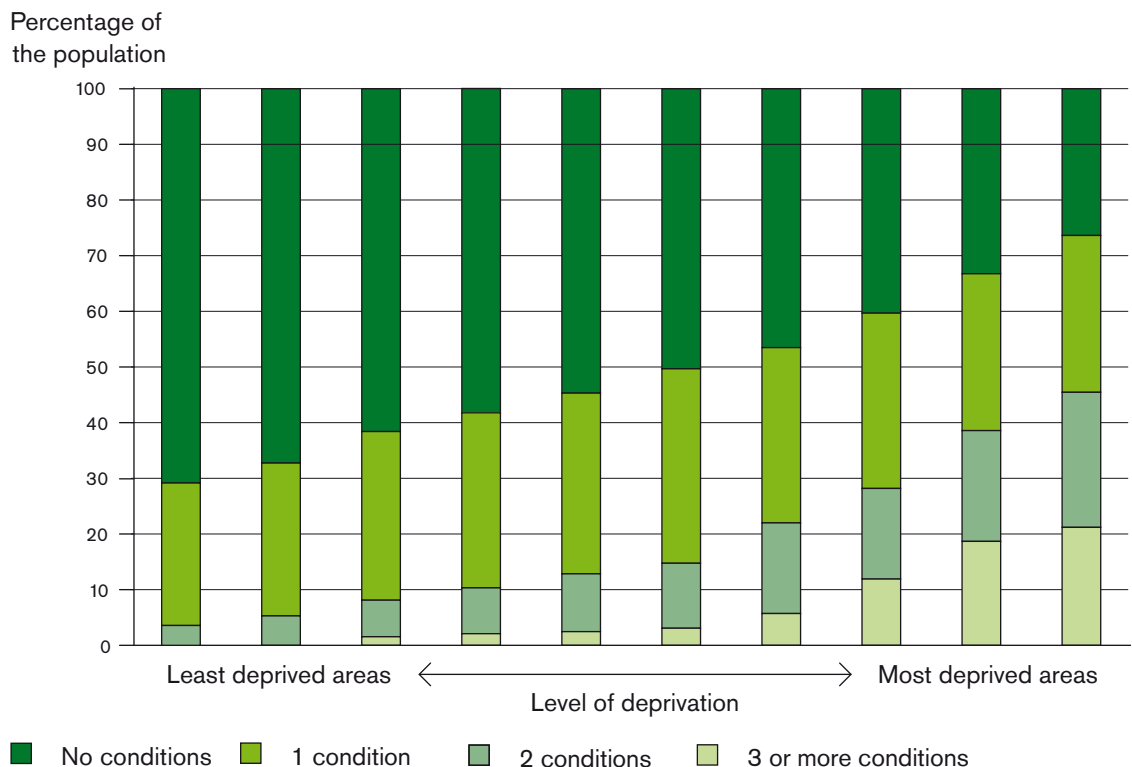
Environmental conditions: river water quality, air quality, green space, habitat favourable to bio-diversity, flood risk, litter, detritus, housing conditions, road accidents, regulated sites (e.g. landfill)

Source: Department for Environment, Food and Rural Affairs[198]

experience long-term ill health and disability, experience slow physical growth and have delayed cognitive development.[199] These adverse outcomes reflect both the direct impact of the housing and the associated material deprivation.

Investment in new and existing housing is needed across the social gradient. More than 500,000 people are living in overcrowded conditions and 70,000 people in temporary accommodation.[200] Almost 2 million people are on council waiting lists for social housing.

Fuel poverty and health inequalities

Cold housing is a health risk. Cold is believed to be the main explanation for the extra 'winter deaths' occurring each year between December and March. In 2008/9 there were 36,700 additional deaths in the December to March period in England and Wales. These winter deaths continue despite government policies to reduce the number of cold homes and prevent the risk of ill health due to cold among families with children, older people and those with a disability or long-term illness.

Being able to afford to keep a warm home is clearly a key factor. A household is said to be in fuel poverty if it needs to spend more than 10 per cent of its income on fuel to sustain satisfactory heating. In 2005/6, 7 per cent of households were spending more than this, over half of which were single-person households. Fuel poverty rates fluctuate with the price of fuel. In November 2008 the rising price of domestic fuel resulted in over half of single pensioners and two-thirds of workless households being in fuel poverty.[201]

Air quality, green spaces and health inequalities

There is clear evidence of the adverse effects of outdoor air pollution, especially for cardio-respiratory mortality and morbidity.[202] It is estimated that each year in the UK, short-term air pollution is associated with 12,000 to 24,000 premature deaths.[203] Poorer communities tend to experience higher concentrations of pollution and have a higher prevalence of cardio-respiratory and other diseases. Sixty-six per cent of carcinogenic chemicals emitted into the air are released in the 10 per cent most deprived wards.[204]

Creating a physical environment in which people can live healthier lives with a greater sense of well-being is a hugely significant factor in reducing health inequalities. Living close to areas of green space – parks, woodland and other open spaces – can improve health, regardless of social class.[205] Numerous studies point to the direct benefits of green space to both physical and mental health and well-being.[206] Green spaces have been associated with a decrease in health complaints[207] blood pressure and cholesterol, improved mental health and reduced stress levels,[209] perceived better general health,[210] and the ability to face problems.[211] The presence of green space also has indirect benefits: it encourages social contact and integration, provides space for

Figure 2.41 Distance travelled per person per year in Great Britain, by household income quintile and mode, 2008

Distance travelled
(miles)
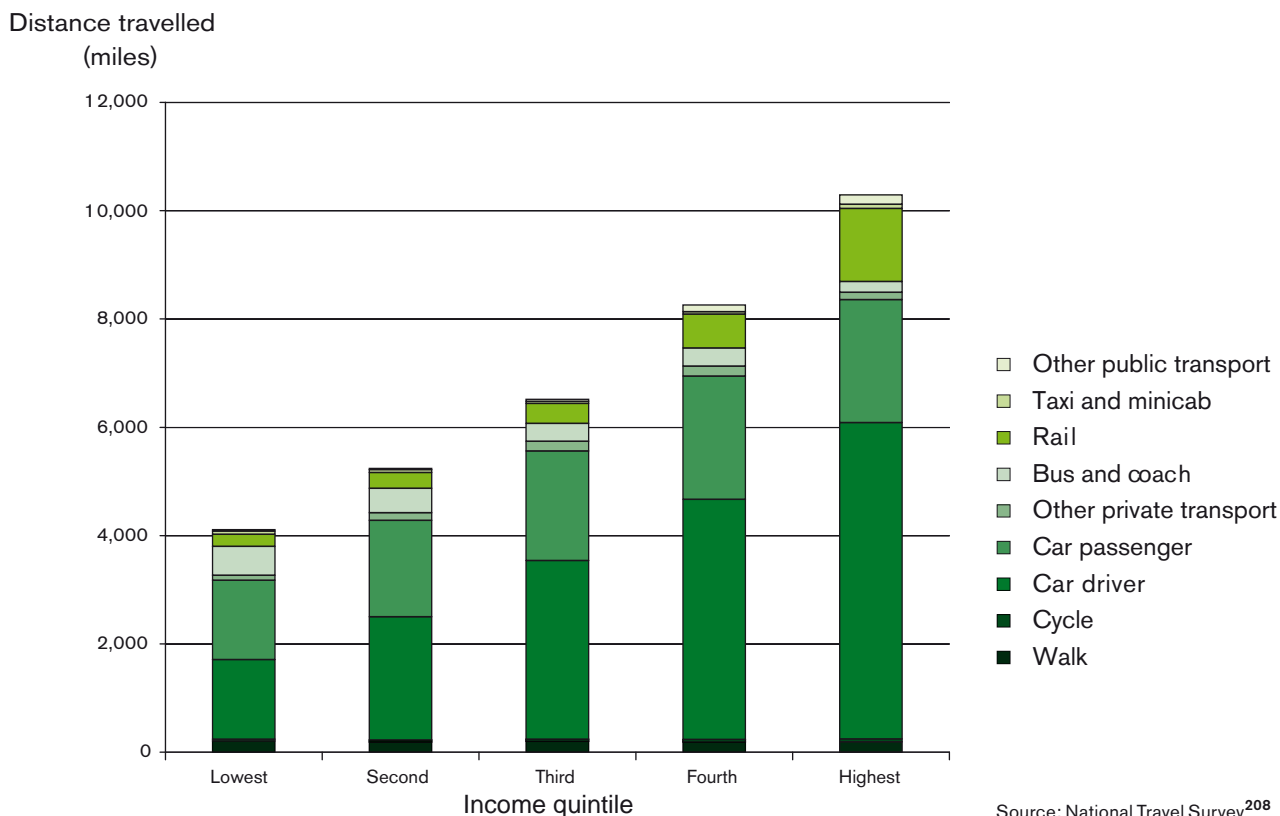
Source: National Travel Survey[208]

physical activity and play, improves air quality and reduces urban heat island effects.[212] (See Chapter 4, Policy Objective E for further discussion.)

Transport and health inequalities

Transport accounts for approximately 29 per cent of the UK's carbon dioxide emissions[213] and contributes significantly to some of today's greatest challenges to public health in England, including road traffic injuries, physical inactivity, the adverse effect of traffic on social cohesiveness and the impact of outdoor air and noise pollution. However, the relationships between transport and health are multiple, complex, and socioeconomically patterned.

Transport also enables access to work, education, social networks and services that can improve people's opportunities.[214] Figure 2.41 shows the gradient in access to work and services. It also provides clear indication of a gradient in car driving by income. This shows greater freedom to travel, but also greater fuel consumption, among higher earners.

The impact of transport on health inequalities is most significant when looking at deaths from road traffic injuries. The single major avoidable cause of death in childhood in England is unintentional injury – death in the home for under-fives and on the roads for over-fives. There are more deaths from unintentional injury than, for example, from leukaemia or meningitis and the social class gradient in child injury is steeper than for any other cause of childhood death or long-term disability.

While overall rates of death from injury in children have fallen in England and Wales over the past 20 years, this has not been the case for rates in children in families in which no adult is in paid employment. Children in the 10 per cent most deprived wards in England are four times more likely to be hit by a car than children in the 10 per cent least deprived wards.[215] Road deaths, especially among pedestrians and cyclists, are particularly high among children of parents classified as never having worked or as long-term unemployed[216] – Figure 2.42.

Particular groups face further inequalities. Black ethnic minority groups in London were 1.3 times more likely to be injured as pedestrians and car occupants on the city's roads than those in white ethnic groups.[217]

Food and health inequalities

Five per cent of people on low incomes report skipping meals for a whole day. Low income and area deprivations are also barriers to purchasing fresh or unfamiliar foods.[218] Lower income households are the hardest hit by food price fluctuations.[219] Policy Objectives C and E explore this in more detail.

Figure 2.42 Child deaths by socioeconomic class (NS-SEC), 2001–2003

Rate of death per 100,000 children aged 0–15
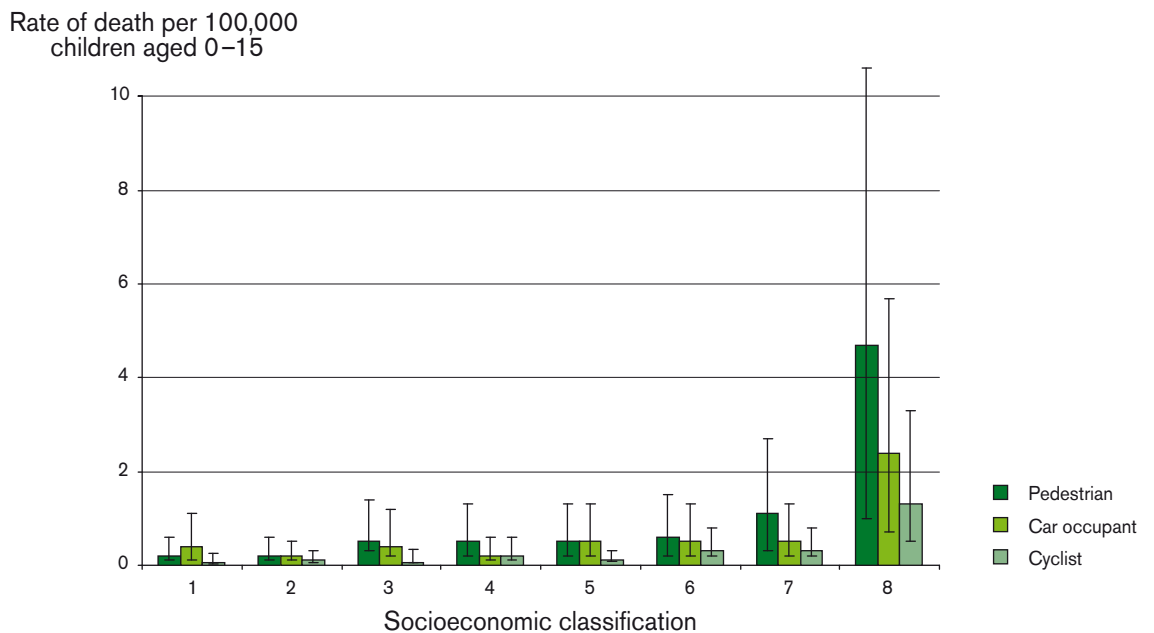
Socioeconomic classification (NS-SEC)

1. Higher managerial & professional
2. Lower managerial & professional
3. Intermediate
4. Small employers & own account

5. Lower supervisory & technical
6. Semi-routine
7. Routine
8. Never worked & long-term unemployed

Note: NS-SEC=National Statistics Socio-economic Classification

Vertical bars (I) represent confidence intervals

Source: Office for National Statistics[220]

Summing up

All the inequalities described in this chapter have persistent and complex causes and relationships are multi-faceted, between, for instance, early years, education, employment, living environment, income and health. A person's physical and mental health is profoundly shaped by their experiences in all these areas and multiple disadvantages compound to produce significantly worse physical and mental health and well-being. In the next chapter we describe lessons learnt from recent policies and interventions to reduce health inequalities, then in Chapter 4 we outline policies for which there is good evidence of success in reducing or ameliorating inequalities in health. But first, in section 2.7, we consider estimates of the human and economic costs of inequalities.

2.7 Human and economic costs of inequalities

The benefits of reducing health inequalities are economic as well as social. The cost of health inequalities can be measured in both human terms – lost years of life and active life, and in economic terms – the cost to the economy of additional illness.[221]

2.7.1 Loss of years of life

Inequalities in mortality are only part of the overall health inequalities that exist between socioeconomic groups. However, they provide a sound starting point for building up an estimate of the full benefits of reducing health inequalities. The size of socioeconomic inequalities in health depends on the socioeconomic indicator chosen (among other factors). We have examined three approaches. Two are based on different measures of socioeconomic status, occupational class (NS-SEC) and education (see Figures 2.6 and 2.7). The third is based on systematic neighbourhood differences in life expectancy according to income deprivation (Figure 1.1).

In each case potential reductions in the social gradient in health were identified and the value quantified of the improvement this would represent in deaths avoided and extra population longevity.

Occupational class

Based on occupational class data available around the time of the 2001 Census, this analysis[222] focused on deaths in a core working age group, 30–59, in order to avoid problems of misclassification at younger and older ages. No estimate was made of lives saved at younger or older ages.

If the mortality rates of all classes in this core working age group had been the same as the 'higher managerial and professional' class in England and Wales in 2003, around 67,000 fewer deaths in this age group would have taken place and a total of 2.3 million years of life potentially saved.

Education

A similar analysis of mortality based on educational qualification recorded in the Census – using the Office for National Statistics Longitudinal Study of England and Wales– showed that if the mortality level of all people was the same as for those with degree-level qualifications, 202,000 premature deaths would be avoided at ages 30 and over each year and 2.6 million years of life potentially saved.[223] On a proportionate basis, this equates to around 2.5 million years of life for England.

Neighbourhood

Finally, a hypothetical improvement in mortality rates of neighbourhoods in England was considered[224] – specifically, potential reductions in life expectancy differences among middle-level Super Output Areas (MSOAs). While there is a strong relationship between deprivation in these areas and the life expectancy levels of their residents, there is also considerable variability between areas with the same level of deprivation (principally due to the region in which the area is located).

For this reason, we focused on a scenario that did not remove the variability between areas with the same level of deprivation (due to region and other factors). Instead we considered the effect of improving life expectancy of areas in the bottom 90 per cent of the deprivation distribution to the levels and distribution seen in areas within the top 10 per cent. Were this the case, there would be around 600,000 extra years of life lived among those who will die in 2010. This method also allows us to estimate the extra years that would be lived if all those born in 2010 experienced the current death rates in the 10 per cent of least deprived areas (1.3 million years) or if everyone currently alive experienced these more favourable death rates (98 million extra years).

2.7.2 Loss of years of healthy life

By applying the technique used in the previous example (life expectancy of neighbourhoods) to disability-free life expectancy, we were able to estimate[225] the extra years spent with a limiting long-term illness or disability by those in neighbourhoods in England with higher levels of deprivation. This analysis suggested that if all those born in 2010 experienced the current rates of illness, disability and death seen in the 10 per cent of least deprived areas they would enjoy some 4.1 million extra years of healthy life. The comparable gain for everyone currently alive is 285 million years of healthy life.

Further details of the methods used and of examples of the effect of more modest improvements are given on the Marmot Review website at www.ucl.ac.uk/gheg/marmotreview

2.7.3   Economic costs

There are a number of ways in which we can convert the figures of lives saved into economic costs, by making suitable assumptions. Examples are available on the Marmot Review website (see above). It is, however, not directly obvious as to where these costs would fall.

On the other hand, it is possible to bring together several quantifiable dimensions of lost activity due to illness or disability. These examples draw on the work of Dame Carol Black's report, analyses of the extra treatment costs borne by the NHS in England as a result of health inequalities and work prepared for Foresight on the future costs of obesity.[226]

By comparing the current situation, with its considerable levels of inequality, with one in which everyone had the same health outcomes as the richest 10 per cent of the population in England, it is estimated that there are currently:

— Productivity losses of £31–33 billion per year
— Lost taxes and higher welfare payments in the range of £20–32 billion per year.[227]

Direct NHS healthcare costs in England associated with treating the consequences of inequality amount to £5.5 billion per year for treating acute illness and mental illness and prescriptions.[228] These activities represent approximately one third of the NHS budget. In consequence, it is likely that the full impact of health inequalities on direct healthcare costs is considerably greater than this.

Taking an alternative approach, by modelling the costs of treating the various illnesses that result from inequalities in obesity this time in England and Wales, it is estimated that inequalities in obesity currently cost £2 billion per year, predicted to rise to nearly £5 billion per year in 2025.[229] Separate estimates could be made for other risk factors for illness (such as lifestyle behaviours). However, there would be an element of double counting involved in trying to estimate too many separate risk factors for different illnesses.

Chapter 3
Lessons to be learned from the current Health Inequality Strategy, targets and indicators

3.1   Introduction

While recent policy approaches have struggled to reduce health inequalities, life expectancy has risen dramatically for all social groups in the last 10 years, a very significant achievement. So too is the fact that widening income and wealth inequalities, documented in Chapter 2, have not translated into commensurate widening inequalities in health and well-being. Nonetheless, this report advocates particular approaches, delivery systems and policies for tackling health inequalities and it is vital that lessons from recent policies and delivery organisations are learnt – and those lessons acted upon. These lessons are the subject of this chapter.

3.2   Current health inequalities policy

In 1998, Sir Donald Acheson, building on the Black Report and a considerable amount of research that had been carried out in the interim, published the *Independent Inquiry into Inequalities in Health*. That Inquiry emphasised the importance for health of social conditions through the life course.[230] Acheson made 39 recommendations, three of which were concerned with health services. There were three priorities:
— To assess the impact on health inequality of all policies
— To give priority to women of child-bearing age, expectant mothers and young children
— To reduce the gap in living standards between the worst-off and the average.

Following the Acheson report, the Government developed a national health inequalities strategy, *Tackling Health Inequalities: A Programme for Action,* with twin aims: to deliver a national health inequalities target by 2010 (reducing inequalities in infant mortality and life expectancy at birth) and to support a long-term sustainable reduction in health inequalities.[231] See Chapter 2 for a description of the national health inequalities target and the two supporting objectives.

The Programme for Action had four themes:
— Supporting families, mothers and children
— Engaging communities and individuals
— Preventing illness and providing effective treatment and care
— Addressing the underlying social determinants of health.

Activities covered by the Programme for Action included:
— Improving employment opportunities and living conditions for disadvantaged groups
— Tackling poverty, particularly child poverty
— Reducing smoking prevalence and promoting access to a healthy diet in poorer communities
— Improving access to, and use of, health services among those who have traditionally been underserved.

The programme emphasised the importance of cross-government working at local, regional and national levels and partnership with other service providers and local communities.[232]

Alongside the two headline targets and to provide a broader context for assessing progress 12 national health inequalities indicators have been adopted. These cover mortality from specific diseases, access to health care, health behaviour, and the wider social determinants of health. The 12 headline indicators are:
1 Death rates from the 'big killers' – cancer and heart disease
2 Teenage conception rate
3 Road accident casualty rates in disadvantaged communities
4 Numbers of primary care professionals
5 Uptake of flu vaccinations
6 Smoking among manual occupation groups and among pregnant women
7 Educational attainment
8 Consumption of fruit and vegetables
9 Proportion of population living in non-decent housing
10 Physical education and school sport
11 Children in poverty
12 Homeless families living in temporary accommodation.

As indicated in Chapter 2, the social gradients originally identified in these indicators have persisted, despite improvements in average levels for many of them.

In this chapter we assess evidence about how the design and implementation of approaches to reducing health inequalities may have affected outcomes in three areas:
1 Policy design and approach
2 Targets and metrics
3 Delivery across the system.

3.3 Lessons learnt: policy designs and approach

3.3.1 The social determinants of health

In Chapters 1 and 2 we set out evidence demonstrating how health inequalities closely relate to other social inequalities, to the social determinants of health. Most effective actions to reduce health inequalities will come through action within the social determinants of health. However, attempts to reduce health inequalities have not systematically addressed the background causes of ill health and have relied increasingly on tackling more proximal causes (such as smoking), through behaviour change programmes.[233]

Part of the explanation for this emphasis lies with the comparative ease of identifying action to address behaviour, rather than the complexity of addressing social inequalities shaping such behaviours. This has led to the seemingly less challenging route of lifestyle interventions – this tendency has been described as 'lifestyle drift'.[234] The emphasis has been either on downstream actions that affect only a small proportion of individuals, or on approaches that have a socially neutral impact at best.[235] Health inequalities are likely to persist between socioeconomic groups, even if lifestyle factors (such as smoking) are equalised, without addressing the fundamental causes of inequality.[236]

3.3.2 Investing in prevention of ill health

Within the NHS, there has been a longstanding, well documented focus on acute services, and on access and waiting times. The dominance of the acute sector at the expense of ill health prevention is evident in the pattern of spending. Less than 4 per cent of total NHS spending is targeted at prevention and this money is not required to be spent on reducing health inequalities (see Policy Objective F).[237] Reducing health inequalities requires significant investment, but, even without considering the moral and social justice case, the financial costs of doing nothing about health inequalities are even more significant, as described in Chapter 2.

3.3.3 Cross-cutting action and all-policy focus on health equity

While the Department of Health has formal responsibility for reducing health inequalities, the causes of health inequalities extend far outside its remit. Reducing health inequalities is clearly a task for the whole of government, locally and nationally. However, too often action has been limited by organisational boundaries and silos. In Chapter 5 we propose mechanisms and systems for ensuring that action is taken across government.

3.3.4 Need to focus on the gradient in health inequalities

Where policies have been designed with a focus on health inequalities, they are often aimed at the lower end of the social gradient. Even if they are effective, these policies fail to tackle all the inequalities that exist for other socioeconomic groups. This report argues that the whole gradient needs to be targeted, with proportionately more focus down the gradient. Both the universal aspects of policies and the increasing focus on those worse off are important. For example, social marketing campaigns are universal policies designed to improve health and change behaviours, but these are often poorly designed for reducing inequality.

Ill health preventions aimed at changing individual behaviours such as smoking, alcohol, diet and exercise are more quickly and commonly taken up by the middle classes and those who already have positive attitudes towards health.[238] The most advantaged groups are often better resourced to take advantage of population-wide interventions. Indeed, without attention to distributional impact and the underlying causes of behaviours, interventions to improve health may increase inequalities.

3.3.5 Small-scale policies and short timescales

Social policy at the national level has witnessed a proliferation of highly targeted projects and new initiatives. This proliferation has been accompanied by undue emphasis on the need for new money for new initiatives, despite the widespread recognition, as evidenced by the inclusion of an inequality component in the NHS resource allocation formula, of the need to change the way mainstream resources are used and services delivered. Nationally set targets and performance management of delivery organisations have tended to focus on narrowly defined short-term objectives and targets, at the expense of broader and longer-term aims.

Many of those involved in delivery have argued that tackling health inequalities requires a commitment to longer time scales. Critical components in delivering reductions in health inequalities, such as community development and capacity building, partnership working, professional development, and local institution building, need ongoing investment and time to mature. By contrast, regular structural change, staffing shortages, and fragmented and short-term funding streams risk making improvements harder.

Long-term outcomes of interventions, including those for health, are complex to evaluate and measure. Isolating the impact of a particular mechanism or approach over time is particularly challenging. Given short political cycles and the culture of demonstrating quick impact, these challenges and longer time horizons can become prohibitive to taking action.[239] It is therefore necessary to link long-term goals to shorter-term stepping stones, as the recommendations in Chapter 4 and associated metrics try to do (Chapter 5 and Annex 2).

Analysis of current delivery highlights these issues. In 1997, the appointment of a Public Health Minister and the implementation of Health Action Zones and Healthy Living Centres signalled a clear strategic direction towards partnership working focused on area- and community-based action. However, there followed a succession of policy and organisational changes that hampered the

partnership working that is essential to addressing the 'wicked issues' of health inequalities. Instead of allowing existing initiatives to mature, the pursuit of short-term objectives and targets, based on a 'quick win' ethos and a limited commitment to long-term funding, came to characterise many policies – and the scale of the challenge facing the agencies was simply not recognised.[240]

3.3.6 The hunt for quick wins

Reviews often look for new interventions, particular policies that may help turn the corner or make significant impact in improving service quality. However, a stream of new initiatives may not achieve as much as consistent and concerted action across a range of policy areas. A social determinants approach to health inequalities highlights how it is the intersection between different domains that is critical – health and work, health and housing and planning, health and early years education. Success is more likely to come from the cumulative impact from a range of complementary programmes than from any one individual programme and through more effective, coherent delivery systems and accountability mechanisms.

3.4 Lessons learnt from delivery systems

As discussed in the preceding section, achieving reductions in health inequalities requires coherent, concerted, long-term, cross-cutting policies, backed by sufficient investment. Achieving reductions in health inequalities also depends on correctly identifying and developing systems capable of delivering change at local and national level. To identify the lessons to be learned from the current delivery and monitoring framework, we considered the following questions:
— What were the barriers to delivery at national and local level?
— Did delivery systems and mechanisms facilitate accountability and performance improvement?
— Were the targets and metrics for measuring progress and galvanising action appropriate?

In framing our analysis of barriers to delivery we drew on the work of our task group and working committee, which were set up to explore and analyse barriers to delivery and potential remedies.[241] The Review's work also drew on the work of the Health Inequalities National Support Team and widespread consultation with health inequalities beacon council representatives, local authority chief executives, Primary Care Trust chief executives, the third and private sectors and the public health work force. The analysis

Figure 3.1 The existing delivery system
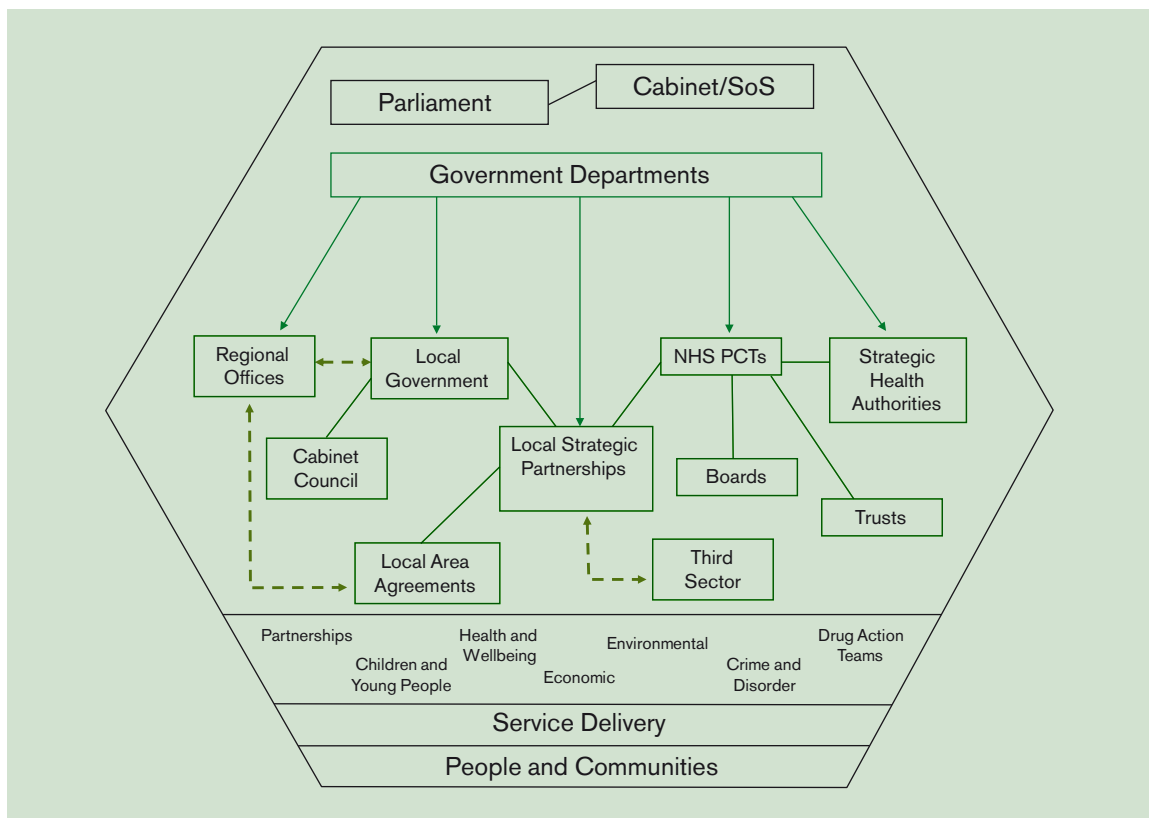
Source: Whitehead et al. [243]

was also framed by the responses to the Review's consultation.[242] For ease of reference, the organisational relationships that characterise the existing delivery system are summarised in Figure 3.1.

3.4.1 Barriers to the national delivery system
Geographic area
Initiatives tend to focus on specific geographic areas, particularly through the spearhead designation (described in Chapter 2). However, they do not necessarily target the people they are intended to target, as large geographic areas are mixed. In fact more deprived people live outside spearhead areas than within them. Further targeting of this kind, even if efficiently designated, fails to tackle inequalities along the whole gradient. Even given the policy of targeting the worst off, reductions in the gap within such broad target groups can often be achieved by focusing on the most numerous, but least deprived, individuals within a target group or area.[244]

Workforce capacity
There has been insufficient attention given to expanding workforce capacity to understand and act on the social determinants of health within both the non-specialist and specialist workforce.[245] Where there are shortages of trained professionals required to deliver the basic functions of services necessary, this is of course a major impediment to successful interventions and public service delivery. There have been significant increases in the numbers entering some public sector professions – doctors, nurses, teachers – but other critical workforces, such as health visitors, are under pressure.

There are also concerns that as fiscal constraints bite, it is frontline workers, particularly those that lack political and popular support (for example, social workers and Jobcentre staff) whose jobs may be cut. At the same time, while there are concerns that substantial upskilling of the workforce is vital – for childcare workers, for instance – there may not be the resources to do this.

3.4.2 Barriers to local-level delivery systems
On a local level progress in delivering health inequalities has been inconsistent, partly as a result of some significant limitations in local delivery organisations, funding and difficulties with partnership working.

Local responsibility for health inequalities
There is a perception among some statutory agencies that responsibility for delivery lies with the local NHS. This is despite local government and other public sector partners, the police, fire service, third sector and private sector organisations, holding many of the levers that shape health inequalities.

The local authorities' role has been obscured by an artificial separation of health policy from other major policies central to the social determinants of health and sometimes they have been tentative in taking a lead in these circumstances. This displacement of responsibility can be compounded by there being limited evidence available to relevant local stakeholders of the key drivers of health inequalities.[246]

There are lessons to be learnt from the failure of some key stakeholders to give partnership working the priority it needs to be successful. These include significant variation in engaging the senior personnel necessary to deliver effective partnership and strategic change and a corresponding lack of commitment to drive forward and tackle the very challenging issue of health inequalities.[247] Common objectives and agreed priorities can be seen as key components of a partnership but these are not easy to agree in a context of different roles and responsibilities, fragmentation of funding streams and financial pressures. There has been an overemphasis on targets by national government and pressure to demonstrate quick short-term wins to the detriment of the long-term strategic progress – hitting the target but missing the point.[248]

Efforts from partnerships in tackling health inequalities have sometimes showed an over-reliance on small-scale health improvement projects and programmes.[249] In some instances, progress has been hampered by difficulties in achieving the information sharing needed to support joint action. This highlights a lack of understanding of the importance of using good quality evidence and the absence of agreed protocols for achieving systematic sharing.

All of these factors diminish the ability of delivery organisations to impact efficiently on the underlying causes of health inequalities. In Chapter 5 we outline mechanisms and systems to overcome these barriers. There are excellent examples of where such problems have been overcome, using approaches that could be adopted much more widely.

3.5 Appropriateness of the targets

England, Northern Ireland, Scotland and Wales have all set explicit health inequalities targets.[250] While limitations in the scope, methods and approaches adopted for many of these targets is now widely documented, there is an equally strong body of opinion that it is important to have a health inequality target to focus attention on the issue.

The experience accumulated from the four countries about developing, setting and using health inequality targets has led to an acknowledgement that a successful target-led health inequalities strategy needs to be underpinned by clarity over the main determinants and dimensions of health inequality that are to be reduced, and the indicators used to measure progress.[251]

3.6 Issues in the construction of the targets

3.6.1 Not all dimensions of equality and inequality are covered
The conceptualisation of health inequalities underpinning the current target does not capture the social gradient in health or the more complex patterning of health associated with other groups (for example, ethnic groups). Other inequalities intersect in

important and complex ways with socioeconomic position in shaping people's health status.

This includes the dimensions covered by current equality legislation and activities that underpin the general duty of public authorities to promote equality are not reflected in the inequality targets for health. However, significant health challenges have been identified related to specific groups based on age, ethnicity, sexuality, gender and disability. The Single Equality Bill places a duty on public bodies to promote equality (in relation to race/ethnicity, gender and disability), including the publication of information on progress on reducing inequalities in outcomes.

A single target cannot realistically incorporate the multiple dimensions of inequality.

3.6.2   Being clear about outcomes

Current targets are designed to provide a broad measure of longevity (life expectancy) and survival in the early years (infant mortality). Both are focused on the avoidance of mortality, but they do not reflect health status or other dimensions of well-being through the life course. The importance of other measures was illustrated in Figure 1.1 which shows gradients in both life expectancy and disability-free life expectancy according to level of neighbourhood income deprivation. As years of life are extended for most people, there is growing evidence of wider social gradients in health during the extra years. There should therefore be a focus, reflected in targets or indicators, on both adding years to life and life to years. The Review's proposals in this area are discussed in Chapter 5.

3.6.3   Use of national targets at local levels

It is increasingly recognised that the delivery of national inequality targets depends, to an important extent, on the effectiveness of local action.[252] There has, however, been a tendency to set health outcome targets at the national level and, in the absence of appropriate performance indicators, they are simply handed out to organisations at regional and local level and treated as if they were local performance targets. This has highlighted the importance of:

— Finding the correct balance between national and local relevance
— The need to integrate with key NHS and local authority processes, including performance management processes
— Data availability (national surveys may not provide adequate local data)
— Small numbers at local level, for instance as with the infant mortality target.

3.6.4   Use of local area information to monitor inequalities

In using area-based information to undertake monitoring, there is an implicit assumption that the information identifies inequalities between individuals. This is reflected in, and compounded by, targeting and monitoring large geographic areas or catchment populations. There are variations in health outcomes within spearhead areas and within non-spearhead areas, and although spearheads were defined as areas with the highest levels of deprivation and poorest health, there are affluent people within spearhead areas and disadvantaged people within non-spearheads. By measuring changes only at local authority level, we cannot tell whether any improvements being made are confined only to the more affluent members of a generally deprived population.

The introduction of within-area inequalities targets attempted to address this problem. However, these targets were not only independent of the national targets but also continued to target areas containing households in widely varying socioeconomic circumstances.

To some extent, this can be viewed simply as a problem of granularity. The smaller the number of people in the area, the smaller the likely within-area variability. For example, sufficiently reliable small area data were not available when targets for spearhead local authorities were set nationally. Now that they are, as long as the numbers in the small areas are sufficient to enable analysis to be undertaken, both issues discussed above could be overcome. This is because:

— All or most local authorities would have had a stake in the target.
— Measures of inequality would have been more sensitive to change.
— The target could be scaled from national to regional to local level with ease.
— There would have been less incentive to focus on initiatives in specific areas (which may or may not hit the right individuals) and more incentive to focus initiatives on the right individuals across the district.

3.7   Monitoring progress in reducing health inequalities

Current targets cast inequalities as a health gap between the health of a defined disadvantaged group and the health of the population as a whole. This simple definition raises several issues.

3.7.1   Over-simplification

Target groups, defined on a cross-sectional basis, may change over time. Their composition may change substantially due to either high levels of churn in areas or systematic geographic or social mobility, for example, gentrification or decline of areas or structural shifts in the labour market.

3.7.2   Problems arising from targeting

While health inequalities are a population-wide phenomenon, the target defines health inequalities as a condition afflicting a sub-section of the national population. The life expectancy target relates only to spearhead areas, covering 28 per cent of the population. The infant mortality target relates to the 40 per cent of those infant deaths with a specified father's class who were in the routine and manual group; births registered solely by the mother or that cannot be classified are excluded from the calculation.

By targeting sub-groups, many deprived groups are excluded from priority action. There are disadvantaged areas that are not accorded spearhead status – around half of disadvantaged individuals and families live outside spearhead areas. Similarly, infant mortality rates for sole-registered and other unclassified births are markedly higher than in the targeted disadvantaged group.

3.7.3 Absolute and relative inequalities

Both the life expectancy and infant mortality targets are assessed in terms of a relative gap between the targeted group and the population as a whole. In contrast, in performance managing the life expectancy target at local level, the absolute difference in a proxy measure is being used (age-standardised mortality rates). There is a wider research debate on the advantages and disadvantages of relative and absolute differences and an emerging consensus that both are essential for public health purposes.[253] However, when the relative and absolute gaps move in opposite directions or in the same direction but at different speeds, most people (public and health professionals alike) are confused by the apparently conflicting messages.

A further issue concerns the most appropriate measure for summarising inequality, for example, a rate difference or a slope index of inequality for an absolute gap; a rate ratio or relative index of inequality for a relative gap. Much confusion has arisen over the correct ways to measure the gaps. The following could provide a more robust approach to measuring gaps between areas. For example:
— For counts and event rates, use relative gaps
— For proportions or percentages, use odds ratios
— For indicators or indices of outcome that have a straight line relationship with the relevant social determinant, use absolute gaps.

Using only a relative and absolute index on its own tends to create perverse incentives for those tasked with implementation (see below). Therefore, both need to be used in measuring progress, using separate metrics for each.

3.7.4 Unintended consequences and perverse incentives

The heterogeneity of target groups is necessarily overlooked in setting a single target. As previously indicated, there are social, geographic, ethnic and other gradients within spearhead groups and within routine and manual classes. Reductions in the gap within such broad target groups can often be achieved by focusing on the most numerous, but least deprived, individuals within a target group or area.

A problem with setting targets that rely only on relative improvements in health among the poorest, is that inequalities can widen in terms of relative differences among social groups, depending on the rate of improvement among more affluent groups. This points to the need to monitor both the relative and absolute changes.

A further problem that may arise when assessing progress towards inequalities targets is systematic variation in the completeness and quality of reporting and recording across social groups. For example, drawing attention to a particular adverse behaviour, with a specific target to reduce it, can lead to either under-reporting of the problem, due to individuals with these behaviours trying to hide their problem – for example, smoking in pregnancy, or an increase in reporting of a previously hidden problem, for example, domestic violence. Both exacerbate the problem of accurately monitoring progress.

3.7.5 The availability of monitoring information

The current targets, headline indicators and local indicators were necessarily shaped by the limitations of existing data systems and the need to monitor progress: they needed to be regularly updateable, robust enough to detect changes over time, compatible with broader policy objectives and so on. These limitations have not enabled a fully integrated and transparent approach to tracking progress.

Some of the issues encountered with the current national monitoring data are:
— Local availability: The task of addressing limitations in local systems can impose a significant burden, for example, developing new systems to measure, and process data on, the health of local populations.
— Timeliness: Where targets are based on health outcomes, there may be a considerable time delay. For example, mortality data that depend on death registrations and data processing tend to be at least nine months behind at the time of publication, and teenage pregnancies, which depend on birth registrations, can only be available over a year after the conceptions occurred. The use of three-year rolling averages can exacerbate this time delay. If rates are changing rapidly, such as for premature coronary heart disease mortality, this means that information lags behind what is needed.

3.8 Delivering across the whole system

In Chapter 5 we set out our proposals for a delivery system and performance improvement framework which, based on the evidence we have assessed and the consultations we have had, facilitate delivery of reductions in health inequalities. From recent policy experience there are several key messages to be drawn:
— Policies to tackle health inequalities must focus on the wider determinants of health.
— Policies, delivery systems and targets should tackle inequalities along the whole social gradient, rather than focus on specific segments of it.
— Policies need to be cross-cutting at national and local level and spread over the usual organisational boundaries at all levels.
— Policies need to have longer time horizons and sufficient funding for those time periods.
— Policies need scale and intensity. Small-scale isolated projects cannot make sufficient impact, however effective they may be at a small scale.
— Strategies to reduce health inequalities should

draw on the overlaps and synergies between different policy areas and not be developed in isolation.

— Strategies intervening in just one part of the social determinants will be insufficient to make the necessary difference to patterns of inequality. The scale of the challenge is significant.

— The experience so far suggests that the solutions to the above points are not straightforward for the disparate regions, cities, towns and villages across England.

— Geographic delineations of specific 'priority areas' have unintended consequences.

— Partnership working across a disparate and complex system involving separate organisations with differing responsibilities, perceptions and cultures is difficult to achieve , time consuming and often outside the experience of some of the key actors.

— Finally, while we separate national and local in this analysis of the issues, it is important that an integrated approach at national and local level is adopted if synergy is to be achieved to secure the maximum impact.

There are also some questions that underpin the discussion of whether the existing targets and indicators are appropriate:

— To what dimensions of inequality should the targets and indicators relate? Are there particular issues in incorporating all the dimensions covered by the Single Equality Bill, for example, age, gender, ethnicity, disability?

— Should targets be aspirational or do they need to be incorporated into a performance improvement framework? Is this affected by the timeframe for delivery – short, medium or long term?

— Are specific targets and indicators intended to be used at national or local level?

— For targets set nationally, what are the implications for local measurement?

— What is the balance between process, intermediate and final outcome measures?

— Should targets relate to the social determinants, the health care system or to health outcomes based on individuals, for example, their socio-economic classification; or group attributes, for example, area deprivation?

— How can targets be made to reflect progress across the gradient in a way that adequately captures proportionate universalism?[254]

In Chapter 5 we attempt to answer some of these questions through our proposed delivery systems, targets and metrics.

Chapter 4
Policy objectives and recommendations

4.1 Introduction

The recommendations set out in this chapter are informed by evidence of what works to reduce inequalities in the social determinants of health. The analyses produced by the nine task groups set up by the Review and the subsequent consultation, research and analysis undertaken during the Review allowed an assessment of the best available evidence.

The criteria for making the recommendations also include 'deliverability' and build on the lessons from current and previous health inequalities strategies, discussed in Chapter 3.

The recommendations
— are based on the best evidence of effectiveness, as outlined in this chapter.
— build, in many cases, on existing programmes or interventions, but require a scaling up of size and intensity to effectively reduce inequalities across the social gradient. This reduces the need to reinvent the wheel, which has afflicted many previous policy initiatives.
— build on policies in the areas described and in other areas. There is intended to be complementarity or synergy between the recommended policies to reduce health inequalities. For example, high quality parenting programmes can achieve multiple impacts on inequalities in children's early years, education and health outcomes and parental health and well-being.
— can mainly be delivered by enhancing existing models of delivery, as outlined in Chapter 5. Recommendations requiring significant reorganisation of the structure and architecture of delivery systems were avoided unless there was a compelling case for it, for instance, with the tax and benefit systems. There was a widely voiced concern to avoid advocating disruptive system changes.
— would mainly be effective by having a proportionate effect across the social gradient, although in some cases only the most disadvantaged would be directly affected, for instance the minimum income for healthy living.
— are illustrated by examples of costs and benefits, although it has been impossible to cost all the proposals we make or to provide quantification of the full range of long-term benefits. The analysis of the costs of health inequalities in Chapter 2 shows that they can be measured in both human

terms and in economic terms. The scale of these costs, and therefore of doing nothing, provides clear evidence that investments in social determinants of health, as outlined in this chapter, are cost effective. Moreover, our estimate of the costs of doing nothing gives extra support to the interventions and policies we recommend. Many interventions will require significant long-term investment before the savings are realised but given the strong social justice and moral case for intervening and some evidence of cost efficacy, we argue that the initial outlay is justifiable.
— are presented in terms of three delivery periods: 2011–15, 2016–20 and beyond 2020. Some of the recommendations are for redirecting existing money, for instance rebalancing pupil spend towards the early years. Others, particularly in the later periods, require new money.
— are for the whole of government and across organisations at local and national level, and therefore require cross-agency working, set out in Annex 2.

The case studies included in this chapter illustrate some of the key themes in the recommendations. Like many interventions, most have not applied a long-term evaluation. Many lack this evaluation because they are short-term projects while others are in the process of being evaluated. While this report advocates systematic effective evaluations, the case studies provide examples of innovative interventions and good practice.

Policy Objective A
Give every child the best start in life

Priority objectives

1   Reduce inequalities in the early development of physical and emotional health, and cognitive, linguistic, and social skills.

2   Ensure high quality maternity services, parenting programmes, childcare and early years education to meet need across the social gradient.

3   Build the resilience and well-being of young children across the social gradient.

A.1   Introduction

Giving every child the best start in life is crucial to reducing health inequalities across the life course. The foundations for virtually every aspect of human development – physical, intellectual and emotional – are laid in early childhood. What happens during these early years, starting in the womb, has lifelong effects on many aspects of health and well-being – from obesity, heart disease and mental health, to educational achievement and economic status (see summary of data in Chapter 2). To have an impact on health inequalities we need to address the social gradient in children's access to positive early experiences. Later interventions, although important, are considerably less effective if they have not had good early foundations.[255]

The importance of the early years, from pre-birth to the age of 5, to later life outcomes is widely acknowledged and consequently has received considerable policy attention. Since 1997 the Government has made the reduction of child poverty a top priority and there has been significant investment in the expansion of early years education and care, extension of parental leave, increased family support through the development of Sure Start Children's Centres and fiscal measures designed to support families with children. This activity represents a revolution in early years provision and parenting support and, although it takes time to measure the outcomes of early years interventions, evidence is now emerging that these policies are making an impact.[256]

However, much more needs to be done. To deliver long-term reductions of inequalities we need continuing political commitment to these policies and increased investment in the early years. In short, we need a second revolution in the early years.

A.2 Recommendations

A.2.1 Increased investment in early years

> **Recommendation:** Increase the proportion of overall expenditure allocated to the early years and ensure expenditure on early years development is focused progressively across the social gradient.

There has been, and continues to be, significant policy attention and public investment in the early years and in family support. The evidence on the importance of the early years has informed recent and current policy initiatives. The Government's *Every Child Matters: Change for Children* programme is described as aiming 'to ensure that support for parents becomes routine, particularly at key points in a child or young person's life. The government, in partnership with local areas, intends to ensure parents and families have access to the support that they need, when they need it, so that all children can benefit from confident, positive and resilient parenting, from birth right through to the teenage years.' [257]

The commitment to the early years has been enacted through a wide range of policy initiatives, including Sure Start and the Healthy Child Programme and is being developed through current proposals in the Families and Relationship Green Paper (January 2010). However, it is vital that this is sustained over the long term with even greater priority given to ensuring expenditure early in the developmental life cycle, on children below the age of 5, and that more is invested in interventions for which there is good evidence of effectiveness.

Evidence shows that social spending on children early in the life cycle is likely to be more effective in enhancing children's long-term outcomes than later investment and that the 'social profitability' of investment is likely to differ significantly across the child's life course. The timing of investment is critical according to the outcomes one is seeking to influence. For example, Cunha and Heckman[258] show that cognitive ability (IQ) stabilises between 8 and 10 years of age, while behaviour remains modifiable into late childhood. A model of adult skill formation developed by Heckman[259] concludes that investment in children should be most intensive during early childhood and should taper off as children age. Rather than treating childhood as undifferentiated, Cunha and Heckman's model recognises the importance of different childhood stages and is based on the following evidence-based arguments:

— Skills gaps between individuals and social groups emerge early in life.
— Critical and sensitive periods exist during the child's life where skills are more easily acquired.
— Returns to investment are high for young disadvantaged children and lower for disadvantaged adolescents, although returns from specifically targeted interventions with young people can be high.
— Investment at different ages is complementary. If early investment is not followed up by later investment, its effect is lessened.

A 2009 report by the Organisation for Economic Cooperation and Development (OECD) compares levels of social spending at different stages of a child's life – 0 to 5 years, 6 to 11 years and 12 to 17 years. [260] The majority of countries, including the UK, spend proportionately more on children as they get older.

Table 4.1 Variation in the distribution of expenditure on childhood education by age in selected European countries, 2003

	Ratio middle to early childhood	Ratio late to middle childhood	Ratio late to early childhood
Austria	1.33	1.09	1.45
Belgium	1.35	1.30	1.76
Denmark	1.34	1.02	1.36
Finland	0.85	1.27	1.08
France	1.00	1.31	1.31
Germany	1.38	1.15	1.58
Italy	1.98	1.04	2.06
Ireland	1.87	1.19	2.24
Iceland	1.11	0.83	0.92
Hungary	0.90	1.03	0.92
Netherlands	2.02	1.17	2.36
Norway	1.31	1.20	1.57
Portugal	2.13	1.10	2.35
Spain	2.00	0.92	1.84
Sweden	1.23	1.09	1.34
United Kingdom	1.35	1.09	1.48
OECD average	2.06	1.12	2.30
Standard deviation	1.65	0.16	1.93

Source: Organisation for Economic Co-operation and Development (OECD)[261]

Table 4.1 summarises how spending per child is distributed across the three major stages of childhood in several European countries, using 2003 data. Out of 28 OECD countries, 26 spent more per child in late childhood than in the early years; and 23 spent more on middle childhood than on the early years. In 2003, Hungary was the only OECD country spending more per child on the early years than in later stages of childhood.

Identifying total expenditure in the early years in England is difficult because the data are held across a variety of central government departments as well as local government. It is therefore not possible to accurately assess the extent to which the ratio of spending on the under-fives in England has changed since 2003. However, looking solely at education expenditure, there has been a steady increase at all stages in England since 1997, but the proportion of spending by stages of childhood has remained virtually unchanged over the same period – see Figure 4.1. In 2001–2 education expenditure on the under-fives represented 13 per cent of the total spend on education (excluding post-16); in 2007–8 it was 12 per cent. If further and higher education are included, the proportion of spending on the education of under-fives has remained virtually static at 8 per cent.

A 2009 report from Action for Children and the New Economics Foundation estimated that the cost to the UK economy of continuing to address current levels of social problems such as crime, mental ill health, family breakdown, drug abuse and obesity will amount to almost £4 trillion over a 20-year period.[262] The report argues that investing in a combination of targeted interventions and universal childcare and paid parental leave could help address as much as £1.5 trillion worth of the cost of these social problems, leaving the UK in a similar position to nations such as Finland, Sweden and Denmark, which have the best social outcomes in the OECD.

Investing in the policy priorities we set out below will not only offer long-term savings in terms of health care: it will also deliver returns to education, employment and social cohesion. Implementing our recommendations will help ensure that all young children have the best possible start in life, will give support to parents and ensure good quality early childcare and education are proportionately targeted to reduce the social gradient in early years outcomes.

Summary
— Investment in early years is vital to reducing health inequalities and needs to be sustained, otherwise its effect is lessened
— Returns on investment in early childhood are higher than in adolescence
— Currently, spending is higher in later childhood years and needs to be rebalanced towards the early years
— Gaps between individuals and social groups emerge early in the life course.

Figure 4.1 Education expenditure by age group, 2001–8

Percent

Year

Under fives   Secondary

Primary   Post 16

Source: Department for Children, Schools and Families[263]
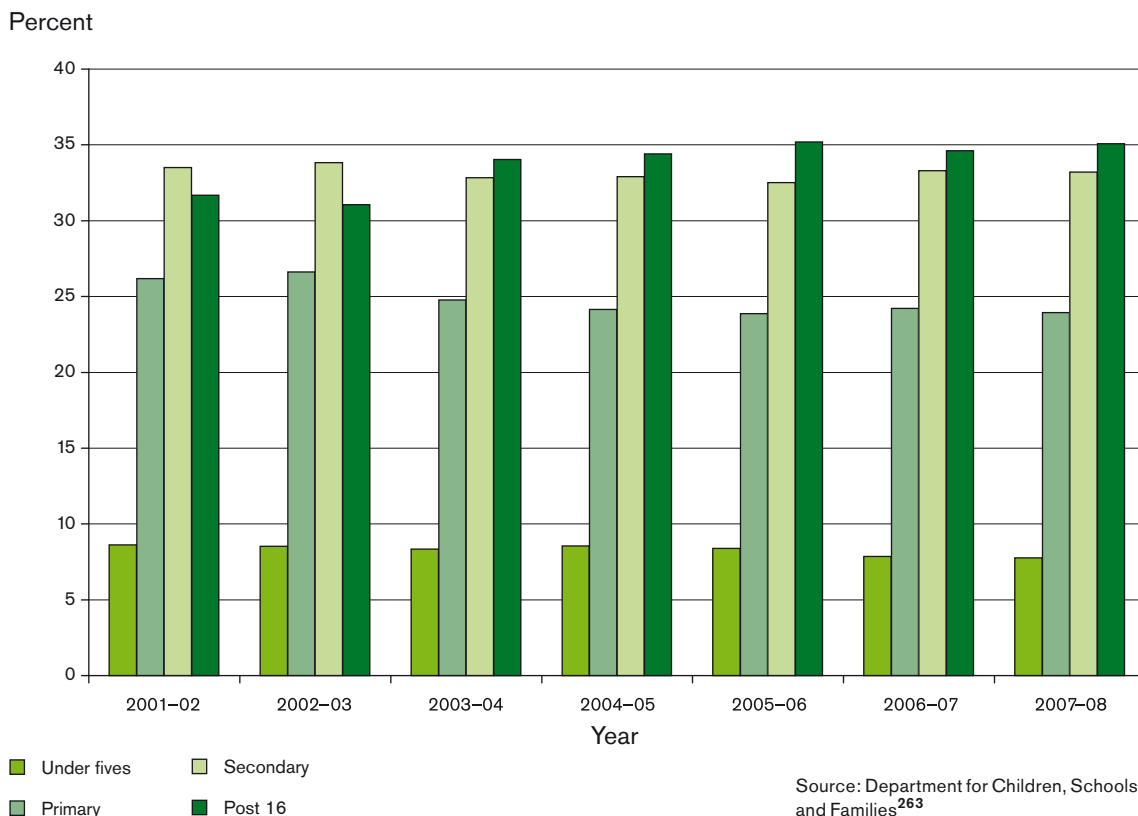
A.2.2 Supporting families to develop children's skills

> **Recommendations:** Support families to achieve progressive improvements in early years development, including:
> 1 Giving priority to pre and postnatal interventions, such as intensive home-visiting programmes, that reduce adverse outcomes of pregnancy and infancy
> 2 Providing paid parental leave in the first year of life with a minimum income for healthy living
> 3 Providing routine support to families through parenting programmes, children's centres and key workers, delivered to meet social need via outreach to families
> 4 Developing programmes for the transition to school.

Pre and postnatal interventions

Support to families needs to start prenatally to improve the health and well-being of mothers. There are strong associations between the health of mothers and the health of babies and equally strong associations between the health of mothers and their socioeconomic circumstances. This means that early intervention before birth is as critical as giving ongoing support during their child's early years. As a 2005 report on maternal health from the World Health Organisation states: 'Mothers and children need a continuum of care from pre-pregnancy, through pregnancy and childbirth, to the early days and years of life.'[264]

Central to this is ensuring that women have an adequate level of income and other material support during pregnancy to enable them to maintain a good level of health and nutrition. This requirement needs to be taken into account when considering minimum income levels for healthy living (see Policy Objective D).

All families need some information and support during pregnancy and postnatally but some require additional support. Proportionate universal programmes are therefore very important. One example is the Healthy Child Programme, a universal, preventive programme tailored to the needs of each family with support provided to planners and practitioners (through the PREview project) to identify the factors in pregnancy and around birth that are associated with health and well-being outcomes for a child at five years.[265] This type of universal pre and postnatal support is important in several respects. It has no stigma attached and levels of take-up are extremely high. As such, it offers an ideal opportunity for informal family assessment, not just in terms of parents and their new baby, but to identify other needs of the family and the option of signposting to other services relating to older children.

Positive attachment between a young child and their primary care-giver, usually but not necessarily the mother, has been consistently shown to be important for healthy early development.[266] Early, secure attachments contribute to the growth of a broad range of competencies, including the self-esteem, self-efficacy and positive social skills that are associated with better educational, social and labour market outcomes in later life. Isolation and depression are two important factors that impact negatively on maternal attachment capacity and which supportive interventions can alleviate.

There is strong evidence that early intervention through intensive home visiting programmes during and after pregnancy can be effective in improving the health, well-being and self-sufficiency of low-income, young first-time parents and their children. Trials in the United States have shown significant and consistent benefits from home visiting including: improvements in women's prenatal health; fewer injuries to children; greater involvement of fathers; increased employment and improvements in school readiness. These findings are supported by evidence from research in Britain.[267] Systematic reviews of home visiting programmes show good evidence of improved parenting skills, child development, reduced behavioural problems and improved maternal mental health and social functioning.[268]

Ensuring that parents have access to support during pregnancy is particularly important. NICE guidelines on intra-partum care[269] and the Standards for Maternity Care developed by the relevant Royal Colleges in the UK provide guidance for improvement in the safety and the experience of maternity care for both the infant and the mother.[270] These highlight the need for a strong midwifery workforce which provides the infrastructure to support women and their partners during pregnancy, birth and early parenthood, for delivery of services that avoid unnecessary intervention, and for ensuring that those women who do, or may, require intervention are signposted at an early stage to specialist care.

A welcome initiative is the development of Family Nurse Partnership pilot schemes. These were established in 10 pilot areas in March 2007 with a second wave of 20 sites funded from March 2008, as an intensive, preventive, home-visiting programme delivered by specially trained nurses and midwives with experience of working with families in the community. It is a structured programme offered to at-risk, first-time young parents from early pregnancy until the child is two years old, on the basis that pregnancy and birth are key points when most families are receptive to support and extra help and interventions can have significant impact at these times. Early evaluation findings are promising.[271]

The strong evidence for the effectiveness of pre and postnatal home visiting suggests that there is scope for this type of intervention to be developed further, particularly for disadvantaged parents. A key challenge is the recruitment of appropriately skilled and qualified staff in the context of critical shortages of some professionals, such as health visitors. To overcome this, consideration should be given to piloting models deriving from the Family Nurse Partnership to test ways of working with a wider range of families as well as exploring alternative models of intensive home visiting, where there is good evidence of effectiveness.

Parental leave during the first year

Sensitive and responsive parent–child relationships are associated with stronger cognitive skills in young children and enhanced social competence and work skills later in school.[272] It is therefore important that we create the conditions to enable parents to develop this relationship during the child's critical first year. This involves making it practical and affordable, through providing paid parental leave for the whole of the first year, and, where required, providing parents with the understanding and skills needed to forge a positive relationship with their child.

Maternal employment in the first year, particularly if early and full-time, is associated with poorer cognitive development and more behaviour problems for some children. For 1–5 year olds there are no adverse effects of maternal employment on cognitive development, but there may be negative effects on behaviour if children are in poor quality child care for long hours.[273] Research has linked maternal employment to lower levels of breastfeeding, increased rates of obesity at three years and poorer indicators of diet and physical activity at five years.[274] These findings do not imply that mothers, or fathers, should not work, but they do indicate that changes in parental employment patterns are not inevitably benign and they highlight the need for policies to support parents to promote the health of their children and to enable them to remain at home with their child for the whole of the first year, if they so choose.

Paid parental leave is associated with better maternal and child health with studies finding an association with lower rates of maternal depression,[275] lower rates of infant mortality,[276] fewer low birth-weight babies, more breast-feeding and more use of preventive health care.[277] This highlights the importance of parents across the social gradient having access to paid parental leave during the whole of the first year as well as the availability of good quality childcare and flexible employment thereafter, including for those young children with parents not in work who are assessed as likely to benefit.[278] Despite important attempts to make childcare more affordable through the childcare element of the working families tax credits, many parents find it difficult to afford to remain at home with their child for the whole of the first year, even if they would prefer to do so.

Routine support to families throughout the pre-school years

All parents need support at times, and most parents will need to turn to someone for information or advice at some point, particularly if they are first-time parents. Where parents are very young, have other difficulties in their lives or have little social support from their family or community, they are likely to need more support. This may relate directly to parenting, or may be in response to other needs – material, social or emotional – related for example, to income, housing or having access to mental health services that recognise their needs as parents.

Since April 2008, local authorities have had a duty to provide information, advice and assistance to parents and prospective parents of children and young people up to age 20 (introduced in section 12 of the Childcare Act 2006). It is important to maintain this access to universal provision in recognition that all families need help sometimes. Early access to support can also prevent difficulties from escalating and act as a gateway to more intensive or specialist support for those who need it, for example, making a referral to specialist services for disabled children or signposting to advice on income and benefits.

Home visiting and outreach services offering family support for early child development should be provided to all families who have children under the age of three years and are assessed as in need of additional support. These services should be staffed by qualified and experienced key workers drawn from a range of professional backgrounds, for example health visitors, midwives and social workers, capable of offering case management and support for families with complex material, social and health needs. This key worker support should be available throughout the pre-school years to ensure that children access the best quality early years education and have support through the transition to school, as well as ensuring that parents receive consistent parenting support and signposting to other appropriate services, including evidence-based parenting programmes.

Early years key workers need the skills to provide advice and support to parents on child development, to identify where there are additional needs and facilitate access to specialist input, including child health, where required. Key workers may be drawn from the statutory sector, for example from the local authority, Children's Trust or Primary Care Trust, but key worker support could equally be commissioned from third sector organisations.

Sure Start Children's Centres are an obvious source of this outreach support and many are already providing it. These centres are intended to be service hubs where children under five and their families can receive integrated services and information.[279] Services vary but should include access to early education and childcare, parenting support, family health services and help for parents to obtain work. By the end of March 2010 there will be at least 3,500 Sure Start Children's Centres and it remains important for local authorities, Primary Care Trusts and Job Centres Plus to ensure that these services are provided consistently in all areas and meet the needs of families across the social gradient.

It remains important to ensure that Sure Start Children's Centres reach families who could benefit the most. Many parents seek out and make use of their local Children's Centre and a very small minority who have come to the attention of children's social care services because of safeguarding concerns may get referred to a Children's Centre. However, it has been observed that families not using Children's Centres can include those who are not coping well but whose difficulties have not come to the attention of statutory services.[280] Such families may not know about the potential benefits of Children's Centre services, or may actively avoid them. Reaching these families requires sensitive outreach and the provision

of non-stigmatising support that brings direct and tangible benefits to the families concerned as well as supporting child development – for example, enabling access to housing support and benefits/debt advice as well as parenting programmes. The DCSF is currently working with the Children's Workforce Development Council (CWDC) on developing a training course for Children's Centre practitioners engaged in outreach, to build on and develop the ways in which they undertake this sensitive and important work.

Parents are the most important 'educators' of their children for both cognitive and non-cognitive skills. Parental involvement in their child's reading has been found to be the most important determinant of language and emergent literacy.[281] Parenting style also makes a difference. Recent analysis of data from the Millennium Cohort Study suggests that parents who combine high levels of parental warmth with high levels of supervision are more likely to have children at age five who are more confident, autonomous and empathic. On the other hand, a 'disengaged' parenting style is associated with poorer outcomes for children.[282]

There is a growing body of evidence that theoretically sound parenting programmes, which are underpinned by strong research evidence, can provide positive gains for parents and children.[283] Reviews have found that parent-training programmes can be successful in improving maternal psychosocial health,[284] in improving emotional and behavioural adjustment of young children under three,[285] and in contributing to safer home environments and reduced unintentional injuries in children.[286] However, quality and consistency of delivery are critical to the effectiveness of parenting support programmes. Trials of the Incredible Years programmes in the US and UK have demonstrated effectiveness in the treatment of conduct disorders

and for children known to be at risk of developing them. The programmes contain the key components recommended by NICE.[287] Investment in parenting support needs to be accompanied by measures to ensure that programmes are consistently delivered to the level of quality shown to have the best results.

Attention also needs to be given to ensuring that the most effective parenting programmes reach parents across the social gradient. Despite the substantial increase in the availability of parenting support in disadvantaged areas, there remains concern that it is still not reaching the most disadvantaged parents in those areas.[288] A recent report on follow up work to support implementation of the NICE/SCIE guidance on parenting programmes discusses effective approaches to maximise take-up of programmes.[289]

Summary
— Early interventions during pregnancy and ongoing support in early years are critical to the long-term health of the child and other long-term outcomes.
— Universal and proportionately targeted interventions are necessary.
— Emerging evidence shows that Sure Start Children's Centres have a positive impact on child outcomes.
— Families have the most influence on their children.
— Adequate levels of income and material and psychological support and advice for parents across the social gradient are critical.
— Intensive home visiting is effective in improving maternal and child health.
— Good parent–child relationships in the first year of life are associated with stronger cognitive skills in young children and enhanced competence and work skills in schools.

What makes parenting programmes effective?

The National Academy of Parenting Practitioners (NAPP) lists eight parenting programmes for which there is currently a good evidence base.[290] These are:
— Incredible Years
— Parenting Positively
— Triple P
— Strengthening Families Strengthening Communities
— Family Links
— Mellow Parenting
— Strengthening Families Together (10–14)
— Families and Schools Together

NAPP identifies three key elements underpinning evidence-based parenting interventions: eligibility criteria, fidelity and the intensity with which it is delivered (sometimes referred to as 'dose').

Eligibility criteria
These need to be used to ensure that the target group of parents are those whom the research shows are most likely to benefit from the selected programme.

Fidelity
Most evidence-based programmes have a set of 'active ingredients' that are essential for ensuring they remain effective. Programmes need to be delivered with sufficient fidelity to ensure that these are not lost.

Intensity
The amount of intervention received affects its impact. There is a need to ensure that parents sustain attendance and to increase the level of intensity for those with more complex needs.

A.2.3 Quality early years education and childcare

> **Recommendation:** Provide good quality early years education and childcare proportionately across the gradient. This provision should be:
> 1 Combined with outreach to increase the take-up by children from disadvantaged families
> 2 Provided on the basis of evaluated models and must meet quality standards.

Good early years provision is good for all children, but it has a disproportionately positive impact on the development of disadvantaged children.[291] Attending a high quality or more effective pre-school acts as an important protective factor even for children who go on to attend a less effective primary school.[292]

Good quality early childhood education and care can help to address inequalities in life chances. Research from the US found that high quality centre-based programmes of early education enhance vulnerable children's school-related achievement and behaviour. These effects are strongest for poor children and for children whose parents have little education. Programmes that are continued into elementary school and that offer high 'doses' of early intervention have the most sustained long-term effects.[293] A review of 27 systematic reviews to promote mental health and prevent mental health problems in children and young people found that high-quality pre-school programmes were effective in improving self-esteem and behaviour.[294] The classic High/Scope Perry Preschool Study of a deprived US community consistently found better outcomes for those who had a pre-school programme. They were more likely to hold a job, commit fewer crimes, more likely to have graduated from high school and have higher earnings.[295]

A longitudinal study of 3,000 children (age 3–7 years) from differing social backgrounds across England also found that pre-school education enhanced all-round development.[296] High quality pre-school programmes lead to stronger and more enduring effects on outcomes, especially for disadvantaged children, boys, and children with special educational needs.[297] It was found that an early start and the duration of attendance impacts on effectiveness, as does having higher qualified staff – see Figure 4.2. The key components of quality in early years settings are highly trained managers and staff with good knowledge of the curriculum and how young children learn, combined with skill in adult–child interaction.[298]

In a Daycare Trust report on the costs of quality early years care, two dimensions of quality daycare are described: 'structural' and 'process' aspects.[299] 'Process' dimensions are the characteristics of the child's experience – for example interactions with others, learning experiences, variety in stimulation, responsiveness in environment. 'Structural' dimensions focus on aspects of the environment that are

Figure 4.2 Reading at age 11 by social class and pre-school experience, findings from the Effective Provision of Pre-School Eduction Project (EPPE), 2008

Mean Year 6 reading level

Social Class

- ■ Preschool
- ■ No Preschool

Source: Department for Children, Schools and Families, Effective Provision of Pre-School Education Project[300]
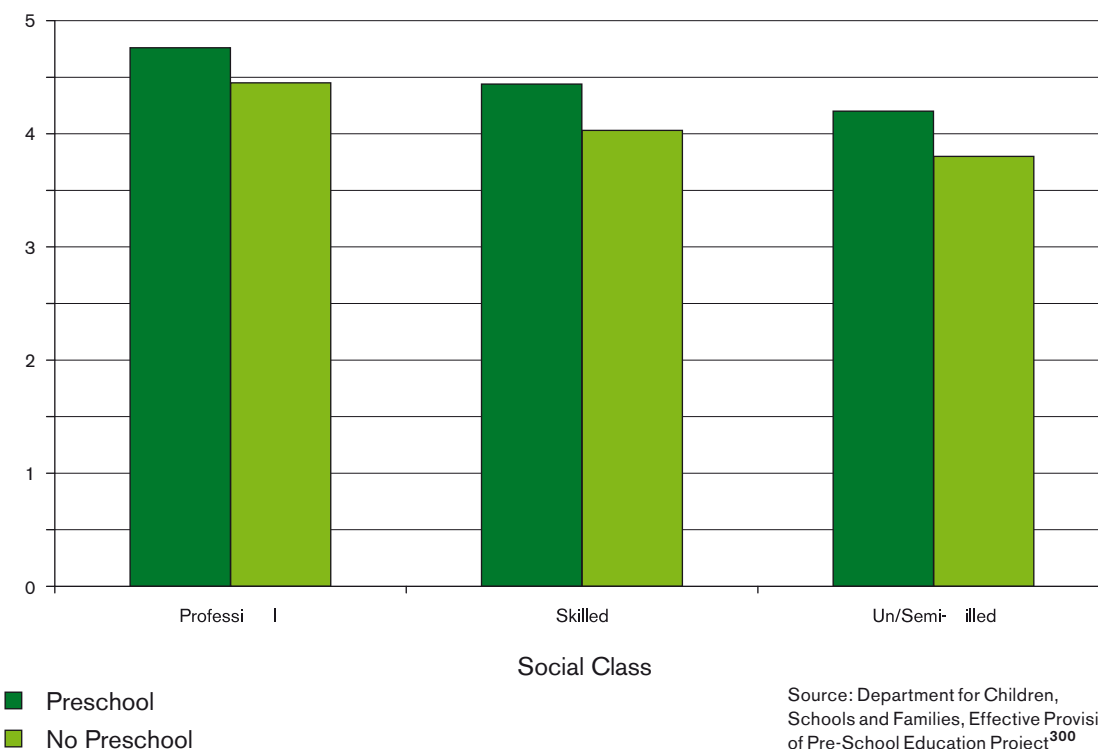
fixed, such as staff and manager qualifications, staff pay, stability/retention of staff, adult–child ratios, group size, management structure, physical environment, and the interaction between these factors.

This evidence supports the argument that priority needs to be given to improving access to the best quality early education and care across the social gradient. There remain concerns that children in disadvantaged areas and/or from poorer families are less likely to access the best quality early years programmes when they are likely to derive most benefit from it. More needs to be done to remedy this situation through outreach work from Sure Start Children's Centres and ensuring that places are allocated and retained according to the socioeconomic composition of the areas they serve.

As well as improving access to early childcare and education, there is a need to ensure that all early years programmes are delivered on the basis of the best available evidence of effectiveness.

When Sure Start was established, its introduction was based on robust evidence of the effectiveness of the Perry pre-school model evaluated over many years in the US. The first Sure Start Local Progammes (SSLPs) in England varied according to local need: all supported children and their families by offering a range of integrated services including early education, childcare, health and family support in specified geographical areas and they pioneered different ways of working with deprived communities. The National Evaluation of Sure Start (NESS)

was commissioned in early 2001 and evidence of what made a Sure Start Local Programme effective became available in 2005 and 2006. This evidence has influenced the subsequent development of Sure Start Children's Centres and the concept of a 'Full Core Offer' which all Children's Centres are now expected to deliver within two years of designation. The ongoing learning from research is vital to ensure that children and families benefit from support based on the best available evidence.

Ensuring the effective integration of prenatal and postnatal policy and service delivery is also critically important. Based on what we know about effective interventions at each developmental stage, from pre-birth to pre-school, policy needs to be aimed at promoting maternal health and a positive family environment both before birth and throughout the pre-school years. There is still concern that some families fall through the gap between pre and postnatal services, particularly when they are the responsibility of different agencies and professional groups.

Currently, there is an unhelpful separation between policy and practice for the prenatal period, including national policies, Local Area Agreement targets and the Lord Darzi clinical pathways groups for infant mortality and maternity care, and those aimed at improving outcomes for early years and child health. This artificial separation gets in the way of more joined-up thinking about improving childhood outcomes. A shared definition of early child

Case Study Providing targeted and universal services to children and families

Linden Children's Centre is located in the Sure Start Local Programme in Hackney Downs, North London. It has a catchment area of five wards with around 2,500 resident children under the age of five. The centre is open from 8am to 6pm, 48 weeks a year and offers 89 day care places and its services reach an average of 800 children under five. The Centre has grown from the combination of an existing Sure Start Local Programme and an early years nursery. The Linden Children's Centre provides both universal and targeted childcare and education services with focus and extended services for vulnerable and low income families.

The universal services offered to the entire community encompass:
— Early education and childcare
— Family support, including visits to all children in the Centre's area within two months of birth
— Links with schools, extended schools, and out-of-school activities
— Links with Children Information Service, Jobcentre and other training providers, including providing information about health services, childcare, early education, play, training,

housing and unemployment along with support for parents and carers who wish to consider training and employment.

Additional targeted services include:
— Early identification of children with special needs and disabilities, with inclusive service and support for families
— Additional visits based on need following a Common Assessment Framework
— Multi-disciplinary team that includes a Family Support Worker
— Accident prevention loan scheme, advice and information
— Increasing involvement of fathers
— Information and guidance on breast feeding, hygiene, nutrition and safety
— Smoking cessation interventions
— Speech and language therapy and other specialist support
— Early intervention parenting programme.

For more information see www.learningtrust.co.uk/childrens_centres/linden.aspx

development needs to include the prenatal period and incorporate an understanding of the impact of intergenerational factors on child health and well-being, that is, the health of mothers and their own nutritional and other environmental experiences during childhood.

Despite these systemic challenges, there are many practical examples of more integrated approaches being developed – for example, Family Nurse Partnership (FNP) programmes working successfully with Children's Centres in preparing for the transition from the end of a FNP programme into Children's Centre support. Ensuring that practitioners such as Children's Centre outreach workers and health visitors work together is of vital importance and, where necessary, local systems need to be adapted to facilitate this.

Providing adequately for families in their children's early years needs to be seen to be the responsibility of a range of agencies alongside Health and Children's Services. An integrated policy framework is needed for early child development to include policies relating to the prenatal period and infancy, leading to the planning and commissioning of maternity, infant and early years family support services as part of a wider multi-agency approach to commissioning children and family services.

A further key priority is the continuing development of the early years workforce. There has been significant investment in recent years in developing an integrated approach to the children's workforce including the development of a core competencies framework. However, the childcare workforce, particularly in the early years, remains low paid and of low status. There are serious concerns about the number of staff available to provide essential early years support. For example, there has been a nearly 13 per cent drop in whole-time equivalent health visitors since 1998 while the number of live births has increased by 8.5 per cent in the same period.[301] There are similar concerns about the availability of qualified and experienced social workers and the number of highly skilled staff working in early years settings. If we are serious about giving priority to supporting families and children in the early years, much more needs to be done to increase numbers and raise the quality and status of the workforce.

This is particularly the case in early childhood education and care settings where quality is key to achieving the best outcomes. There is good evidence that increasing the pay and qualifications in early years settings to match those of equivalent roles in schools can reduce staff turnover and establish the foundations for ensuring that children receive the best early active learning experiences.

Summary
— Good quality early childhood education has enduring effects on health and other outcomes
— These outcomes are particularly strong for those from disadvantaged backgrounds
— A good quality workforce makes a difference to health outcomes but the childcare workforce remains low paid and low status
— Pre and postnatal policy and services should be integrated.

Time period: 2011–2015

1   Increase the proportion of overall expenditure allocated to the early years and ensure expenditure on early years development is focused progressively across the social gradient.

2   Support families to achieve progressive improvements in early child development, including:
—   Giving priority to pre and post natal interventions including intensive home visiting
—   Providing paid parental leave in the first year of life with a minimum income for healthy living
—   Giving routine support to families through parenting programmes, children's centres and key workers, to meet social need via outreach to families
—   Supporting children and families through the transition to school.

3   Provide good quality early years education and childcare proportionately across the social gradient. This provision should be:
—   Combined with outreach to increase the take-up by children from disadvantaged families
—   Provided on the basis of evaluated models and must meet quality standards.

Time period: 2016–2020

1   Continue to incrementally increase expenditure on early years development progressively across the social gradient.

2   Support families and children to achieve progressive improvements in early years development, including:
—   Continuing to give priority to pre and postnatal support including intensive home visiting
—   Progressively increasing the coverage of paid parental leave in the first year
—   Supporting families through parenting programmes, children's centres and key workers, to meet social need
—   Maintaining support through the transition to school.

3   Progressively increase the coverage of good quality early years education and childcare across the social gradient, including:
—   Progressively improving the quality of the early years workforce.

Time period: 2020 and beyond

1   Maintain the higher level of early years expenditure and ensure it is distributed across the social gradient.

2   Support families and children to achieve progressive improvements in early years development.

3   Make paid parental leave in the first year available to all.

4   Make good quality early years education and childcare available to all.

5   Other dimensions of inequality intersect in important and complex ways with socio-economic position in shaping people's health status.

Policy Objective B
Enable all children, young people and adults to maximise their capabilities and have control over their lives

Priority objectives

1   Reduce the social gradient in skills and qualifications.

2   Ensure that schools, families and communities work in partnership to reduce the gradient in health, well-being and resilience of children and young people.

3   Improve the access and use of quality lifelong learning across the social gradient.

B.1   Introduction

To achieve equity from the start, investment in the early years is crucial. However, maintaining the reduction of inequalities across the gradient also requires a sustained commitment to children and young people through the years of education. Central to this is the acquisition of cognitive and non-cognitive skills, which are strongly associated with both educational achievement and a whole range of other outcomes including better employment, income and physical and mental health, as described in Chapter 2. Overall, success in education brings many advantages. If we are serious about reducing both social and health inequalities, we must maintain our focus on improving educational outcomes across the gradient.

Inequalities in educational outcomes are as persistent as those for health and are subject to a similar social gradient, shown in Chapter 2. Despite many decades of policies aimed at equalising educational opportunities, the attainment gap remains. As with health inequalities, reducing educational inequalities involves understanding the interaction between the social determinants of educational outcomes, including family background, neighbourhood and peers, as well as what goes on in schools. Indeed, evidence on the most important factors influencing educational attainment suggests that it is families rather than schools that have the most influence.

Therefore, schools alone cannot address educational inequalities but they clearly do play an important role in the lives of children and young people. This role extends beyond educational attainment: schools and families together are important for promoting the development of children – physically, socially and emotionally as well as cognitively. Education is not just about attainment: it should also enable children to develop their personalities, talents and abilities, to build resilience, self esteem and to live a full and satisfying life.

Learning does not just happen in schools and it does not stop when we leave school. To enable people to fulfil their potential, opportunities for lifelong learning and skills development need to be promoted, not only in formal educational settings, but also in the workplace and in communities.

B.2 Recommendations

B.2.1 Reduce the social gradient in educational outcomes

Recommendation: Ensure that reducing social inequalities in pupils' educational outcomes is a sustained priority.

There is strong evidence that educational achievement leads to a range of positive outcomes, including good health. Prerequisite to such achievement is the acquisition of both cognitive and non-cognitive skills, particularly in early childhood. It is therefore crucial that reducing inequalities in skills development and educational achievement across the gradient remains a top priority objective.

Although the most recent data available from the Department for Children, Schools and Families does show some improvement, as we showed in Chapter 2 serious inequalities persist, despite many years of policy initiatives and investment aimed at narrowing the achievement gap.

Much of the policy focus has been on schools, and clearly school improvement is important. However, many of the influences on educational outcomes are outside the control of schools. Only around 10–20 per cent of the variation in educational attainment between different pupils can be explained by differences between schools and even less variation in other outcomes, such as well-being, can be explained by schools.[302] Just as we cannot hope to reduce health inequalities just by changing the NHS, similarly we cannot radically impact on education inequalities just by intervening in schools.

Other policy initiatives have focused on specific disadvantaged groups, responding to the evidence that some groups of pupils have particularly poor educational outcomes. Such targeted interventions may be important for raising the attainment of some individuals or groups, but have not succeeded in reducing inequalities across the gradient. This leads us to propose that greater emphasis needs to be given to the wider social determinants of educational attainment and wider social inequalities. Family and community-based factors, including material inequalities, are key to both education and health.

Summary
The acquisition of cognitive and non-cognitive skills is strongly associated with educational achievement and a range of other outcomes including better employment, income and physical and mental health.
— The focus on improving educational outcomes across the gradient is crucial to addressing health inequalities.
— Educational inequalities persist.
— Addressing inequalities in education requires action outside of schools.
— Proportionately targeted interventions to meet the needs of disadvantaged groups are needed.

B.2.2 Reduce the social gradient in life skills

Recommendation: Prioritise reducing social inequalities in life skills through:
1 Extending the role of schools in supporting families and communities and taking a 'whole child' approach to education
2 Consistent implementation of the full range of extended services in and around schools
3 Developing the school-based workforce to build their skills in working across school–home boundaries and addressing social and emotional development, physical and mental health and well-being.

There is considerable evidence that inequalities in educational achievement emerge very early and that parents' transmission of skill across the generations is crucially important.[303] For example, the mother's education is a good predictor of a child's cognitive abilities at ages three and five.[304] A clear link has been made between parental basic cognitive skills and the skills of their children.[305] This evidence supports the argument for a continued emphasis on early education as a key policy priority, accompanied by family-based interventions to support parents to develop their child's learning, as well as a continued emphasis on the development of parents' own basic skills through lifelong learning.

The evidence strongly supports the economic efficiency of early years investment that is sustained through the primary school years. Later remediation is possible but it has been estimated to cost 40 per cent more to attain later what can be accomplished by early investment.[306] The impact of investment in the pre-school years is likely to evaporate unless it is sustained through school, particularly through the years of primary education. Children who fail to acquire basic skills in the primary years are likely to fall further behind, as success in later stages of education relies on literacy and numeracy as well as on non-cognitive life skills.

The strength of this evidence supports the argument that priority should be given to early cognitive and non-cognitive development, starting in the early years and continuing through childhood. It is crucial that effective early programmes are followed through with effective provision in the primary years: even the most effective early years interventions can be 'washed out' by poor quality primary education. Success in learning at school is rooted in the stimulation and encouragement a child receives at home, in the family and in the community. Where parents have not gained these skills themselves, disadvantage is passed from one generation to another. School-based interventions need to be linked to work with parents, the family and the community, with an emphasis on enabling parents to support their child's cognitive development and life skills.

Families assessed as in need of progressively intensive support in the early years should continue to be provided with help throughout the transition to school. This transition can be difficult for many

children, with those from disadvantaged backgrounds in particular often coping poorly with the move to a more formal approach to learning. Even the best primary schools struggle with an intake of children who lack 'school readiness', that is, those whose behaviour stops them from learning and/or who lack the necessary communication and social interaction skills, as described in Chapter 2.

Specific interventions such as Reading Recovery (see case study below) have an important role in providing additional support to children who have literacy difficulties. Given the clear links between literacy and other educational outcomes, it is important to maintain support for such well evaluated programmes. However, it is equally important to implement these specific programmes in the context of a holistic approach to children's education.

Strategies in the primary years need to keep involving the whole family.

Integral to this approach is the need to work across school–home boundaries and the provision of a range of extended services around schools to families and communities in their area. The Extended Schools initiative was launched in 2005, as a key vehicle for delivering the Government's objective of lifting children out of poverty and improving outcomes for them and their families.[307]

Subsequently, the terminology has changed to 'extended services' or 'extended services in and around schools', a change that places greater emphasis on the idea that schools, usually working together in clusters, should provide access to a range of services locally, whether delivered by the school and on school premises or not. All schools were required to make a 'core offer' of extended services by 2010, and many are already offering an array of such services. The 'core offer' includes access to a range of activities, childcare in primary schools, community access to school facilities, swift and easy referral to specialist services and parenting support.

An evaluation published in 2007 highlighted positive early findings from full-service extended schools. The evaluation reported that these schools were impacting positively on the attainment of pupils, particularly those facing difficulties, and were having a range of other impacts on outcomes for pupils, including engagement with learning and family stability. Full-service extended schools typically experienced improved school performance, better relations with local communities and an enhanced standing in the area.[308] In the light of such evidence, it is important to continue to embed the development of extended services in and around schools in mainstream practice. There is an important opportunity for schools to play a bigger role in providing resources to families and communities and ensuring a whole-child approach is taken that pays attention to physical and mental health and the ongoing acquisition of non-cognitive skills.

This type of approach has implications for the workforce mix in schools, which will increasingly need more professional non-teaching staff with skills in, for example, enabling children's play and young people's self-directed leisure and in working across school–home boundaries to help parents to encourage and support their children's learning. It also has implications for the role of schools as commissioners of services to provide a broader range of support to families and children both in and out of school.

As guidance from Play England shows, play forms a vital part of a happy childhood, as well as being important for children's ongoing and future well-being.[309] Play may help to combat childhood obesity by increasing activity levels; aid children's mental and emotional responsiveness; improve their social skills; and promote their resilience. Play also helps children to develop learning and problem-solving skills, key to their ability to achieve in school and in later life.[310] As part of their extended services, schools have an important role in maximising the value of play and leisure activities for child development.

One of the tenets of education is that children learn more and better when they enjoy it. The final report of the Independent Review of the Primary Curriculum highlighted the importance of play and proposed extending and building on the active, play-based learning of the Early Years Foundation Stage across the transition to primary education, especially into Key Stage 1.[311] Opportunities for play are an important feature of after-school provision as part of the varied menu of activities and the childcare elements of the core offer of extended services, which all schools were required to provide by 2010.[312]

The considerable amount of time children and young people spend in school means that schools have the potential for fulfilling an important role in

Case Study Reading Recovery

Evaluations of specific early literacy interventions such as Reading Recovery (implemented in England through the Every Child a Reader programme) have shown positive findings. Children participating in Reading Recovery are shown to make significantly better progress than children receiving alternative interventions.[313]

An economic analysis of the benefits of Every Child a Reader by KPMG estimated that the scheme could offer a return of more than £17 in the next 31 years for every £1 spent now, based on the estimated costs of problems associated with poor literacy such as truancy and poor employment prospects.[314]

Maintaining support for programmes that are well evaluated is key to realising a reduction in health inequalities in educational outcomes.

promoting the health and well-being of children and young people and laying the foundations for healthier outcomes in adulthood through school-based health programmes.

Interventions to address health through schools fall into two main types: specific programmes delivered in educational settings, and targeted on particular health outcomes, and/or particular groups of learners for example, focusing on drug misuse, mental health, teenage pregnancy, or obesity. The second type can be broadly termed 'environmental' interventions, aimed at creating school environments that have characteristics held to produce better health outcomes. In practice, the distinction between environmental and programmatic approaches is often one of emphasis, with some combination of the two present in some instances.

There is some evidence that targeted health programmes in schools can have significant impacts on certain health outcomes. A review of the international evidence suggests that the evidence is strongest in relation to school-based programmes targeting mental health, healthy eating and physical activity.[315] This review of the effectiveness of targeted interventions aimed at promoting the mental well-being of children aged 4–11 suggested that anxiety prevention programmes based on Cognitive Behavioural Therapy can be effective. Brief interventions worked better for emotional problems than for conduct problems. Multi-component programmes showed positive effects in social problem solving and the development of positive peer relations. However, the review also concluded that having more than one condition at the same time made intervention delivery difficult and long-term outcome evidence was lacking.

Evidence from the US suggests that social and emotional learning (SEL) programmes improve students' social-emotional skills, attitudes about self and others, connection to school and positive social behaviour. SEL was also found to improve students' conduct problems and emotional distress. SEL programmes were found to be effective in both school and after-school settings, for racially and ethnically diverse students, and for students with and without behavioural and emotional problems.[316] In England, the mental health programme SEAL ('social and emotional aspects of learning'), has been promoted by government, and there is some evidence of positive outcomes.[317] However, reviews of the evidence suggest that the effects of programmes are variable, plus there are problems with the robustness of the evidence base.[318] Most evaluations focus on relatively short-term impacts and it is less clear as to whether or not these are sustained in the long term.

Internationally, there is considerable interest in 'health promoting schools' initiatives that support schools in taking wide-ranging action so that they, for instance, develop a formal health curriculum, a health-promoting physical and socio-emotional climate, and health-oriented school-community interactions.[319] Such a combination is currently being attempted in England through the National Healthy Schools Programme, established in 1999, and where the strands include personal, social, health and economic (PSHE) education, healthy eating, physical activity and emotional health and well-being.[320] There are some similarities between initiatives of this kind and school improvement programmes that seek similarly wide-ranging developments in the characteristics of schools associated with better educational outcomes. Indeed, some of

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Case Study Meeting children's emotional needs at school

The Place2Be is a charity working inside schools to improve the emotional well-being of children, their families and the whole school community. The Place2Be provides counselling services to children in some of the UK's most deprived neighbourhoods. It is currently working in 155 schools across the UK in 17 regional hubs, making services available to over 50,000 children.

Along with those experiencing everyday worries about friendships and football teams, counsellors regularly see children who lash out or self-harm; children who have witnessed stabbings or violent gang initiations; children living with parental drug or alcohol misuse. The Place2Be provides one-to-one and group counselling services to help children to make sense of their experiences, to cope and make better-informed decisions about their lives, enabling them to learn more effectively and to move through school with growing prospects rather than growing problems.

The organisation has an in-house research and evaluation team working closely with an advisory committee of external academics. All children taking part in one-to-one and group work are assessed at the beginning and end of the intervention using Goodman's Strengths and Difficulties Questionnaire, an externally-validated tool for assessing children's emotional and social difficulties. Results show that, for most children, there is a significant improvement between their entry and exit scores – with 71 per cent showing improved total difficulties scores after engaging with the service according to parent ratings, and 60 per cent showing improved scores according to teacher ratings.[321]

Providing this type of emotional support and helping to build resilience in children should be mainstreamed and offered in every school and is key to a successful extended school.

For more information see www.theplace2be.org.uk

the characteristics of health-promoting schools are themselves similar to those that seem to make schools educationally effective.[322]

There is some evidence that health-promoting schools can have positive impacts. The nature of the school environment seems to have an impact on health outcomes for pupils and there is evidence that it is possible for schools to change in ways that can impact on health-related behaviours, knowledge and attitudes.[323] The evidence informing and emerging from the National Healthy Schools Programme in England suggests that well designed, broad-based whole-school approaches to promoting health can have a positive impact on health – as well as on education-related outcomes among children and young people.[324] However, neither the process of school change nor the impact of changed school practices on children is straightforward and it is not clear how far impacts in the school years translate into better adult health outcomes.[325]

Summary
— A clear link exists between parental cognitive skills and the skills of children.
— When early years investment is sustained through the primary years it has most benefit.
— Children who fail to acquire basic skills in the primary years are likely to fall further behind and have more limited life chances.
— Success at school is rooted in the stimulation and encouragement a child receives at home and in the community. School-based interventions need to link with families and communities.
— Extended services based in schools have a positive impact on pupil attainment and on family stability.
— Play develops life and cognitive skills.

B.2.3   Ongoing skills development through lifelong learning

Recommendation: Increase access to and use of quality lifelong learning opportunities across the social gradient by:
1 Providing easily accessible support and advice for 16–25 year olds on life skills, training and employment opportunities
2 Providing work-based learning, including apprenticeships, for young people and those changing jobs/careers
3 Increasing availability of non-vocational lifelong learning across the life course.

Lifelong learning has the potential to impact on health inequalities in two ways. Centrally, but indirectly, it is important for providing the skills and qualifications for employment and progression in work; and directly there is evidence that participation in adult learning in itself impacts on health behaviours and outcomes.

As discussed in Policy Objective C, employment status is closely linked to health, with those in higher status jobs being healthier; and there is a clear relationship between unemployment and poorer health.

Not having qualifications or having only low levels of skills are both associated with lower chances of being employed and being in lower paid work. Gaining skills and qualifications can have an impact on income, although the wage return varies according to both the type and level of qualification obtained. The evidence points to the importance of providing opportunities for people to acquire higher levels of skills and qualifications beyond compulsory education.

In recent decades, investment in post-compulsory learning has been heavily weighted towards the 18–25 age group, as shown in Figure 4.1. Young adults are clearly important recipients of this investment as new entrants to the labour market. However, a large proportion of this overall expenditure goes into higher education which disproportionately benefits middle class young people and those with higher academic attainment. There remain some serious gaps in the provision of vocational skills development for other groups of young people, in particular access to work-based learning routes. As noted in the next section, young people are still the group most likely to be unemployed and to be in low-skilled jobs.[326] Ensuring that young people receive individualised support to gain skills involves starting well before they leave school and maintaining the support through the transitional years from 16–25.

Participation in post-compulsory education has a range of potential benefits relevant to health outcomes. Participation in any form of learning may stimulate further personal development which may provide the opportunity to progress in the labour market, as well as other benefits. For example, acquiring NVQ2 has been shown to increase the likelihood of participating in further accredited learning.[327] There are also consistent findings that adult learning improves confidence[328] and self-efficacy,[329] which have been shown to be positively associated with health behaviours.[330] Adult education has been shown to increase social capital, which is in turn associated with better health.[331]

Analysis of cohorts of adult learners shows that participation in adult learning contributes to positive and substantial changes in health behaviours. For example, the estimated effect of taking one to two courses (of any type) between the ages of 33 and 42 is a 3.3 percentage point increase in the probability of giving up smoking.[332] However, the evidence also seems to suggest that the greatest benefits are gained by those who are already likely to be healthier. If people from lower socioeconomic groups gain fewer health benefits from education than those from higher socioeconomic groups then a general increase in learning activity could widen rather than narrow health inequalities. The conclusion here, then, is that if an aim of policy is to narrow health inequalities through adult learning, it needs to target its attention at those who could benefit most to have the most positive effect.

The Government's White Paper 'The Learning Revolution' outlines its latest plans to further increase the level of lifelong learning in England, but the total funds spent on lifelong learning are not expected to rise. The direction of learning and skills policy

remains focused on those in work, through policies like Train to Gain.

While such a work-based approach may still have beneficial effects on the health of those who newly engage in learning and may even narrow inequalities in health outcomes among the in-work segment of society, it may perversely increase the disparities between those in work and those out of work. Given that the latter include the most socially disadvantaged, non-work-based lifelong learning policies need to be available to the unemployed and economically inactive to have any effect on tackling health inequalities. A comprehensive policy is required that would encourage people not in work to participate in learning activities in greater numbers. This will need to include readily available information and advice to point people in the direction of learning opportunities.

Summary
— Participation in adult learning impacts positively on health behaviours and outcomes.
— Gaining skills and qualifications can have an associated impact on income.
— Support and advice over ongoing learning, training, housing, debt, physical and mental health and relationship concerns is particularly important for the 16–25 age group, who miss out on many other forms of help and support.
— Adult learning improves confidence and self-efficacy, increases social capital and leads to positive and substantial changes in health behaviours.

B.3   Policy Recommendations

Time period: 2011–2015
1   Prioritise reducing social inequalities in pupils' educational outcomes.

2   Prioritise reducing social inequalities in life skills by:
— Extending the role of schools in supporting families and communities and taking a 'whole child' approach to education
— Consistently implementing the full range of extended services in and around schools
— Developing the school-based workforce to build their skills in working across school–home boundaries and addressing social and emotional development, physical and mental health and well-being.

3   Increase access to lifelong learning opportunities across the gradient, by:
— Providing support and advice for 16–25 year olds on life skills, training and employment opportunities, delivered through centres that are easily accessible to young people
— Increasing opportunities for work-based learning for young people, including apprenticeships, and for those changing jobs/careers.

Time period: 2016–2020
1   Ensure that the priority in improving educational outcomes is implementing effective interventions to reduce the social gradient.

2   All schools should take an extended role in supporting families and communities and take a 'whole-child' approach to education by:
— Delivering a full range of extended services in and around schools
— Having the school-based workforce work across school–home boundaries and address social and emotional development, physical and mental health and well-being.

3   Further extend access to lifelong learning opportunities across the gradient, by:
— Maintaining and providing further resources of easily accessible support and advice of 16–25 year olds
— Further extend work-based learning for young people and those changing jobs/careers
— Increase availability of non-vocational life-long learning across the life course.

Time period: Beyond 2020
1   Improvements in educational outcomes focused on reducing the social gradient.

2   Schools to provide a 'full service' approach in supporting families and communities and take a 'whole child' approach to education.

3   Increase the use of lifelong learning opportunities across the gradient, by intensive resourcing of:
— Easily accessible support and advice for 16–25 year olds
— Work-based learning for young people and those changing jobs/careers
— Non-vocational life-long learning across the life course.

Policy Objective C
Create fair employment and good work for all

C.1   Introduction

As the evidence outlined in Chapter 2 shows, being in good employment is protective of health. Conversely, unemployment contributes to poor health. Getting people into work is therefore of critical importance for reducing health inequalities. However, jobs need to be sustainable and offer a minimum level of quality to include not only a decent living wage but also opportunities for in-work development, the flexibility to enable people to balance work and family life, and protection from those adverse working conditions that can damage health.

The evidence suggests that policy to reduce the social gradient in employment and working conditions should be focused on two interrelated aims:
— First, to reduce the adversity of working conditions and employment.
— Second, to target interventions proportionately towards lower socioeconomic groups.[333]

The importance of employment and the quality of work is recognised by policy-makers and reducing unemployment in particular has been a primary aim of a range of policy initiatives over the past 15 years. At least some of these have met with some success and potentially improved health among the workforce. In particular, Public Service Agreement 16, on socially excluded adults, sets out the Government's aim to increase the proportion of socially excluded adults in education, training and employment.

C.2   Recommendations

C.2.1   Active labour market programmes

Recommendation: Prioritise active labour market programmes to achieve timely interventions to reduce long-term unemployment.

Active labour market programmes (ALMPs) seek to integrate the unemployed into work rather than simply providing passive income support to people without work. ALMPs can be classified into several types. There is direct job creation, which is often offered to the long-term unemployed as either a means of preserving good working habits or a work-test for benefit receipt. A second approach is that of direct government subsidies to employers to maintain staffing (wage subsidies), or grants for entrepreneurial start-ups. Third, retraining and reintegration programmes may be offered to increase occupational and industrial mobility among the unemployed. Last, some ALMPs focus on improving the efficiency of the job-matching process, including mobility grants, re-interview programmes, and efforts targeted at groups at risk of long-term unemployment.

ALMPs have become a major feature of both domestic and international labour market policy and social development interventions. OECD countries in particular have extensive experience with ALMPs, often targeted at the long-term unemployed, workers in poor families, and particular groups with labour-market disadvantages. In England they form a core component in the delivery of welfare-to-work policy, the New Deal programmes and broader policies of urban regeneration. The long-term unemployed, young people and lone parents have been the focus of government attention, with emphasis on work as the best route to prosperity and increased social mobility for disadvantaged individuals and communities. Programmes such as the New Deal are used to increase employability and reduce the risk of being unemployed. Interventions include job search assistance and training, as well as wage and employment subsidies, aiming to enhance labour supply and improve the functioning of the labour market.

Particular attention has been given to lone parents through the New Deal for Lone Parents (NDLP), in response to concerns that these parents and their children are one of the most vulnerable social groups in the UK. There are concerns about the exceptionally low rates of employment among lone parents and

a growing consensus that this leads to poverty and social exclusion. The NDLP has since undergone successive reforms towards a more mandatory and tailored system.

So how effective have these initiatives been? The evidence suggests that they have had some success in getting people into jobs. Reductions in overall unemployment from 1997 onwards were clearly partly attributable to sustained economic growth, but the New Deal programmes are believed to have played a contributory role.[334] But in general, most progress was made in the period up to 2001. After that the long-term unemployment rate flattened out, while the rate for 18–24 year olds flattened and started to rise from 2005. By the first quarter of 2008 it was back to pre-New Deal levels.[335] The employment rate of lone parents has increased steadily, from 46 per cent in 1997 to 57 per cent in 2007, albeit not rapidly enough to be on target to reach 70 per cent employment by 2010. There has also been a slow but steady rise in employment and activity rates for disabled people.

It is striking that the groups for whom no programme of assistance was available, young people aged 16 and 17, saw unemployment rise steadily. One in four of the economically active in this age group was unemployed in 2007. Of course, the current recession presents a major threat to the progress that was made up to the end of 2007, with unemployment starting to rise sharply after the first quarter of 2009.[336]

There is also some evidence that ALMPs have contributed to increasing income among recipients, though they have been most effective when combined with other fiscal and benefits measures to 'make work pay'. For example, since the NDLP and complementary measures have been in place, lone parents in the UK have increasingly moved into employment and relative poverty among lone parent families has substantially declined. The different qualitative and quantitative evaluations and studies carried out to date suggest that the implementation of active labour market programmes, New Deal for Lone Parents and New Deal Plus for Lone Parents, combined with measures to make work pay through the Work Family Tax Credits (WFTC), partly account for this positive trend.

Evaluations of ALMPs, and the government training programmes used to deliver them, have mostly examined labour market outcomes such as earnings, re-employment opportunities and the cost effectiveness of programmes. This is clearly important for health inequalities: if ALMPs can be shown to improve participants' basic skills and education, thereby increasing their potential for entering the labour market and securing employment, the indirect health benefits could be very significant. However, there is less evidence, particularly from the UK, on how these policies and social interventions directly affect the quality of life, in particular the health and well-being, of those they intend to help. The evidence that is available suggests that participation in ALMPs, specifically government training programmes, can have a positive effect on the psychological health and subjective well-being of the participants compared with unemployed people not involved in an ALMP.

Making a substantive claim for the potential of ALMPs to reduce health inequalities more broadly is problematic given the individualised and context-specific nature of the evidence available. For example, the effects of ALMPs seem to vary according to a range of individual factors, including the initial attitude of participants to work, or 'job readiness', and the effectiveness of their allocated adviser. However, the evidence does suggest that health improvements can occur via participation in ALMPs, despite material circumstances remaining poor, via psychosocial mechanisms such as increased social contact, social support, and generating feelings of control and self-worth.

There is also good evidence that ALMPs can have significant benefits for people with mental health difficulties. Employment for people with a range of mental health conditions can promote both recovery and social inclusion by providing routine, purpose, income, social interaction and self-confidence[337] and there is evidence that those with long-term mental health problems can return to paid work with appropriate support.[338] A Europe-wide trial of Individual Placement and Support (IPS), a vocational rehabilitation model that provides individuals with support to find and sustain open employment, reported positive results. During an 18-month follow-up period, over 50 per cent of those with a severe mental illness who received IPS worked at least one day compared with only 28 per cent of those who did not.[339]

This adds to the body of evidence that vocational rehabilitation services, particularly IPS, can significantly increase rates of employment in those with a mental illness.[340] This evidence has been reflected in the New Horizons programme, launched in December 2009 as a cross-government programme of action to help improve everyone's mental well-being, and the services that provide mental health care.[341] A national mental health and employment strategy was also launched in December 2009, designed to improve well-being at work for everyone, and to deliver significantly better employment results for people with mental health conditions.[342]

Overall, it can be concluded that active labour market programmes to assist disadvantaged groups to move into employment have been successful when measured by the relatively short-term indicators currently available. However, there is a need to further investigate the longer-term impacts of these programmes. Issues such as job retention, progress in the labour market, the net effect on income, and specific health outcomes have not been a priority in research and evaluations so far.

Summary
— Unemployment and particularly long-term unemployment has significant impact on physical and mental health.
— Being in good work protects health.
— ALMPs should intervene early and work best when combined with other fiscal and benefits measures.
— ALMPs can lead to health improvements, particularly benefits for mental health. More research is needed to better understand their impact.

C.2.2 The development of good quality work

Recommendations: Encourage, incentivise and, where appropriate, enforce the implementation of measures to improve the quality of work across the social gradient by:
— Ensuring public and private sector employers adhere to equality guidance and legislation
— Implementing guidance on stress management and the effective promotion of well-being and physical and mental health at work.

Develop greater security and flexibility in employment by:
— Prioritising greater flexibility of retirement age
— Encouraging and incentivising employers to create or adapt jobs that are suitable for lone parents, carers and people with mental and physical health problems.

As we have already noted, creating jobs is not sufficient to impact on health inequalities. Just as important is the creation of 'good jobs'. There are 10 core components of work that protects good health and promotes health. Good work is:[343]
— Free of the core features of precariousness, such as lack of stability and high risk of job loss, lack of safety measures (exposure to toxic substances, elevated risks of accidents) and the absence of minimal standards of employment protection.
— Enables the working person to exert some control through participatory decision-making on matters such as the place and the timing of work and the tasks to be accomplished.
— Places appropriately high demands on the working person, both in terms of quantity and quality, without overtaxing their resources and capabilities and without doing harm to their physical and mental health.
— Provides fair employment in terms of earnings reflecting productivity and in terms of employers' commitment towards guaranteeing job security.
— Offers opportunities for skill training, learning and promotion prospects within a life course perspective, sustaining health and work ability and stimulating the growth of an individual's capabilities.
— Prevents social isolation and any form of discrimination and violence.
— Enables workers to share relevant information within the organisation, to participate in organisational decision-making and collective bargaining and to guarantee procedural justice in case of conflicts.
— Aims at reconciling work and extra-work/family demands in ways that reduce the cumulative burden of multiple social roles.
— Attempts to reintegrate sick and disabled people into full employment wherever possible by mobilising available means.
— Contributes to workers' well-being by meeting the basic psychological needs of experiencing self-efficacy, self-esteem, sense of belonging and meaningfulness.

A range of evidence on the most effective interventions to create better work is summarised below.

C.2.3 Reducing physical and chemical hazards and injuries at work

Employers have a responsibility to comply with legal requirements and to provide qualified personnel to monitor and control conditions of work. Successful implementation requires the laws to be sufficiently robust, the enforcement agencies to be adequately

Case Study Improving lifelong learning opportunities for low-paid workers

In Northern Ireland, the union UNISON has developed a partnership programme with Health and Social Care Trusts and the Open University. Staff from across disciplines in health and social care are eligible, including those working in direct care provision, administration, catering, cleaning, security and labs. The programme aims to support health and social care staff to improve their practice, develop knowledge and skills and to award them with a qualification that would support them to improve their skills and job possibilities.

The academic course engages learners who may never have considered university study an option for them. Approximately 70 per cent of those coming onto the programme left school with fewer than five O'Levels/GCSEs. UNISON developed a study skills course and an exam preparation day as part of the programme and negotiated release for staff to attend tutorials. Additional support was put in place for learners with dyslexia and close contact between UNISON and the Open University during each course ensured that extra support could be provided for learners if needed. This has resulted in a much higher retention rate than the UK average.

Participants have used the course to enter preregistration nurse training, gain job promotions (for example, a kitchen stores worker [band 1] applied and succeeded in gaining a position as a rehab worker [band 3]) and pursue further study with the Open University towards a full degree.

The partnership has supported over 500 low-paid workers to access the level 4 Health & Social Care certificate, which awards 60 credits towards a degree.

For more information see www.ulearnni.org

resourced and the legal framework to be sufficiently clear to enable prosecutions to succeed – for example, the limited successful use of recent corporate manslaughter legislation in England. As an essential prerequisite, an unambiguous and comprehensive risk assessment has to be established. In the UK, the Health and Safety Executive (HSE) has developed the necessary tools and procedures and has responsibility for implementation.[344] A recent extension includes the assessment of a stressful psychosocial work environment (see below).

A further challenge concerns the prevention of injuries and accidents at work. The legal and organisational measures undertaken by occupational cooperatives in Germany over the last century have been particularly successful. For instance, over a period of 40 years, from 1960 to 2000, the number of work-related accidents was reduced from 140 per 1000 employees to 40 per 1000 employees. Major measures included improved monitoring and documentation of accidents, systematic implementation of safety measures performed by a well-trained new professional group (safety experts), such as instruction-related or technological innovations, and comprehensive legal regulations protecting vulnerable groups. As several low status occupations were at increased risk, such as construction workers, wood and sawmill workers, farmers and agricultural workers, they had the largest health gain.

More recently, a nationwide campaign against falls at work was launched in Germany, where public personalities from sport and films served as role models to reinforce appropriate behaviour. This approach had previously been shown to be effective among less educated occupational groups. Among occupations involving frequent physical mobility (for example, using stairs frequently or involving heavy lifting or dragging), falls were reduced by 15 per cent during the two-year campaign.[345] Another trial with relevance to injury prevention, conducted in the US, concerned increased autonomy at work. Particularly relevant for manual workers, this study

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Case Study A great place to work

Artizian is a medium-size catering company with contracts held nationally. It employs 350 people and 30 per cent of its staff work part-time or are casual workers. It provides fresh-food catering in restaurants of blue-chip companies. Artizian has a strong belief in a shared company vision, integrating employees' views into its work strategy, and making all senior management known to all workers, keeping them visible and seen to work. The company's motto, which it seeks to share with all of its employees, is to 'eat, work and enjoy every day'.

In 2009 Artizian won the Health, Work and Well-being award at the National Business Awards. It was rewarded for improving the health and well-being of its workforce in a way that also benefits the organisation. Artizian has also received health and safety awards because of its low level of accidents. It offers yearly health and safety training for all staff, rather than the statutory requirement of training every three years. Artizian provides all new staff (at all levels) with two days' induction and in the catering industry where employers have to take over existing employees when winning a new contract, this means providing training to employees who may have had little, if any, previous training.

Artizian has highly visible policies on stress at work and seeks to ensure that staff are aware that their health will be a priority. For example, it provides return-to-work interviews for those returning from long-term illness. While the company cannot afford an occupational health therapist, it employs a consultant and a nutritionist to monitor sickness and provide advice to staff. Its sickness benefits are comparable (or lower) than similar companies' benefits. Artizian finds its staff do not use these benefits, instead depending on other forms of support it offers. It has a low staff turnover at all levels, from management to kitchen porters.

Artizian attributes the main elements of its success in retaining staff and the low level of absence due to sickness to:
— Providing learning and development opportunities for staff at all levels, including alternatives to formal external training when budgets are tight.
— Committing to its values, even when times are difficult: it looks after redundancies and does not cut the training budget.
— Liaising with GPs (with the employee's permission) to provide support to the employee with their health and health care to get people back to work.
— Consulting with staff and going beyond formal statutory requirements, for example, running a regular 'gossip' session for staff, allowing staff to informally voice their concerns.
— Rewarding the 'employee of the month' with a day off.
— Recruiting staff who hold similar values to the company and training managers to understand the company's values and its benefits.

Artizian's methods demonstrate that there are inexpensive methods to meet their employees' psychosocial needs and provide a healthy workplace. Its efforts have led to being rewarded not only with the National Business Award, but also with low sickness levels and low staff turnover.

For more information see www.artizian.co.uk

found that increased control over the pace of work had a protective effect on the risk of occupational injury.[346] Importantly, organisational commitment, mainly from managers, and self-managing work teams, where feasible, reinforced this effect.

A recent Europe-wide project on the impact of safety representatives on reducing occupational health hazards concluded that having trade union representation in the assessment and control process leads to better compliance with the rules, lower accident rates and fewer work-related health problems.[347]

C.2.4 Shift work and other work-time factors

The current available evidence does not suggest that restructuring the work schedules of manual shift workers will achieve large reductions in social inequalities in health. However, it does indicate considerable room for improvements of work-time organisation in daytime work, as follows:

— Given the health-adverse effects of long working hours, overtime and excessive work, hours need to be controlled more systematically, particularly in jobs where legislation is often not strictly applied.
— The implementation of rest breaks is desirable, particularly in jobs with a fast pace, work pressure, multiple interruptions and monotony. Rest breaks have been found to reduce the risk of injury.[348]
— Individual work-time control, for example with regard to flexitime or time banking, was shown to reduce sickness absence, specifically among employed women, and to moderate adverse effects of psychosocial stress at work on sickness-related absence.[349]

C.2.5 Improving the psychosocial work environment

Several recent systematic reviews have summarised current evidence on health effects following improvements of the psychosocial environment.[350] A majority of intervention studies have addressed behavioural changes, especially stress management programmes, while fewer have tested the effects of changes in the work environment. Several conclusions can be drawn from these reviews:

— Relatively consistent results were obtained on the positive effects on mental health and, where available, sickness absence from interventions that increased participants' job control and degree of autonomy at work.[351] There is less evidence for the positive effects of reducing demands or augmenting social support.[352]
— Interventions that worked well were characterised by a participatory approach involving employee representatives and management personnel, for example in the form of 'problem-solving committees' or 'health circles'.[353]
— Increasing task variety as part of the job and strengthening team working resulted in inconsistent and at best modest improvements in health. Similarly, introducing more autonomous production groups in factory-based mass production did not show the desired effects on health.[354]

— Work-related burnout and psychobiological stress reactions were significantly reduced by reward-enhancing measures based on organisational and personnel development, including leadership training.[355]

There is emerging evidence that the combined effects of making changes to the setting-focused work environment and employee-focused mechanisms for coping with adverse work are stronger and more sustainable than their separate effects.[356] Thus, tailoring organisational interventions to specific subgroups or contexts provides an effective approach to achieving intervention goals.

Several studies indicate that combining change to the work environment with healthy lifestyle interventions in employees increases the probability of them adopting health-promoting behaviour. This is the case not only in white-collar employees, but also in skilled blue-collar workers.[357] The latter results are relevant in view of the well-documented steep social gradients in health-adverse behaviours and of the potential for preventive gain by reducing them.

Health-promoting psychosocial work environments have been shown to improve return to work in the chronically ill and particularly in people with mental health problems, so preventive and rehabilitative efforts need to be strengthened.[358] In addition, there is a strong business case in terms of sickness absence reduction and productivity gain for introducing such measures, in particular the Individual Placement and Support Models.[359]

In conclusion, despite the paucity of intervention studies directed at the work environment and the methodological limitations of many of them, there are some promising first results that illustrate the potential health gain that could be achieved by improving the psychosocial quality of work environments. Lack of control and lack of reward at work have been shown to be critical determinants of a variety of stress-related disorders and to be more prevalent among lower occupational status groups. Focusing interventions around these dimensions and targeting less privileged groups within the workforce is a high priority. The evidence suggests that structural (mainly organisational and workplace-related) and personal (mainly behavioural) interventions may improve the health and well-being of exposed groups within the workforce.

Obviously, there are many obstacles to promoting and expanding good work. For instance, labour market constraints may prevent any rapid decrease in low- skill jobs and the current economic crisis may undermine efforts towards establishing regulatory control on downsizing, subcontracting and outsourcing. However, a large 'unused' potential for developing and expanding 'good' working conditions exists in all advanced and rapidly developing economies where the benefits of implementing 'good' work include medium-term and long-term increases in return on investment, enhanced productivity, health and commitment of workers, and reduced costs related to sickness absence and work compensation claims.

Summary
— Good work is characterised by a living wage, having control over work, in-work development, flexibility, protection from adverse working conditions, ill health prevention and stress management strategies and support for sick and disabled people that facilitates a return to work.
— Both the psychosocial and physical environments at work are critical.
— Lack of control and lack of reward at work are critical determinants of a variety of stress-related disorders and more prevalent among lower occupational status groups.
— Combining work environment change with healthy lifestyle interventions in employees increases the probability of them adopting health-promoting behaviour.
— Preventive and rehabilitative efforts need to be strengthened, as health-promoting work environments improve return to work.

C.3   Policy Recommendations

Time period: 2011–2015

1   Develop active labour market programmes to achieve timely interventions to reduce long-term unemployment.

2   Encourage, incentivise and, where appropriate, enforce the implementation of measures to improve the quality of work across the social gradient, including:
— Ensuring that public and private sector employers adhere to equality guidance and legislation
— Implementing guidance on stress management and the effective promotion of well-being and physical and mental health at work.

3   Develop greater security and flexibility in employment by:
— Improving flexibility of retirement age
— Encouraging/incentivising employers to create or adapt jobs that are suitable for lone parents, carers and people with mental and physical health problems.

Time period: 2016–2020

1   Make wider use of active labour market programmes to intervene early to reduce long-term unemployment.

2   Improve implementation of measures to improve the quality of work across the social gradient by:
— Improving job security built into employment contracts and ensuring employers adhere to equality legislation
— Extending stress management and the effective promotion of well-being and physical and mental health at work.

3   Extend greater security and flexibility in employment by:
— Continuing to improve flexibility over retirement age
— Widening availability of jobs suitable for lone parents, carers and people with mental and physical health problems.

Time period: 2020 and beyond

1   Use active labour market programmes to achieve timely interventions to reduce long-term unemployment.

2   Continue to implement measures to improve quality of work across the social gradient, including by:
— Building job security into employment contracts and monitoring employers' adherence to equality legislation
— Monitoring stress management and the effective prevention of physical and mental health problems at work.

3   Continue to achieve flexibility in employment by providing:
— A tax and benefits system that promotes flexibility of employment
— Jobs that are suitable for lone parents, carers and people with mental and physical health problems.

Policy Objective D
Ensure healthy standard of living for all

1 Establish a minimum income for healthy living for people of all ages.

2 Reduce the social gradient in the standard of living through progressive taxation and other fiscal policies.

3 Reduce the cliff edges faced by people moving between benefits and work.

D.1 Introduction

Having enough money to lead a healthy life is central to reducing health inequalities. The Commission on Social Determinants of Health (CSDH) showed that poverty and low living standards are powerful determinants of ill health and health inequity.[360] The generosity and coverage of established social protection systems and the way they are administered have important implications for a nation's health.[361] This policy objective aims to address the situation of the worst-off and, at the same time, the role of the tax/benefit system in perpetuating inequalities.

Since the 1980s, UK tax policy has been based on work incentives, wealth creation and enterprise; however, these policies frequently have not benefited the poorest in society. In fact, as Figure 4.3 shows, the overall impact of direct and indirect taxation does not achieve any redistribution of gross income across the income gradient. Redistribution, as was indicated in Section 2.6.4, is entirely dependent on the benefit system (see Figure 2.36). According to Jones *et al* (2009):

> *Direct taxes reduce[d] income inequality and their impact became a little stronger over the period between 1977 and the mid-1990s, remaining fairly constant thereafter. Indirect taxes increase[d] income inequality, and their impact became slightly stronger between 1977 and the early 1990s, then remained relatively constant. [D]irect and indirect taxes had opposite impacts, and even the ways in which those impacts changed over time largely cancelled each other out. The distribution of post tax income was remarkably similar to the distribution of gross income over the last 30 years.'[362]*

The progression from original to final income was described more fully in Section 2.6.4.

Since 1997, social inclusion has been a major policy objective of the Government, notably in the form of its commitment to tackling child poverty. In this respect, it has led the way in Europe. However, the proportion of the UK population living in poverty remains stubbornly high, above the EU average and with a worse performance than France, Germany, the Netherlands and the Nordic countries. Employment policy has helped, but the UK welfare state remains inadequate.

Social protection schemes are designed to smooth income flows across the life course and act as a buffer against those times when it is harder to obtain and

maintain secure employment or adequate pay. Ideally, a social protection system offers people the opportunities to maintain a decent standard of living while ensuring that it:

— gives assistance and encouragement to people to remain in work when they experience poor health or other life-changing events such as divorce or new caring responsibilities and facilitates the transition into work or self-employment as their health improves or other responsibilities change

— enables and incentivises people to move into retirement at a pace that reflects their health and wider capabilities

— creates opportunities for people to prepare for alternative careers through access to training and re-skilling

— provides the support required by families when bringing up their children.

However, most current social protection systems, fail to fulfil the above criteria. A first key difficulty is that benefits are inadequate to provide a healthy standard of living or fail to reach those in need. A second key difficulty is that they tend to create a black and white distinction between being reliant and non-reliant on various components of support. The distinction between being in work and out of work is too distinct, leading to a 'cliff edge'. This cliff edge may discourage people from seeking work or from staying in work with, say, reduced hours if they could otherwise be signed off as ill.[363]

In the UK, as the current benefits system stands, many find their income plus benefits is inadequate to support a healthy life: even maximum entitlements for some benefits fall well short of many individuals and families being able to have a healthy standard of living. The requirements for a minimum income for healthy living are described under Recommendation D.2. This shortfall contributes to social exclusion and associated health risks.

First-time pregnant mothers dependent on Income Support find their level of income particularly challenging. The Government has responded to concerns about pregnant women's health with a new universal health-in-pregnancy grant. However, pregnant women in receipt of benefits remain vulnerable, especially if they are under 25 and only receive lower age benefit rates for themselves, making it difficult to maintain a healthy standard of living.[364]

In London, successive mayors have accepted the need for a living wage substantially above the minimum wage. While the mayor has no powers to impose an increased minimum wage, set at 16 per cent above the current minimum wage in 2009, the current mayor argues a living wage of £7.60 per hour is 'morally right' and helps to retain staff.[365]

In high-income countries where evidence is available, more generous social protection systems are shown to lead to better population health outcomes and to increased life expectancy.[366] Welfare regimes may also differ with regard to their ability to provide a buffer against the adverse health effects

Figure 4.3 Taxes as a percentage of gross income, by quintile, 2007/8

Percent

Quintile of household equivalised disposable income

■ All indirect taxes
■ All direct taxes
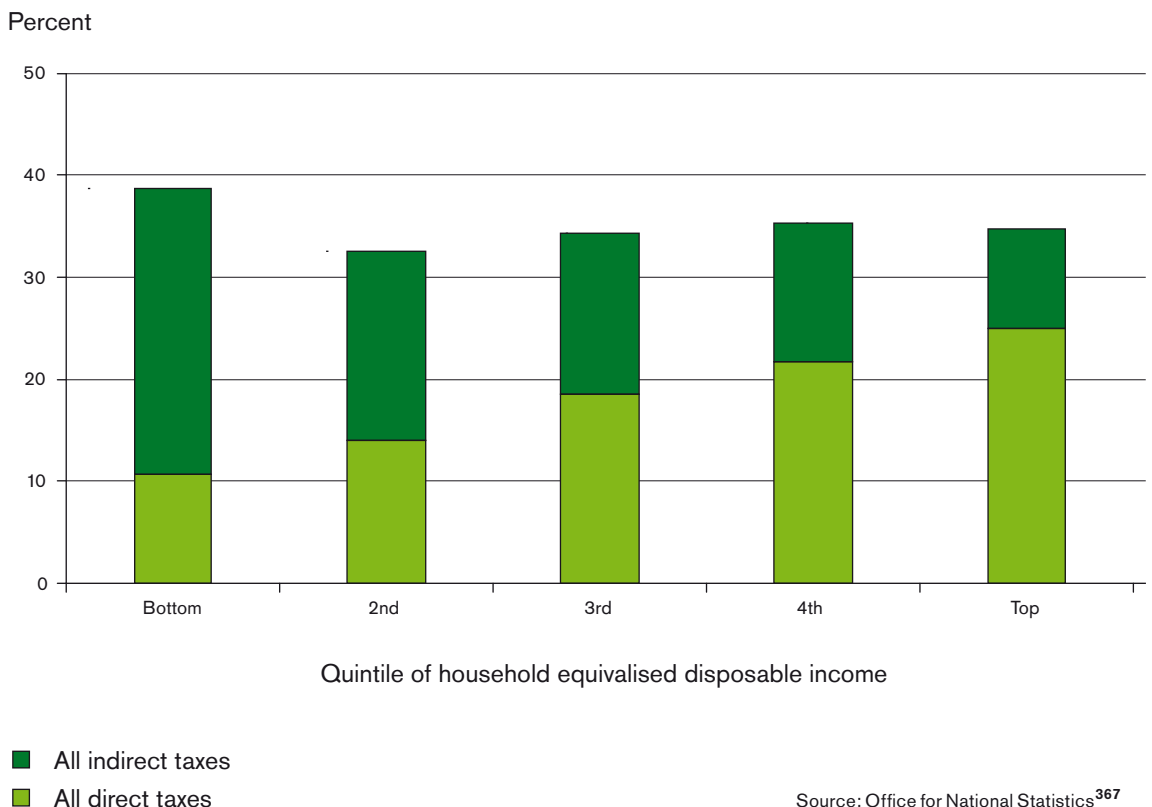
of economic crises and substantial job instability. There is some evidence that social inequalities in health have tended to remain stable in Nordic states during periods of economic crisis whereas they are widening in European states with both more liberal and conservative regimes.[368]

In England, numerous government policies seek to reduce poverty and improve public services to reduce the wider disadvantage associated with poverty. Policy aims to help people back to work and has concentrated on improving skills, aptitude and motivation, for example, Flexible New Deal, Pathways to Work and Jobcentre Plus. In addition to these programmes and the minimum wage, the introduction of tax credits has increased support for working people on low incomes, but these initiatives have not succeeded in reaching all those who are entitled. As such, more efforts are needed to ensure that all citizens have a sufficient income to live a healthy life.

Alongside policies to improve minimum incomes has been an increase in the conditionality of benefits, now applied to lone parents, those in ill health and with disabilities. Conditionality, the requirement that benefits are dependent on satisfying certain conditions, has been an increasing part of UK policy for over 20 years. A number of problematic areas in the benefits system were identified by the Gregg Report, particularly that the conditionality for those not receiving Jobseeker's Allowance is too strict, as these people often have genuine limitations (for example, child caring) to working; that there is wide variation in support offered across the country; and that there is a lack of transparency to sanctions. The report argued that conditionality pushes people outside of the benefit system entirely, leading to their disconnection from both work and welfare, and that the system fails to recognise the wider contributions that claimants are making. The Gregg Report recommends support be based on individual *need* rather than the type of benefit received. This method better reflects the reality of the complexity of people's lives.

Conditionality is being used in many other countries and learning from these programmes is being used to pilot programmes in England. The Child Development Grant, started in New York, is currently being piloted in England. In this programme, low-income eligible parents who have not been in touch with Children's Centres will be given £200 if they 'engage or re-engage' with the advice and help available there. Before roll-out of this or other incentive-based programmes, the impact of conditionality needs to be better understood. In 2001–2 over 8,000 claims were disallowed because of the failure to attend a child health clinic, often for valid reasons.[369]

To achieve a healthy standard of living for all will require a minimum income standard that includes health needs as well as reprioritising the tax and benefits system.

Figure 4.4 Effect of tax credits on taking children in working families out of the low income bracket, 1997–2008

Children in families where at least one of the adults is working (millions)
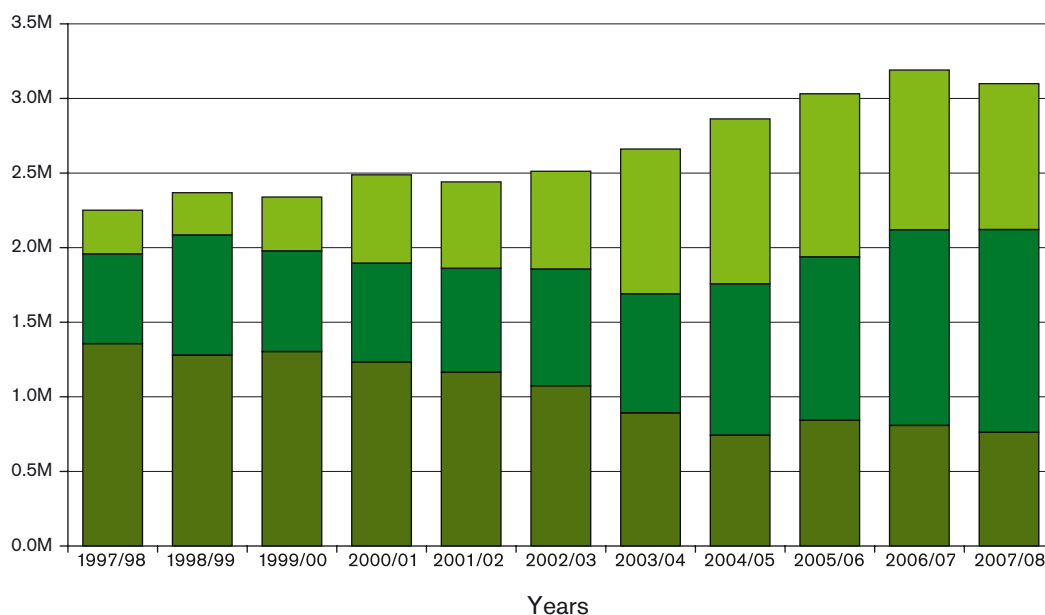
- Getting tax credits; lifted out of low income
- Getting tax credits; still in low income
- Not getting tax credits; in low income

Note: Low income = households below 60 per cent of median income
Source: Palmer et al., based on Household Below Average Income, Department of Work and Pensions[407]

photo: Abbas/Magnum

> **Recommendation:** Develop and implement
> standards for minimum income for healthy living.

An adequate and fair healthy standard of living is critical to reducing health inequalities. Insufficient income is associated with worse outcomes across virtually all domains, including long-term health and life expectancy. When governments increase incomes and implement pro-poor family income strategy, the impacts on children's and others' health are significant. Combined measures implemented since 2000, for example the Working Families Tax Credit, increases in income support for children and the minimum wage, have increased the spending of low-income families, improving children's future health and well-being. Family spending by parents living in poverty rose on items like fruit and vegetables, children's clothing and footwear, books and newspapers.[371] Since 1998 tax credits have lifted 500,000 children out of poverty.

The introduction of the Working Family Tax Credit was associated with a reduction in single parents' anxiety and malaise in the period after the onset of single parenthood. Families' improved income had a particular impact on adolescent children in those families and gaps between them and other teenagers' behaviour narrowed. Rates of poor self-esteem, unhappiness, truancy, smoking and the desire to leave school at 16 all halved.[372]

However, the total number living with low relative income (the sum of the first two blocks in Figure 4.4), after falling for a number of years, has begun to rise again since 2003. But these policies need to be maintained; when governments take their foot off this policy accelerator, budget improvements cease and by implication so do their impact on health.[373]

The development of the concept of a minimum income for healthy living (MIHL) was sparked by the absence of health needs in the existing minimum income requirements.[374] The MIHL includes consuming a healthy diet, for example five portions of fruit and vegetables a day, two portions of fish a week; expenses related to exercise costs, for example, the cost of trainers, bicycles and swimming in a local leisure centre; and costs related to social integration and support networks, for example those for telephone rental, television and presents.

A minimum income for healthy living will improve the standard of living for those on low incomes. It would ensure that all would receive an appropriate income for their stage in the life course, and would reduce overall levels of poverty as well as child poverty. A minimum income estimates the level needed to purchase a given basket of goods and services whereas a MIHL is more realistic and accepts that as a society becomes richer, the levels of income and resources that are considered to be

Figure 4.5 Minimum Income Standard as a percentage of median income, April 2008[375]

Per cent of
median income

■ MIS as percentage median income before housing costs
■ MIS as percentage median income after housing costs
••• Poverty line

Source: Family Resources Survey [376]
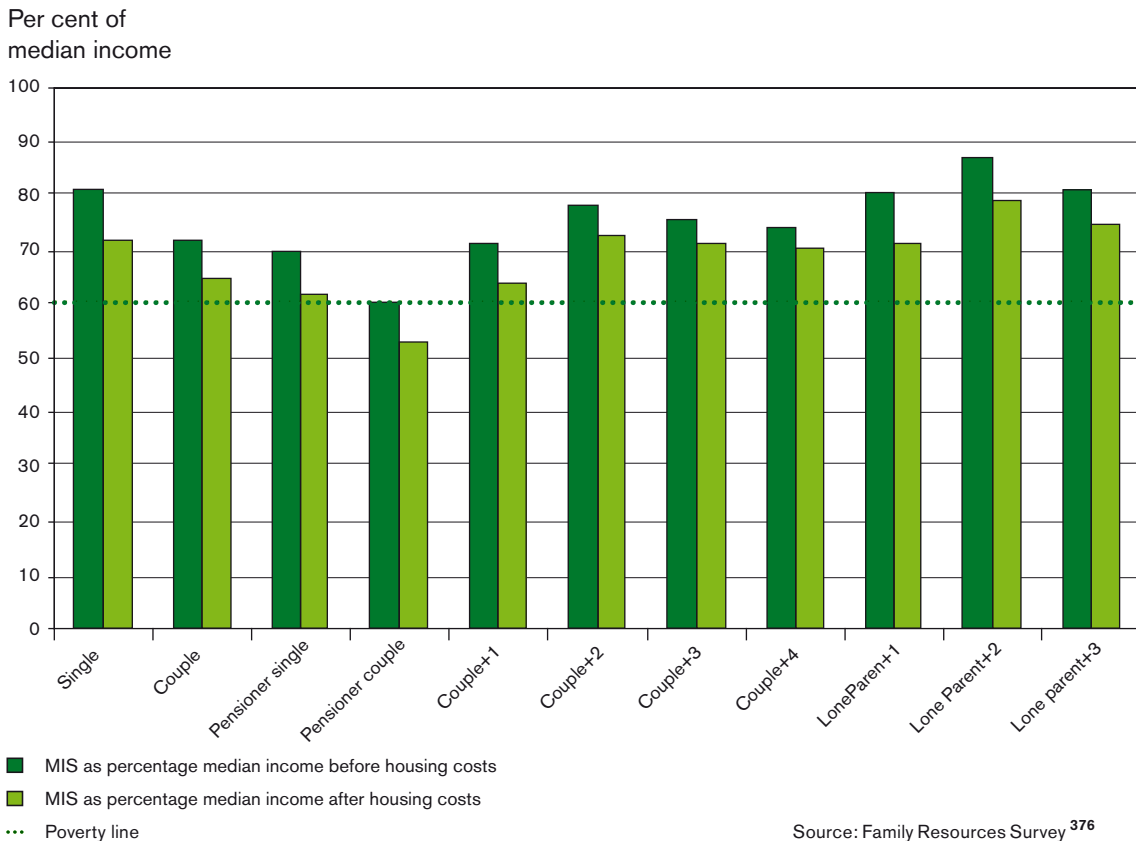
adequate also rise, otherwise the poor do not keep up with the rest of society. As a participant in a discussion held by the Joseph Rowntree Foundation about minimum incomes said, 'Food and shelter keeps you alive; it doesn't make you live.'

The calculation for a MIHL includes needs relating to nutrition, physical activity, housing, psychosocial interactions, transport, medical care and hygiene. Using these calculations, there is a deficit between the state pension, supplemented with pension credit guarantee and winter fuel allowance, and the calculated MIHL.[377] Two models of a MIHL were developed. These addressed the needs of healthy young men and older people.

York University has since developed a similar calculation but with wider coverage – the MIS. Like the MIHL, the MIS includes more than food, clothes and shelter; instead it considers what are the sufficient 'resources to participate in society and to maintain human dignity, consuming those goods and services regarded as essential in Britain'.[378] Based on discussions with both members of the public and experts, York's analysis concludes that a full-time earner on the minimum wage cannot achieve a minimum income standard and that people of working age without children still receive less than half the amount required, and those with children about two-thirds.[379]

The minimum income approach is an appropriate way to begin to judge what levels of income might be taken as the basis for healthy living.[380] Figure 4.5 shows that in most cases the income 'needed' by each family type to have a minimum healthy standard of living is higher than that implied by the poverty line set at 60 per cent of median income, the EU at-risk-of-poverty standard.

The minimum income standard distinguishes different levels of need for people in different circumstances. For pensioner couples or single pensioners the minimum income standard is slightly lower than the poverty line, after housing costs, meaning these groups require less income to subsist than, for example, a couple with two children. For other groups, the current poverty line is below what is recommended as a minimum income standard and thus their incomes need to increase in order to see a related improvement in physical and mental health.

Using the MIS, only two fifths of those with no children meet the MIS income support levels. For couples and single parents with children, income support levels are roughly two thirds of MIS levels and 80 per cent of the poverty line. Whether the MIS or MIHL is used, the striking result is how different the scale is of social 'protection' for different groups in the population (Table 4.2).

A MIHL needs regular revision; as stated by the Joseph Rowntree Foundation 'those goods and services that people on the minimum income spend proportionately more on than average tend to be items whose prices are rising fastest'.[381]

Summary
— A certain minimum level of income is necessary to lead a physically and mentally healthy life.
— Many people have insufficient income for healthy living.
— Current minimum income definitions do not include health needs.

D.2.2 Remove 'cliff edges' for those moving in and out of work and improve flexibility of employment

Recommendation: Remove 'cliff edges' for those moving in and out of work and improve flexibility of employment.

Even with numerous systems of support, there remain cliff edges between those in work and out of work with too rapid a fall in support. These affect physical and mental health. Getting rid of the cliff edges means withdrawing benefits more slowly as people move into work and adjust to new ways of living; this is particularly the case for low earners and those working part-time.[382]

Those who move in and out of employment risk falling into poverty, as the benefits system fails to respond rapidly to changing situations. The rules do not reflect how swiftly people's circumstances change and how medical conditions fluctuate. Loss of work through unemployment or retirement can have a significant impact on household income and health.[383] Many of those who become unemployed

Table 4.2 Income Support levels in relation to poverty thresholds and Minimum Income Standards, by family type, 2008/9

Family type	% of poverty line	% of MIS
Single, aged 25, no children	50	42
Couple, working age, no children	46	42
Couple, 1 child aged 3	66	62
Couple, 2 children aged 4, 6	75	62
Couple, children aged 3, 8, 11	81	61
Single parent, 1 child aged 3	81	67
Pensioner couple aged 60–74	94	106
Single pensioner aged 60–74	107	109

Source: Department for Work and Pensions[384]

The relationship between finance and health has been tackled by a number of small projects throughout England and the Citizen's Advice Bureau (CAB) plays a key role in providing many of these services. 37 per cent of the CAB's 2,030 regular outreach projects take place in health care settings. In some areas there is comprehensive financial support delivered in health care settings, but in other areas, there is none. For example, more than half of Derbyshire Primary Care Trust's GP surgeries have regular CAB sessions and in 2008/9, they helped more than 2,050 clients to secure over £2 million in additional benefits. Derbyshire PCT estimates for every £1 invested, the project secured £6.50 in additional income.

In North East Essex the local PCT has developed a local service to offer financial support. The Tendring ReachOut project helps people receive advice and assistance in deprived areas. Instead of waiting for people to come to Jobcentres or ask for advice (as in traditional CAB programmes), ReachOut provides advice and support by knocking on doors, meeting people in the street and at local community venues. It offers support on a range of issues, such as finance, employment, housing, training opportunities and accessing services. The project seeks to address the wider determinants of health, such as low income, poor housing, low education, training or employment opportunities.

ReachOut is a partnership with the local Citizens Advice Bureau, North East Essex NHS, Essex County Council, and the Interaction Partnership.

This ReachOut project is based on one started by Wirral Borough Councils. The original Wirral ReachOut programme aims to increase employment rates within priority wards. The service is also delivered by an outreach team who visit residents directly in their own homes, knocking on doors. The project emphasises employment, training and education for hard-to-reach groups in the local communities. Although there are a number of services that have a remit of improving the quality of life for the local community, Wirral Borough Councils found a large proportion of the community still do not feel able to access services. The Wirral ReachOut programme has, in three years, knocked on over 83,000 doors, engaged over 160,00 clients on the doorstep, referred 6,000 clients and had over 2,000 people start jobs.

In Salford, the Mental Health Services Citizens Advice Bureau (SMHS) has offered services for over 20 years. SMHS works throughout the community at mental health in-patient units, community mental health centres, offering support by telephone, home visits, outreach sessions, appointments and drop-in sessions. The majority of services are provided via outreach sessions throughout Salford. In addition, they offer support to those in the adult forensic mental health services. They offer assessment, treatment and rehabilitation in conditions of medium security, and provide holistic individual care for patients with multiple and complex needs outside a secure hospital. In 2007-8 SMHS saw 696 clients and had 117,090 contacts with those clients. They helped to write off over £15,000 in debt, secure more than £25,000 in benefit back pay, and increase income through benefits by over £290,000.

These programmes recognise that the tax and benefits systems are complex and those in most need require additional help both to secure benefits and to get back into work. Many of these programmes are offered on a project by project basis and receive short-term funding. Few financial support interventions are mainstreamed into PCT or local authority budgets yet many are consistently effective in improving incomes and reducing debt.

For more information see
www.involvenorthwest.org.uk/employment.html
& www.citizensadvice.org.uk/bureau_detail.html
?serialnumber=100535

or retired face a major drop in their income without a sufficiently graduated system of benefits to enable them to adjust to their changed circumstances. Benefits need to be maintained or withdrawn more slowly to enable and encourage more people into work, particularly those earning low wages or working part-time. For example, recipients of housing benefit and council tax benefit who move into work can be subject to steep marginal deduction rates – up to 85 per cent – and parents or carers of disabled children face even greater disincentives.[385]

Currently, incentives are weakened through some of the tests applied to benefits and tax credits. Over two million workers in Britain would lose more than half of any increase in earnings to taxes and reduced benefits. Some 160,000 would keep less than 10p of each extra £1 they earned. Lone parents face some of the weakest incentives to work of all, and weak incentives to earn more, because many will be subject to withdrawal of a tax credit or means-tested benefit as their earnings rise.[386]

Yet surveys consistently demonstrate that most people want to work but systems stop them. Half of non-working parents said they would work if they could arrange good-quality childcare which was convenient, reliable and affordable, rising to 65 per cent of those with a household income below £10,000 and 66 per cent of lone parents.[387] Several policies have attempted to ameliorate this anomaly, such as increasing the earnings disregard – the amount of money that can be earned before it is deducted from benefits. However, the earnings disregard acts as a structural barrier to moving people into work. Despite several incentives to work in jobs of less than 16 hours per week, the numbers have changed little.[388]

The lack of flexibility in both the nature of employment and the benefits/tax credit system is a barrier to employment and upwards mobility. This is particularly true for those in lower paid jobs and those working part-time.[389] Recent policies have sought to ameliorate this situation but will need close analysis in order to understand if these changes increase the numbers in work across the social gradient.[390]

Summary
— There are significant financial cliff edges between being in and out of work, which need to be reduced.
— The benefits system should not act as a disincentive to returning to work.

Case Study Providing a minimum income and addressing worklessness in East London

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The London Borough of Newham (LBN), in East London, has levels of unemployment well above the London and national averages. The Borough recognises the impact that worklessness is having on numerous other indicators such as education and health and as a result, has developed two employment support services to address these needs: the Mayor's Employment Project and Workplace. These two services are locally developed and offer innovative support to help the long-term unemployed to get back to work.

The Mayor's Employment Project (MEP) assists the long-term workless and those who are hardest to help. Established in October 2007, it is aimed at people who have been unemployed for at least three years, residents who have never worked and those who come from workless households. The MEP is delivered by a dedicated set of advisers who offer expert benefit advice and financial support. The MEP offers a guarantee to residents that they will not be worse off in work and the MEP will top up housing benefit for a year if necessary. The team includes a LBN benefit adviser who advises residents of their financial situation after moving into work. They can also offer help in setting up in-work benefits and looking for childcare.

The MEP placed 110 residents into work in its first year and 110 in its second. None of the residents has needed the in-work subsidy as all have been better off in work but the guarantee of a minimum income, alongside the benefit advice, has proved useful in allaying people's fears when moving into work.

Workplace was developed as a one-stop-shop in May 2007 to support residents in accessing the opportunities available in the local economy. Workplace is based on two sites but also delivered in six hubs and in outreach services such as Sure Start Children's Centres. Designed to help all residents, Workplace seeks to offer a personalised service to meet the individual needs of each client. This includes careers advice, jobs brokerage (construction and non-construction recruitment teams build and maintain links with employers, manage accounts and secure jobs), application support, training (closely aligned to the skills needs of local employers), business start-up and the Mayor's Employment Project.

Workplace also works with a number of partners to offer expert and integrated support on other issues: Jobcentre Plus officers work on site to provide access to their local vacancies and the Citizens Advice Bureau advisers are available on site to help with debt issues and any other concerns.

In its first year Workplace helped 641 people into work against a target of 600. In 2008/9 it placed 1,560 residents into work, beating its target of 900. In 2009/10 Workplace has placed 995 individuals into work against a target of 650.

For more information see
www.newhamworkplace.co.uk

D.2.3 Review and implement systems of taxation, benefits, pensions and tax credits

Recommendation: Review and implement systems of taxation, benefits, pensions and tax credits to provide a minimum income for healthy living standards.

A more progressive tax and benefit system is needed to create a fairer distribution of income and remove anomalies for those on lower incomes. The current tax credit and benefit system should be fundamentally reviewed to be fairer, work incentives for people on low incomes strengthened and simplicity and certainty for families increased. Recommendations for other policy objectives will also contribute to this goal: for example, reducing the numbers not in work, improving education and skills, encouraging and enabling a longer working life and enabling a higher proportion of the working age population to enter the labour force.

The complexity in the benefit system is partly attributable to the fact that the Government is trying to meet complicated needs and because people lead complex lives. However, the current complexity is unnecessarily worrying to families whose circumstances change week by week.[391] The system needs to better correspond to people's complex lives, be more inclusive of flexible working and better help people navigate the system. David Freud's review for the Department for Work and Pensions found that '(a) range of international evidence suggests that complexity in the benefit system acts as a disincentive to entering work, and that badly designed systems create unemployment and/or poverty traps.'[392] There has been some improvement of take-up rates under the present system, but an estimated 20 per cent of money due under the Working Tax Credit still goes unclaimed, and 40 per cent of entitled claimants do not take it up.[393]

Numerous suggestions have been made to move to a single system of benefits, including by the Government's own Welfare Reform Green Paper.[394] Support systems need to respond more quickly to external events that have a striking impact in the short term. For example, over the period 2004–2007 older households faced average price increases of 55 per cent for gas and 36 per cent for electricity. In the same period these households increased their fuel spending by an average of 21–22 per cent and reduced their fuel consumption by around 10 per cent.[395]

Case Study Addressing financial needs during illness

During certain periods, such as following diagnosis of a serious illness, income can be an unnecessary additional worry. A cancer diagnosis, for example, frequently results in a drop in income as jobs are lost and savings are eroded. Ninety per cent of people affected by cancer in the UK experience a significant drop in income and an increase in daily living expenditure as a direct consequence of a diagnosis.

For many people affected by cancer, financial concerns are a significant cause of stress. Macmillan Cancer Support provides information to support people affected by cancer in the process of claiming the money they are entitled to, or simply to empower them to manage their financial affairs, which can be a complex matter. Many people affected by cancer diagnosis require financial advice and support on a wide range of issues, including employment rights, saving and borrowing, pension rights, fuel poverty, prescription charges, hospital travel costs and insurance, as well as how to access welfare benefits and meet all the extra costs associated with a cancer diagnosis. Services are offered in partnerships with colleagues in NHS, local government, the Pension Service, CAB and other voluntary sector organisations.

Macmillan's projects are dotted across the UK and are not offered as part of a mainstream service.

There are over 60 benefits advisers in England but Scotland has been at the forefront of expanding this service. In Scotland, Macmillan Cancer Support has, over a period of five years, built a network of benefits and financial advice services for people affected by cancer which covers all parts of the country, working in partnership with local government, the NHS and other advice providers. The network aims to reach all of the 27,000 Scots who are diagnosed with cancer each year, and has generated over £30 million in client financial gains for people and their carers. The Scottish Government is currently funding Macmillan Cancer Support to expand the model of in house financial advice services piloted at Beatson West of Scotland Cancer Centre to all of Scotland's tertiary cancer centres (Beatson, Western General, Ninewells, Aberdeen Royal Infirmary and Raigmore) and to pilot extending the cancer model to those with other long term conditions, working with NHS Tayside and NHS Forth Valley. The combined services are expected to provide a total client financial gain of around £5.6 million a year.

For more information see www.macmillan.org.uk/HowWeCanHelp/FinancialSupport/BenefitsAdvisers/MacBenefitsAdvisers.aspx

Summary
— Current tax and benefit structures should be adapted to be fairer with greater work incentives.
— Benefits systems are complex and should improve to better correspond with flexible working patterns.

D.3   Policy Recommendations

Time period: 2011–2015

1 Develop standards for minimum income for healthy living.

2 Review the role of the tax and benefits systems to facilitate adherence to minimum income for healthy living standards.

3 Conduct a review of the systems of taxation, benefits, pensions and tax credits to achieve the reduction of 'cliff edges' faced by those in and out of work and facilitate flexibility of employment.

Time period: 2016–2020

1 Initiate the coordination of social support, tax systems and minimum wage levels necessary to:
— Enable full implementation of minimum income for healthy living standards
— Maintain minimum levels of income for those in and out of work
— Remove 'cliff edges' faced by those in and out of work and facilitate flexibility of employment.

2 Prioritise the introduction of tax and fiscal measures that are progressive across the income gradient.

Time period: Beyond 2020

1 Full implementation of minimum income for healthy living standards.

2 Extend tax and fiscal measures that are progressive across the income gradient.

Policy Objective E
Create and develop healthy and sustainable places and communities

Priority objectives
1   Develop common policies to reduce the scale and impact of climate change and health inequalities.
2   Improve community capital and reduce social isolation across the social gradient.

E.1   Introduction

The health and well-being of individuals is influenced by the communities in which they live. People's health is affected by the nature of their physical environment; living in poor housing, in a deprived neighbourhood with a lack of access to green spaces impacts negatively on physical and mental health, as described in Chapter 2.

As well as physical places, the communities and social networks to which individuals belong over their life course also have a significant impact on health and health inequalities. The links that connect people within communities, often described as social or community capital, can bring a range of benefits. Social capital can provide a source of resilience, a buffer against particular risks of poor health, through social support and connections that help people find work or get through economic and other difficulties. The extent of people's participation in their communities and the added control over their lives that this brings, has the potential to contribute to their psychosocial well-being and, as a result, to other health outcomes. As the CSDH pointed out, we live, grow, learn, work and age in a range of environments, and our lives are affected by residential communities, neighbourhoods and relational communities and social structures.

The creation of healthy, sustainable places and communities should go hand in hand with the mitigation of climate change and have a shared policy agenda. Access to good quality air, water, food, sporting, recreational and cultural facilities and green space all contribute to reducing inequalities as well as helping to create sustainable communities. Policies concerning sustainable places and communities and designed to mitigate climate change prioritise the environment, and should, and sometimes do, include strategies to improve diet, physical activity, and mental health. Aligning the sustainability and climate change agendas can help to frame the way healthy communities and places are created and developed and create conditions that enable everyone to flourish equally, within the limits of finite ecological resources.

Aligning these two agendas requires a conscious effort and will not happen automatically. For example, widening access to green spaces has to occur in all communities, across the social gradient and not just where it might be 'easy'. Measures intended to respond to climate change must not widen health inequalities.[396] Poorer groups suffer disproportionately from

regressive taxing and pricing regimes. For example, green taxes, fuel consumption taxes and road pricing can be proportionately more expensive for those on low incomes. Any policies to reduce carbon emissions or promote sustainability should carry out a health equity impact so that health inequalities do not increase as a result. If regressive consumption taxes were introduced then a more progressive income tax system should make up for the regressive effects of consumption taxes on the poorest in society.

Numerous policies instigated across several government departments have aimed to improve the quality of community environments, such as: the New Deal for Communities, Bikeability, the London Congestion Charge, The Housing and Regeneration Act, Green Flag Awards, and World Class Places, the Government's strategy for improving quality of place. Yet few of these policies examine their impact on health inequalities and only concentrate on overall improvements to health. For example, campaigns to improve cycling more often aim to increase cycling rates in an area, across the whole population of that area. Only infrequently do they look at reducing the social gradient in cycling. Figure 4.6 depicts the percentage of people cycling each week, by social grade (where A is high) and shows a clear social gradient in cycling rates even as rates increase for everyone from 2006.

Pursuing policies for healthier and more sustainable places and communities involves making choices about how funding is allocated. The Commission for Architecture and the Built Environment (CABE) estimates that the budget for new road building, £10.2 billion to 2014 for Highways Agency and local authority roads, would, if it were spent differently, provide 1,000 new parks at an initial capital cost of £10 million each. That would enable the creation of two new parks in each local authority in England. Creating 1,000 new parks could save approximately 74,000 tonnes of carbon from being emitted (based on a 10 hectare park with 200 trees).[397] Which choices we make depends on our commitment to building healthy and sustainable places.

E.2 Recommendations
E.2.1 Prioritise policies and interventions that reduce both health inequalities and mitigate climate change

Recommendation: Prioritise policies and interventions that both reduce health inequalities and mitigate climate change by:
— Improving active travel across the social gradient
— Improving good quality spaces available across the social gradient
— Improving the food environment in local areas across the social gradient
— Improving energy efficiency in housing across the social gradient.

Figure 4.6 Proportion reporting any cycling in a typical week in the previous year, by social grade, 2006 and 2009

Percentage

Social Grade

■ 2006
■ 2009
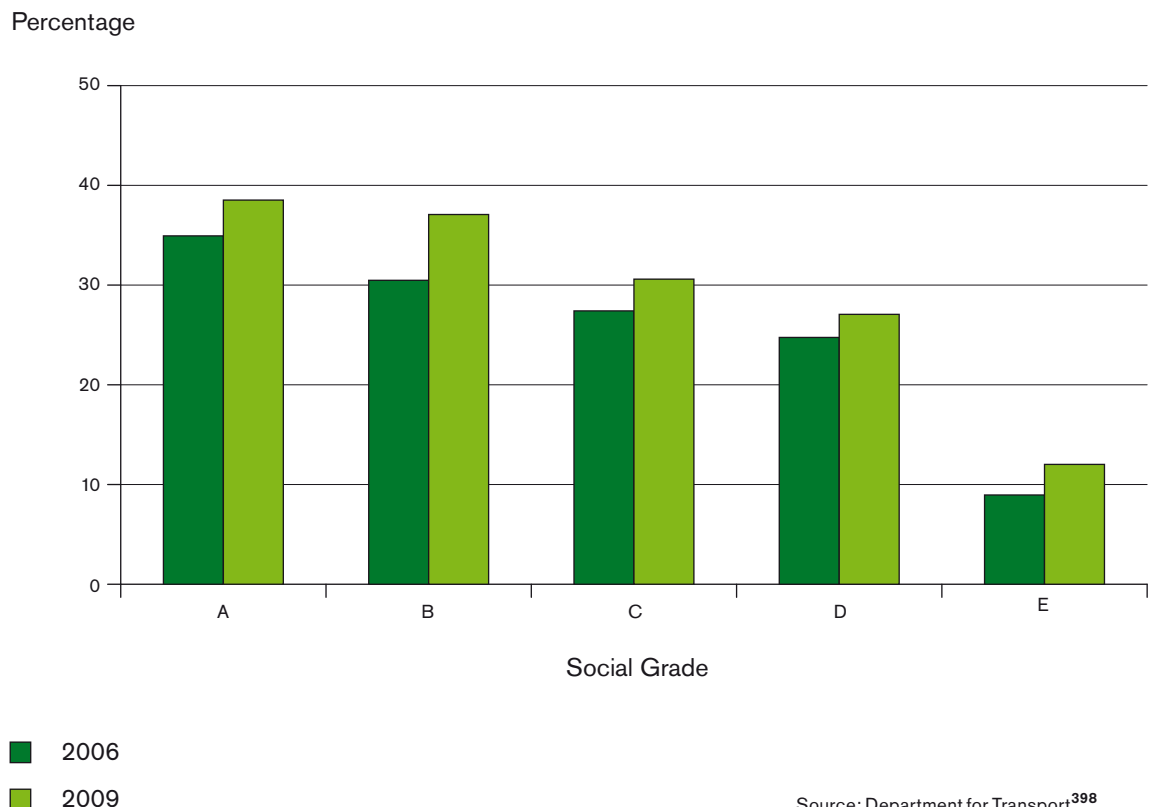
Source: Department for Transport[398]

Climate change is a fundamental threat to health and reducing emissions to mitigate climate change will also make people healthier. As Chan (2009) says, 'Health protection should therefore be one of the criteria by which mitigation measures are judged.'[399]

By 2020 the UK will have to dramatically reduce greenhouse emissions if the country is to succeed in playing its part in tackling climate change. Under the Climate Change Act 2008, the Government has set a legally binding target to reduce UK emissions by at least 80 per cent by 2050, and at least 34 per cent by 2020 (against 1990 levels). The Act also establishes a system of five-year 'carbon budgets', limits on UK emissions that set the trajectory towards these medium and long-term targets. The Government's policy for meeting the 2020 target, in all sectors including electricity generation, homes and communities, workplaces and transport, was set out in the UK Low Carbon Transition Plan, published in July 2009. The Plan also described a system of departmental carbon budgets to ensure all Government departments share responsibility for emissions reduction.

It is important that Government leads by example in tackling climate change, by reducing its own emissions. Sustainable Operations on the Government Estate (SOGE) is an outcome-focused target to reduce carbon emissions in central government. This approach is unique to the UK, and supported by all main political parties. These targets apply to all central government departments, executive agencies, and to non-departmental public bodies on a case-by-case basis. SOGE aims to make the government office estate carbon neutral by 2012 but goes beyond carbon to address sustainability more widely. SOGE seeks to reduce the Government's total emissions from buildings by 30 per cent, recycle 75 per cent of waste, reduce the waste generated by 25 per cent, reduce water consumption by 25 per cent and increase energy efficiency by 30 per cent per square metre.

While overall progress towards these targets is good, the need to raise the level of ambition is currently being considered and should go further. The most significant contribution that Government can make is through policy development that supports and incentivises a reduction in carbon emissions and improves sustainability. The establishment of

Case Study 'Greening' kidney care in the NHS

'Green Nephrology' is a programme to improve the sustainability of kidney care. Set up by the Campaign for Greener Healthcare in response to the call for the NHS to reduce its carbon footprint, the programme funds a Green Nephrology Fellowship, in which a nephrology trainee is seconded to work on climate change mitigation issues within kidney care. The Green Nephrology Programme aims to align the provision of more sustainable health care with higher quality care at lower financial costs.

Renal medicine is among the first specialties to begin to pursue the changes that will be required when carbon rationing starts to reshape how the NHS delivers its services. Renal medicine is likely to contribute disproportionately to the overall footprint of the NHS. The most common form of renal replacement therapy involves thrice weekly return travel (nearly always by car), large amounts of plastic and packaging waste, and large amounts of energy and mains water consumption. In addition, clinic appointments for newly transplanted patients involve frequent long distance journeys.

The Green Nephrology Fellow explores the environmental impacts of kidney care and investigates initiatives and interventions to reduce carbon emissions. Examples of the work being undertaken include efforts to raise awareness, including developing champions in local units, carbon footprinting studies of aspects of kidney care, the development of case studies of good environmental practice, and collaboration with the renal industry to develop sustainable procurement.

The Green Nephrology Fellow is sharing best practice case studies, such as the conservation of water during haemodialysis. Patients typically require three four-hour sessions of dialysis per week. Each of these three sessions requires nearly 500 litres of mains water and of this 500 litres, up to two thirds are discarded during the purification process. Recycling this water would save thousands of litres, yet only a few hospitals currently do, using the water in laundry or sanitation, for example. Kent & Canterbury Trust is leading the field in this area. The Trust diverts the water normally destined for the sewers to a recovery tank that supplies the toilets in the operating theatres and the accident centre and a similar installation in a satellite unit supplies the laundry. From a £14,000 capital investment for the recovery tank, it is now making savings of approximately £7,000 a year and the tank has also resulted in a 38 per cent reduction in mains water usage.

Other examples from around the world show how hospitals are reducing their environmental footprint; one Australian unit recycles this water in a commercial car-wash, reducing water use as well as bringing money into the unit.

The programme is supported by NHS Kidney Care, the Renal Association, the British Renal Society, the NHS Sustainable Development Unit, the National Kidney Federation, and the Association of Renal Industries.

For more information see www.greenerhealthcare.org/green-nephrology-programme

departmental carbon budgets provides a good basis for this but it is vital that this opportunity is used to build the necessary momentum to achieve the ambitious targets set out in the Climate Change Act.

A starting point for a more effective strategy is to develop a more integrated approach between policies aimed at tackling climate change and policies aimed at creating healthier communities and addressing health inequalities. This includes improving the sustainability of government services, including those of the NHS. While the NHS is one of the leading contributors to the UK's carbon emissions, emitting more than 18 million tonnes of CO_2 a year, as the largest public sector employer in Europe it has the potential to be a leader in addressing the issue. There are signs it has started to act as a leader, with the establishment of the NHS Sustainable Development Unit and publication of a Carbon Reduction Strategy which seeks both to reduce carbon emissions and save the NHS money.[400] The NHS Sustainable Development Unit shows that if health care trusts meet their target to cut primary energy consumption by 15 per cent between 2000 and 2010, the NHS will save £50 million per year on its current energy bills.

While this Strategy provides robust guidance, the NHS is not yet on track to meet these targets, nor is carbon reduction included in NHS performance management, apart from on a voluntary basis. Inclusion in core frameworks for commissioning, reporting and performance management would enable the NHS to make the necessary carbon reductions. Reports also show that Primary Care Trusts and Acute Trusts can cut carbon and costs by co-locating services to reduce their carbon emissions.[401]

Improving active travel across the social gradient

Transport accounts for approximately 29 per cent of the UK's carbon dioxide emissions and significantly contributes to some of today's greatest challenges to public health in England: the burden of road traffic injuries, physical inactivity, the adverse effect of traffic on social cohesiveness and the impact of outdoor air and noise pollution. The relationship between transport and health is complex and socioeconomically patterned. Transport also enables access to work, education, social networks and services that can improve people's opportunities.[402] The EU also regards transport as central to improving health and its action on sustainable urban transport seeks to create healthy environments and reduce non-communicable diseases such as respiratory and cardiovascular diseases, and to prevent injuries from occurring.

Active transport can be an important contributor to overall levels of physical and mental health but it is not an easy solution to implement. The number of children walking to school is declining, decreasing from 62 per cent in 1989 to 52 per cent in 2006.[403] However, our understanding of solutions is improving as research explores what impedes us from making healthier choices and decisions. For example, understanding how to increase the numbers walking to school is improving; attitudes and perceptions play a significant role in the decision to walk and cycle. In a rural area in East England with high levels of deprivation, children whose mothers who walked or cycled to work were also more likely to walk and cycle to school.[404] Getting children to walk to school may also mean getting their parents and families to increase their level of active travel.

Improving active travel across the social gradient includes providing incentives to increase levels of active travel as well as initiatives to improve safety to encourage active travel. Interventions may include increasing investments to encourage more walking and cycling, reducing car speed, improving quality of and access to walking and cycling routes and improving public transport. Interventions need to both improve road safety and improve parental and peer support, as recommended in the NICE guidance 'Promoting physical activity in children and young people'.[405] The provision of cycling infrastructure can lead to a long-term increase in cycling and a reduction in cycle casualties.[406] Numerous studies find that opening new sections of cycling trails leads to long-term increases in cycling, especially when located in highly populated areas.[407] Substantial increases in the number of cyclists also leads to reductions in the numbers of cyclists killed or seriously injured.[408]

The presence of pavements or footpaths that are well maintained with good surfaces, cycle paths, and street lighting increases the number of walking and cycling trips.[409] Lowering speed limits improves quality and access for active travel and improves safety for pedestrians and cyclists. Lower speed limits reduce risk of death and serious injuries.[410] Area-wide traffic calming, such as 20 mile per hour zones, is associated with absolute reductions in injury rates and, if appropriately targeted, can help achieve relative reduction in inequalities in road-injuries and deaths.[411] Traffic calming measures reduce speed as well as the volume of traffic, and the frequency and severity of traffic accidents, leading to increased walking and cycling.[412]

In London, where 20 mph zones have been introduced, injuries have decreased by 40 per cent, with cyclist injuries falling by 17 per cent and pedestrian injuries by a third.[413] Modelling exercises concluded that 20 mph zones halved the number of casualties (580 deaths in one year) in the most deprived quintiles.[414] Lower speed restrictions are often targeted in collision areas, but should not only be limited to these areas.[415] Targeting zones in deprived residential areas would help lead to reductions in health inequalities.

Other factors are also important in improving pedestrian access, such as the location and accessibility of crossings. The risk of having a collision while crossing the road increases with age, especially after 79 years, with injuries to older people (over 65 years) tending to be more serious and more often fatal than injuries to other age groups. Surveys of older pedestrians in the UK found particular concerns about crossing busy roads. While only 35 per cent of roads crossed by older pedestrians were main roads, 85 per cent of this group's injuries were on these roads.[416] People over 65 tend to find traffic a serious problem that inhibits their own travel patterns.

In addition to improving active travel and the quality and access to cycling and pedestrian routes, better public transport has been shown to result in significant changes in travel patterns and improving health. A health impact assessment in Edinburgh suggested potential health and health inequality benefits from increased use of public transport.[417]

All policies seeking to improve active travel, such as Cycling Demonstration Towns, should be required to measure their impact on health inequalities. Increasing the number of cyclists, as the Cycling Demonstration Towns initiative seeks to do, will not reduce health inequalities unless communities are targeted progressively across the social gradient.

Improving good quality spaces available across the social gradient

Green space and green infrastructure improve mental and physical health and have been shown to reduce health inequalities.[418] Green infrastructure networks reduce urban temperatures and improve drainage, reducing the risks to health associated with heat waves and flooding. Well designed and maintained green spaces can encourage social interaction, exercise, play, and contact with nature. Well designed, car free and pleasant streets encourage feelings of well-being, chance interactions and active travel; good quality and good access to public spaces contributes to pride in the community, integration and social cohesion.

Over 95 per cent of people believe it is very or fairly important to have green spaces near to where they live and this value placed on green space is consistent across the social gradient. However, Figure 4.7 shows that there is a social gradient relating to the frequency of use of green spaces. The highest social group, A, are most likely to visit green spaces frequently, while over 35 per cent of social grade E visit green spaces infrequently (several times a year or less).[419]

A UK study found that income-related inequality in health is affected by exposure to green space. Health inequalities related to income deprivation in all-cause mortality and mortality from circulatory diseases were lower in populations living in the greenest areas. It is not precisely known why exposure to green space affects health in this way but the effect remained after controlling for known confounding factors.[420] Green spaces also have important effects on community capital. Natural features can create enclosed areas to promote play between different groups and create varied activities suitable for different age groups leading to better overall concentration and motor skills.[421]

Exercising outside can have more positive mental health benefits than exercise of other kinds.[422] The psychological benefits of jogging in an urban park outweigh those of street jogging.[423] 'Green gyms', keeping fit by engaging in activities in the open air, have been shown to result in positive physical and mental health outcomes.[424]

Simply providing more green spaces is not enough – attention also needs to be paid to their

Figure 4.7 Percentage of population by social grade who visit a green space infrequently in a year, 2009

Percent of population

Social grade
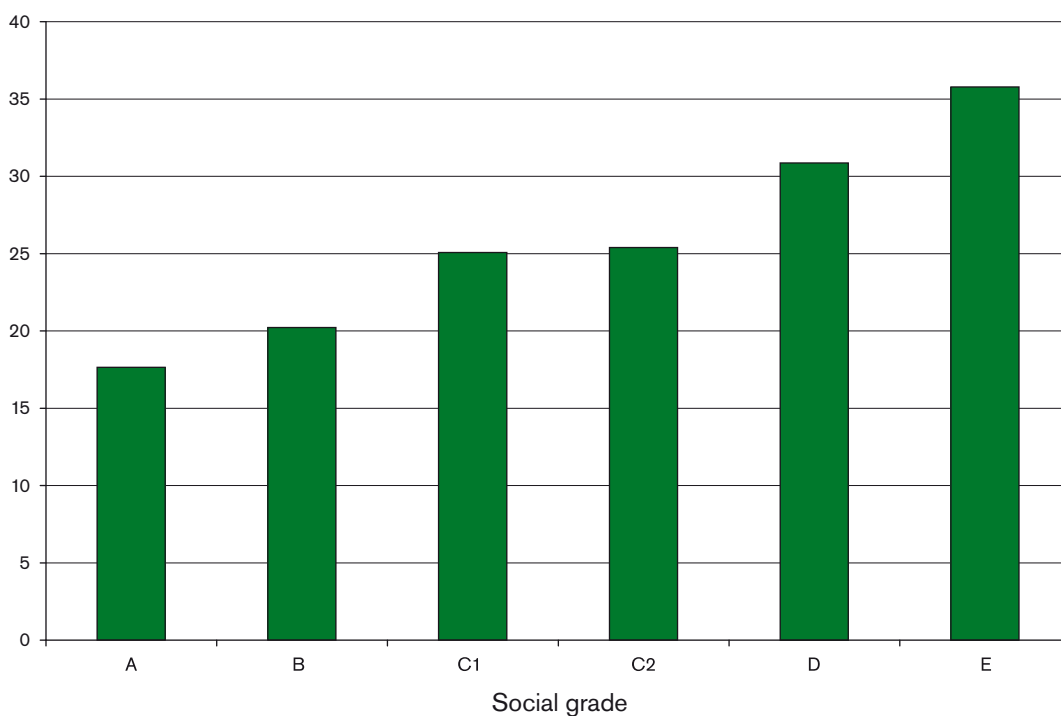
Source: Department for Environment, Food and Rural Affairs, Energy Savings Trust[426]

design and quality.[425] Children and older people in particular often feel excluded from public spaces. Design and proximity to home can improve the use of green spaces. For example, marking school playgrounds with designs that stimulate active games is associated with a 20 per cent long-term improvement in physical activity.[427] A natural play environment at school also helps reduce bullying, increases creative play, improves concentration and a feeling of self worth in children.[428] Well designed green and open spaces can benefit communities in a variety of ways including increasing levels of social contact and social integration, particularly in underprivileged neighbourhoods.[429] In one study, green space in a housing complex encouraged more social activity and more visitors. Residents also knew more of their neighbours and said that their neighbours were more concerned with helping and supporting each other.[430]

Designing neighbourhoods well can also increase their 'walkability': how geared they are to enabling people to walk or cycle to destinations.[431] People are more likely to be physically active if they live in neighbourhoods with many destinations, such as shops and other facilities, and where they have a number of reasons for walking, including walking to work, for recreation and to fulfil other tasks.[432] In contrast, dense vegetation, unmaintained areas, dog fouling, graffiti and vandalism all contribute to a perceived lack of safety which reduces the use of green spaces.[433]

Many government policies have sought to encourage improvements in local green spaces. For example, the Green Flag Awards are given annually to those spaces judged against criteria including health, safety and security, community involvement, access and sustainability. The Green Flag Awards are well placed to help develop the public health role of parks and park staff across all local authorities by focusing more on their role in reducing health inequalities in all areas across the social gradient.

Proximity to space is also important and understanding the relationship between proximity to green space and its impact on health is improving. Children's physical activity levels are increased when they live closer to parks, playgrounds, and recreation areas.[434] In densely populated urban areas, green space located within walking distance is more likely to promote physical activity outside the home.[435] The survival of older people increases where there is more space for walking near their home, with nearby parks and tree-lined streets. Prevalence rates for diseases such as diabetes, cancer, migraine/severe headaches and depression are lower in living environments with more green space within a one kilometre radius and mental health may be particularly affected by the amount of local green space.[436]

A 2009 study examined the difference between green space being three kilometres or one kilometre from one's home, and found that having green spaces within one kilometre reduced disease prevalence. Those with lower education levels living in these zones had lower annual prevalence rates of chronic obstructive pulmonary disease.[437] As research in this area improves, we are gaining a better understanding of the level of proximity and access to green space required to lead to better health outcomes.

Population-wide interventions can have significant effects on the social determinants of health, particularly when there are such wide variations

Figure 4.8 Modelled changes in air pollution concentration due to London Congestion Charge, by area of London and level of socioeconomic deprivation, 2003–07

Difference in microgram per cubic metre (µg/m³)

Level of neighbourhood deprivation
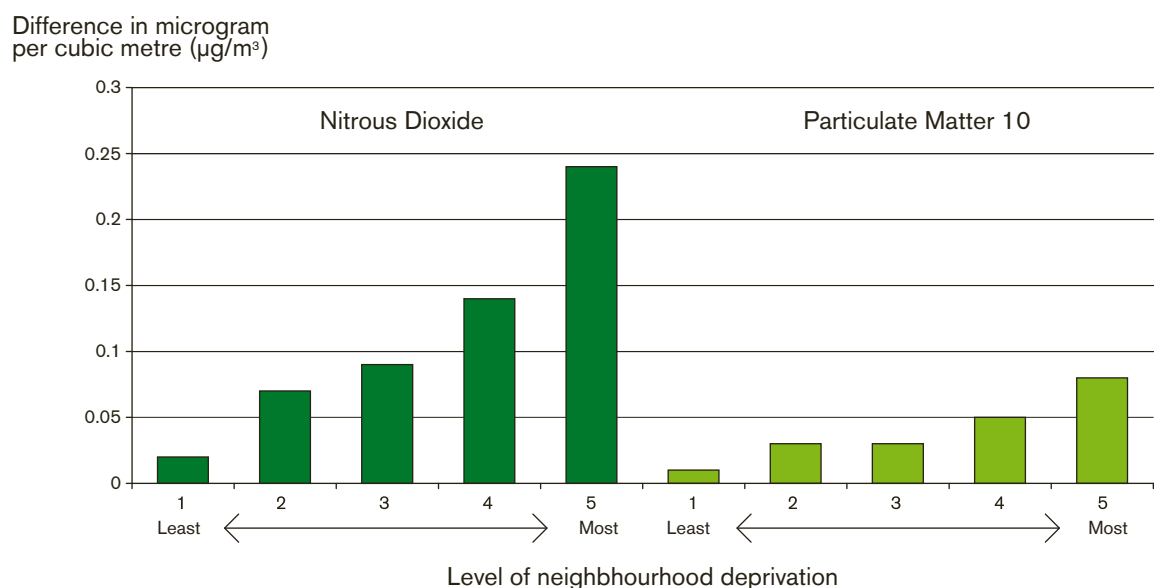
Note: Post – pre difference µg/m³ = change in air pollution concentration measured in micrograms per cubic metre
Source: Tonne et al [438]

in these determinants. The London Congestion Charge is applied across central London only, but it has reduced the gradient in air pollution proportionately across the social gradient, with increasing impact in the more deprived areas – Figure 4.8.

Improving the food environment in local areas across the social gradient

Dietary change can also play a key role not only in mitigating climate change and adaptation strategies, but also in promoting health by reducing the consumption of saturated fat from meat and dairy sources. Food preparation and production contributes around 19 per cent of the UK's greenhouse gas emissions; half of these emissions are attributable to the agricultural stage.

Food systems have the potential to provide direct health benefits through the nutritional quality of the foods they supply.[439] Improving the food environment involves addressing issues concerning the accessibility of affordable and nutritious food that is sustainably produced, processed and delivered.

Internationally, studies show that among low-income groups price is the greatest motivating factor in food choice. In the US, price reductions have seen positive increases in the sales of low-fat foods and fruit and vegetables.[440] The era of cheap food may be approaching its end, but consumer expectations are still of low prices, which fail to include the full environmental costs.[441]

There are studies that show association between proximity, or lack of, to healthy food, and health outcomes such as obesity or malnutrition, but these studies should be approached with caution. They are most often observational and so do not show *causality* between inadequate access and health outcomes.[442] One study in the UK on the greater access to unhealthy food has shown this *may* disproportionately affect those in more deprived areas.[443] Data from the US shows more substantial links between schools and proximity to fast food outlets, as well as proximity to fast food outlets and obesity but the food environment in the US is very different to the UK's.[444]

Case Study Working in partnership to reduce fuel poverty

The UK Public Health Association (UKPHA) brings together individuals and organisations from all sectors who share a common commitment to promoting the public's health and it is leading the delivery of an innovative and integrated fuel poverty programme. Starting with understanding the current evidence, engaging with key partners then implementing a pilot, the project is a good example of the delivery of integrated and evidence-based interventions to reduce health inequalities.

The programme originates from the UKPHA's Health Housing and Fuel Poverty Forum, funded by DEfRA. The forum, made up national figures from the health, housing and energy sectors, and practitioners from across England, developed the 'Central Clearing House' model. Their research concluded that a model of local area partnerships that linked health, housing and fuel poverty services was the most effective approach for directing services to the vulnerable. The CCH model identified the key systems and processes necessary to access the vulnerable fuel poor, identify high risk groups, streamline referral and delivery systems and implement monitoring and evaluation processes.

The CCH model was first piloted in Manchester, with the implementation of the Affordable Warmth Access Referral Mechanism (AWARM). Funded by the Department of Health, the pilot was a partnership with Salford City Council and Primary Care Trust. Manchester Business School is evaluating the programme for the mismatch between theory and practice and an assessment of what 'fit for purpose' should look like.

Greater Manchester invested approximately £100,000 each year into AWARM. Since April 2008 AWARM activity resulted in over £600,000 of investment and majority of cases are still open so many households will receive further investment. AWARM resulted in a dramatic increase in referrals from across the social and care sectors, but the number of referrals from health professionals (mainly GPs) remains low. In 12 months the programme trained 1,359 professionals, a third in health, with the remainder in social services, voluntary/community services, local government and housing.

The lessons learned from the pilot include:
— There are numerous opportunities to share data between local authorities, GPs and PCTs to improve how referrals are targeted
— A pop-up system on GP patient electronic records would help to immediately direct referral to a one-stop-shop
— Involving energy companies as active project partners can help identify novel ways to target vulnerable individuals and neighbourhoods.

The funding received ends in 2010, yet the project is improving local delivery systems, increasing the numbers receiving funding to reduce fuel poverty. Like many other ill health prevention projects, funding only invests in a pilot, regardless of the outcomes. In this case, this means a project showing successful short-term outcomes may not be rolled out.

For more information see
www.ukpha.org.uk/fuel-poverty.aspx

Availability of healthy food, and in particular fresh produce, is often worse in deprived areas due to the mix of shops that tend to locate in these neighbourhoods.[445] A study of the location of McDonald's outlets in England and Scotland showed per capita outlet provision was four times higher in the most deprived census output areas than in the least deprived areas.[446] Low-income groups are more likely to consume fat spreads, non-diet soft drinks, meat dishes, pizzas, processed meats, whole milk and table sugar than the better-off.[447]

The creation of food deserts is likely to be a by-product of a complex interaction between local planning, regulatory and economic factors and the national location policies of large supermarket companies.[448] In a controlled 'before/after' study following the opening of a new supermarket in Scotland, there were no differences between the control and experimental groups: both increased their daily intake of fruit and vegetable portions.[449] However, there is still a suggestion that residents of deprived areas could benefit from policies aimed at low-mobility groups, increasing their access to better shopping facilities and healthier food alternatives.[450]

Improving energy efficiency of housing across the social gradient

The existing housing stock emits 13 per cent of our carbon dioxide and as such, there is a compelling case for improving the environmental standards of housing across all sectors. Poor housing conditions and design have substantial impacts on health inequalities. It is estimated that reducing household energy emissions but examining the effects of fabric, ventilation, fuel switching, and behavioural changes, could lead, in one year, to 850 fewer disability-adjusted life-years (DALYs – a method of estimating the negative lifetime impact of premature mortality and disability) and a saving of 0.6 megatonnes of CO_2 per million population.[451] The annual cost to the NHS of both cold homes and falls is estimated to be over £1 billion. The ageing housing stock requires consistent reinvestment, particularly to reduce the carbon emissions from older homes.[452]

Living in cold conditions is a health risk. A household is in fuel poverty if it needs to spend more than 10 per cent of its income on fuel to sustain satisfactory heating. In 2006, 11.5 per cent of households in England were fuel poor, either spending more than this 10 per cent or under-consuming energy to save money; over half of these households were single persons. The Government set statutory targets to eradicate fuel poverty among vulnerable households in England by 2010 and all households in England by 2016 as far as is reasonably practicable. It is estimated that these targets will not be met and the most recent figures state that 2.8 million households in England are in fuel poverty.[453] The risks of fuel poverty are higher in rural areas – in 2006, 21 per cent in rural areas were in fuel poverty compared with 11 per cent in suburban and 10 per cent in urban areas.[454] The risk of fuel poverty rises sharply as household income

Figure 4.9 The risk of fuel poverty according to household income, 2009

Percent of households in fuel poverty

Household income quintiles

Note: Percent in fuel poverty relates to households in fuel poverty after deducting housing costs
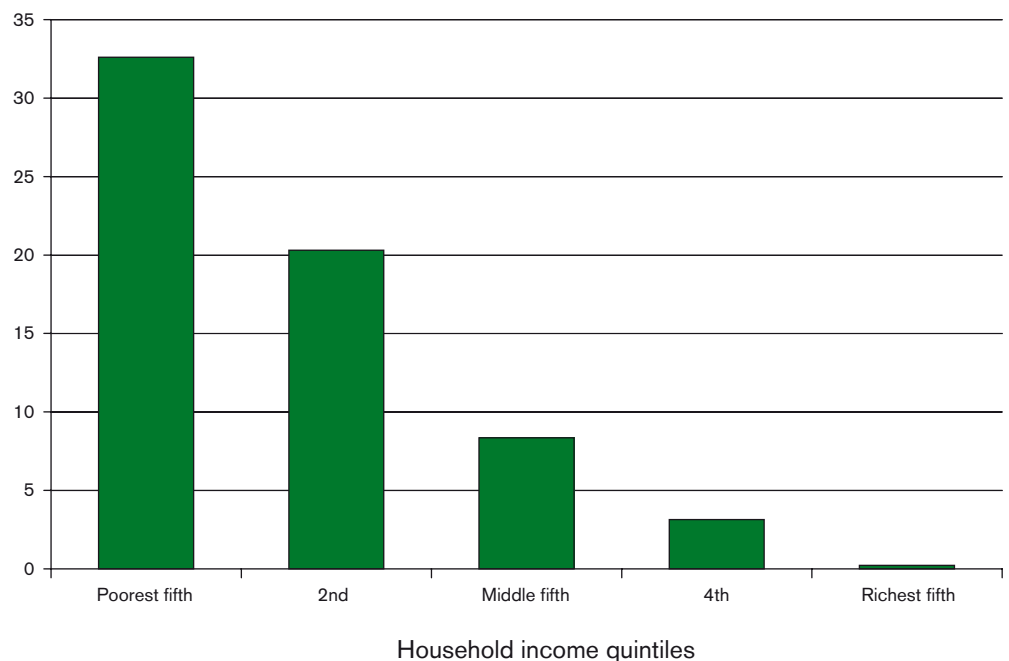
Source: English House Conditions Survey, Department of Communities and Local Government [455]

falls. Very few households with above-average incomes are in fuel poverty – see Figure 4.9.

Other factors besides household income affect whether a household is in fuel poverty or not, such as housing costs and type of ownership. As a proportion of the total number of households for a given tenure, for example private rented, owner occupier or social housing, households living in private rented accommodation have higher likelihood of living in fuel poverty – 16 per cent of which were in fuel poverty compared with 11 per cent in other tenures.[456] However, more of the fuel poor live in owner-occupied properties, with over two thirds of fuel poor household living in that sector.

The government programme Warm Front, which provides a package of insulation and heating improvements to qualifying households, has been shown to have a positive impact on mental health, alleviating respiratory problems in children and reducing deaths among older people.[457] Despite this policy and others such as the Winter Fuel Payment, the number of fuel poor households in England dramatically increased between 2004 and 2008. The cold winter of 2008/9 saw the highest number of extra deaths in England and Wales since 1999/2000, with 36,700 excess deaths. Much of the increase in fuel poverty in 2008/9 was due to the increased costs of energy and it is estimated that in the long term, energy costs will increase.[458]

Improvements in housing conditions have been shown to have a number of positive impacts on health, including lower rates of mortality, improved mental health and lower rates of contact with GPs. Significant improvements in health-related quality of life were found in a randomised controlled trial of home insulation, which concluded that targeting home improvements at low-income households significantly improved social functioning and both physical and emotional well-being (including respiratory symptoms).[459] Adequate heating systems improve asthma symptoms and reduce the number of days off school.[460]

Following the introduction of the Housing Health and Safety Rating System by the Department for Communities and Local Government (CLG) a number of the initiatives addressing the problems of cold homes and the impacts of housing on health. Many of the difficulties in addressing the issue of cold homes is that the *effects* of the problem are the responsibility of one government department, the Department of Health, but the responsibility for *solutions* lies with the CLG and with the Department of Energy and Climate Change (DECC).

The 2004 Housing Act gave local authorities the powers to tackle poor housing, setting out statutory minimum standards. The Housing Health and Safety Rating System evaluates the potential risks to health and safety from any deficiencies identified in dwellings. The introduction of the Housing Health and Safety Rating System, together with other developments in calculating the cost of the impact of poor housing on health, has led to increased activity between local housing authorities and health partners in reducing health inequalities. This work is at a relatively early stage but it has the potential to help reduce the numbers of people in fuel poverty, to help maintain independence and lead to improvements in health and well-being.

Health inequalities also relate to the shortage of new homes. It is estimated that three million new homes are needed by 2020 to meet the rate of new household formation. Many are waiting for new homes. Close to two million are on council waiting lists, with 500,000 in overcrowded conditions and 70,000 in temporary accommodation.

The Decent Homes programme sought to improve the quality of homes and by 2010, 95 per cent of social housing will reach the Decent Homes Standard. The programme had invested over £40 billion by 2010 and work has been completed on 3.6 million social homes, with improvements for 8 million people in total, including 2.5 million children. Continued investment is needed to maintain this standard; housing associations will need funding to continue to invest in the ageing housing stock. The impact of this investment on health needs to be better understood; it is important that these policies and investments are assessed for their impact on health inequalities.

Summary
— There are co-benefits to addressing both health inequalities and climate change.
— The NHS has implemented some strategies to reduce carbon emissions and improve environmental sustainability but can go further.
— Strategies are needed to enable access to good quality, active transport across the social gradient.
— Good quality green and open spaces improve physical and mental health.
— Green and open spaces have more of an impact if they are close to where people live.
— Fuel poverty is a significant problem and likely to grow as the cost of fuel increases.
— Investments to improve housing need to be sustained.

E.2.2 Integrate planning, transport, housing, environmental and health policies to address the social determinants of health

Recommendation: Fully integrate the planning, transport, housing, environmental and health systems to address the social determinants of health in each locality.

An important step in tackling the social determinants of health at a local level would be greater integration of health, planning, transport, environment and housing departments and personnel.

At present, the planning process at local and national levels is not systematically concerned with impact on health and health equity.[461] Currently, Policy Planning Statement (PPS) 17 deals with health issues, 'Planning for open space, sport and recreation'. However, the lack of attention paid to

health and health inequalities in the planning process can lead to unintended and negative consequences. A policy planning statement on health would help incorporate health equity into planners' roles.[462]

The Healthy Urban Development Unit and CABE demonstrate in numerous reports how good planning can have a positive impact on public health and that designers can influence people's well-being and design neighbourhoods in a manner that promotes health and well-being.[463] A new Planning Policy Statement on health could ensure that new developments are assessed for their impact on health inequalities, for example limiting the number of fast food outlets in a Super Output Area. This tool could help to provide a lever for local authorities to change the way neighbourhoods are designed.

Existing tools such as the Joint Strategic Needs Assessments are another lever to facilitate integrated approaches at a local level. However, as CABE reports,

'producing needs analysis data does not in itself lead to change'.[464] Integrated working, such as making PCTs statutory partners in local planning decisions, should be decided at local levels.

Training local authority managers and officers in planning, housing, environment and transport in health equity issues could improve commitments to local development frameworks.[465] Related professional bodies can make health equity mandatory in professional development.

Equally, local planning should ensure services are easier to access and more joined up locally. The design of neighbourhoods can have an impact on community participation – good neighbourhood design can avoid putting up barriers to participation, and actively encourage it, for example through ensuring accessible transport, well-located services and amenities, and the provision of facilities and activities which encourage integration.

Case Study Improving private rented housing in Liverpool

Liverpool City Council's Healthy Homes Programme (HHP) seeks to prevent premature death and ill health caused by poor housing conditions and accidents in the home. It is aimed at the rented sector and seeks to help the most vulnerable residents in Liverpool. Based on national estimates, poor housing conditions are a significant contributor in up to 500 deaths and around 5,000 illnesses needing medical attention in Liverpool each year. The city has one of the highest rates of excess winter deaths in the UK; between 2004 and 2007, there were 242 excess winter deaths per year.

Liverpool PCT commissioned the City Council to assist in the reduction of health inequalities and improve morbidity and mortality statistics through the HHP. The HHP proactively targets and surveys a large number of the worst properties that house the most vulnerable occupants. In tackling sub-standard housing conditions and knitting together the wide range of health-related services the city has to offer, the hardest to reach and most vulnerable residents are actively engaged and encouraged to take advantage of available health services from a single point of contact. This partnership confronts head-on health inequalities in a city that has some of the worst levels of deprivation and health disparity in the country.

The programme will identify approximately 15,000 properties for an initial survey, and prioritise 2,750 for full health and safety inspection to develop a personalised home improvement plan. Following the inspections of the properties, the necessary improvements are secured by the team's Environmental Health Officers through advice and enforcement. This programme is delivered initially over three years and is controlling the most significant and life threatening hazards in these homes, including: poor heating and insulation; bad internal arrangements (to prevent accidents); dampness and mould (combating respiratory illness).

In addition to inspecting housing conditions, the health and well-being needs of all occupants are investigated and advice on accident prevention and health promotion provided. Referrals to relevant agencies are also made where specific health and well-being problems are identified.

The programme works in partnership with a number of related agencies such as Merseyside Fire and Rescue Service and initiatives such as energy efficiency and making neighbourhoods cleaner and healthier. HHP also works with primary care by increasing awareness of the programme in neighbourhood General Practices and creates referral systems for clinicians. Health professionals can then actively address the causes of some respiratory complaints and other chronic diseases.

Advice and education on health promotion and home accident prevention are also integral to the programme. Vulnerable households such as those housing black and minority ethnic groups, the elderly and young are being specifically targeted.

The programme is designed to:
— Prevent up to 100 premature deaths when fully implemented
— Reduce the number of GP consultations and hospital admissions by an estimated 1000 cases
— Improve clinical understanding of poor housing on local health via communication with GPs and other clinical services
— Reduce reliance on secondary and tertiary treatment
— Increase community capacity to support housing improvements.

For more information see
www.liverpool.gov.uk/healthyhomes

Summary
— Integrated planning, transport, housing, environmental and health systems are needed.
— Training in health for planning, transport, housing and environmental professionals should be implemented.
— A Policy Planning Statement on health is needed.

E.2.3   Create and develop communities

Recommendation: Support locally developed and evidence-based community regeneration programmes that:
— Remove barriers to community participation and action
— Reduce social isolation.

Community or social capital is shaped both by the ability of communities to define and organise themselves, and by the extent to which national and local organisations seek to involve and enagage with communities. It is comprised of different factors in different communities, and can include community networks, civic engagement, a sense of belonging and equality, cooperation with others and trust in the community. Community capital needs to be built at a local level to ensure that policies are drawn on and owned by those most affected and are shaped by their experiences.

Communities with less community capital differ from stronger communities in many ways. For example, there is less volunteering/unpaid work in neighbourhoods that are perceived to be less safe, and less socialising and less trust in others.[466] In the last decade, the level of volunteering/unpaid work has remained fairly constant. According to the Joseph Rowntree Foundation, '[b]etween 35 per cent and 40 per cent engaged in some form of civic participation, around 20 per cent in civic consultation and 10 per cent in civic activism. Around 35 per cent volunteered informally, and 25 per cent formally over the period.'[467]

Evidence for causal associations between social capital and health is improving. In many communities facing multiple deprivation, stress, isolation and depression are all too common.[468] Residents of busy streets have less than one quarter the number of local friends than those living on similar streets with little traffic.[469] The most powerful sources of stress are low status and lacking social networks, particularly for parents with young children.[470] Low levels of social integration, and loneliness, significantly increase mortality.[471] Several longitudinal studies have shown that social networks and social participation appear to act as a protective factor against dementia or cognitive decline over the age of 65 and social networks are consistently and positively associated with reduced morbidity and mortality.[472] There is strong evidence that social relationships can also reduce the risk of depression.[473] People with stronger networks are

Figure 4.10 Percentage of those lacking social support, by deprivation of residential area, 2005

■ Some lack

■ Severe lack

Source: Health Survey for England[475]
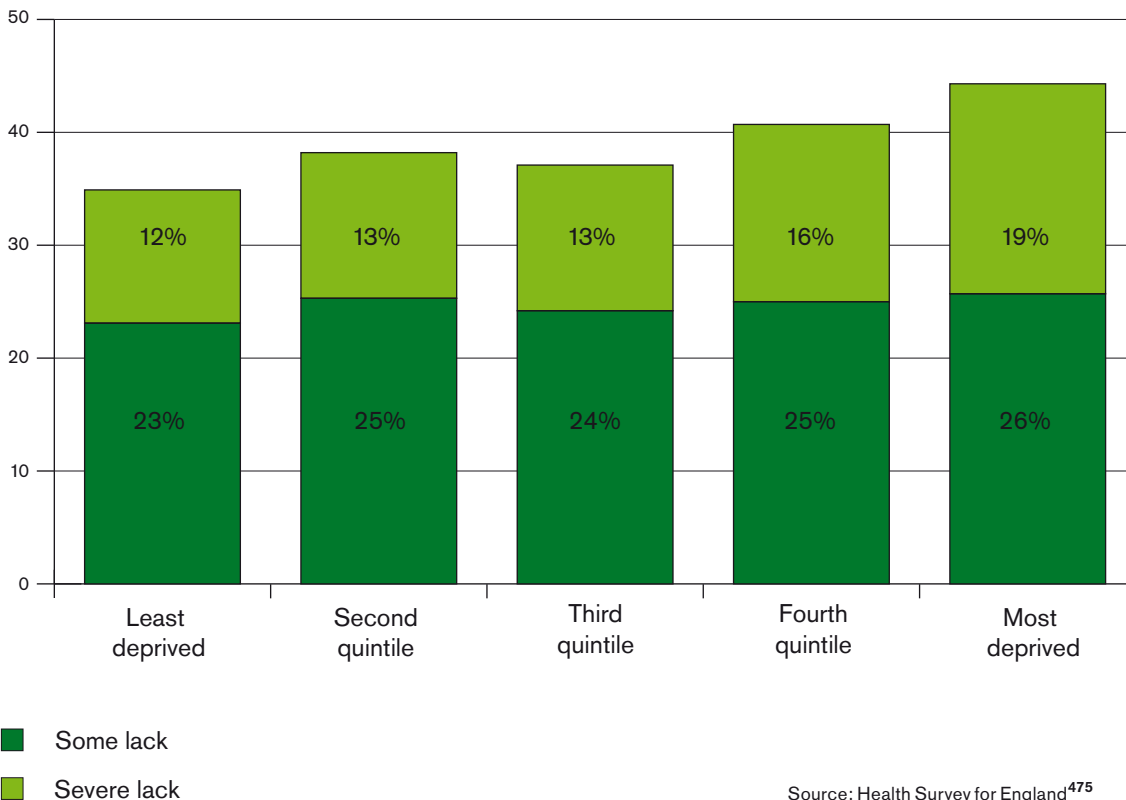
healthier and happier. Making resources available to address the association between poor health and poor social networks and break the cycle of deprivation can also decrease costs of health care.[474]

Remove barriers to community participation and action

Addressing the psychosocial effects of neighbourhood deprivation is a difficult task as identifying methods to improve community capital can be difficult. Those living in deprived areas often find their communities lack social support (Figure 4.10) and, according to the Joseph Rowntree Foundation, 'people in more deprived areas [are] more likely than others to think that certain issues [represent] a serious problem in their area. For example, over half of people in the most deprived areas [feel] that drug use or dealing, litter and vandalism [are] serious problems where they [live]. This compare[s] to between one-quarter and one-third in other areas.'[476]

In the UK, neighbourhood regeneration programmes have demonstrated improvements in average employment rates, educational achievements, household income and housing quality, all of which may contribute to a reduction in inequalities in health, but they can also increase housing costs, rendering residents poorer, as regeneration displaces the original residents.[477]

Numerous policies across government departments have sought to improve community capital and to tackle concentrated deprivation in deprived neighbourhood, such as Communities for Health (Department of Health) and the National Strategy for Neighbourhood Renewal (CLG). The latter was underpinned by investment in area-based regeneration and community renewal, primarily through the Neighbourhood Renewal Fund (NRF – refocused since 2008/9 on employment as the 'Working Neighbourhoods Fund'), but also through the New Deal for Communities (NDC) and the Neighbourhood Management Pathfinders (NMP) programmes.

Evaluation evidence from across these programmes identified some positive trends – for example, the proportion of young people getting good GCSEs and residents' satisfaction with local services, such as police and street cleaning. A review of the NDC[478] found more than half of residents said the area improved as a place to live. The feeling of being part of a local community increased from 35 per cent in 2002 to 42 per cent in 2006, still below the national average at 53 per cent, but nonetheless showing an increase in deprived communities, where improvements are more difficult to achieve. Self-reported health rose slightly from 77 per cent feeling that their health was good or fairly good in 2002 to 80 per cent in 2006 (still below the national average at 87 per cent).

Overall, despite these efforts, the proportion of people who do not feel they could affect decisions locally has not changed since the start of the decade and in the last 20 years a consistent number of adults, around two-fifths, have felt that their neighbourhood was not the type of area where people would help

each other.[479] Other evaluations have identified that a failure to commit to mainstreaming and a lack of ability to think strategically about how core services could work better in regeneration areas meant that progress was limited.[480] While the NDC programme highlighted some real challenges on engaging and developing communities, it did provide long-term funding, which alleviates funding stresses from local communities who often survive on year-to-year funding programmes.

Engagement of residents tends to have been most successful at the neighbourhood level and where there is engagement in individual projects and initiatives rather than at strategic or general consultative level. The National Strategy for Neighbourhood Renewal has had most success in influencing mainstream services to adopt a greater focus on deprived neighbourhoods where complemented by existing national policies and targets.

The experience of these programmes offers some important lessons for the future and what has and has not been most effective in supporting deprived neighbourhoods. For example:

— A need to focus more on underlying economic drivers of deprivation, such as the wider labour market, which will most likely operate at a higher spatial level than the neighbourhood
— A need to engage with mainstream agencies and ensure core services work better in regeneration areas

Communities need to be involved in developing and delivering their own regeneration programmes and initiatives – but that involvement needs to be real and fit for purpose (i.e. at the right spatial level and reflecting the capacity of local communities). Interventions work best with national guidance but accompanied by local freedom to develop relevant local programmes. As indicated in section E2.2, the design of neighbourhoods can also have an impact on community participation.

To achieve sustainable change it is necessary to take an integrated and appropriately sequenced approach that considers the social, economic and physical problems of an area and the interactions between them, and how best to complement the interventions of other agencies.

Reduce social isolation

Reducing social isolation, and increasing individual and community empowerment and health outcomes, is challenging but much needed as the number of one-person households increases. In 1991 26.3 per cent of households contained one person, rising to 30 per cent in 2001, but social isolation and exclusion concerns more than just those living alone. Social exclusion encompasses social, political, cultural and economic dimensions and has different impacts at different stages in a person's life. It is the multiple disadvantages experienced by particular groups and individuals existing outside the 'mainstream' of society.[481]

Social isolation impacts on health: social networks and social participation act as protective factors against dementia or cognitive decline over the age

of 65.[482] Individuals who are socially isolated are between two and five times more likely than those who have strong social ties to die prematurely. Social networks have a larger impact on the risk of mortality than on the risk of developing disease, that is, it is not so much that social networks stop you from getting ill, but that they help you to recover when you do get ill.[483]

Four pathways suggest the interventions and policies that could reduce social isolation and exclusion:

1 First, identifying population needs better quality information from communities. In theory this can lead to health improvements and reduced health inequalities through an increased uptake of more effective services, particularly preventative services, and/or more effective interventions.

2 Second, improving governance and guardianship and promoting and supporting communities to participate in directing and controlling local services and/or interventions. This will help to improve the appropriateness and accessibility of services and interventions, increase uptake and effectiveness and influence health outcomes.

3 A third way to reduce social isolation is to develop social capital by enhancing community empowerment. This helps to develop relationships of trust, reciprocity and exchange within communities, strengthening social capital.

4 Lastly, increasing control and community empowerment may result in communities acting to change their social, material and political environments.[484]

Summary
— Understanding of the relationship between social and community capital and health is growing.
— Communities facing multiple deprivation often have high levels of stress, isolation and depression.
— Social networks and participation can improve mental health inequalities.
— Area-based initiatives have demonstrated some limited successes.
— Social isolation can lead to increased risk of premature death.
— Including communities and individuals in designing interventions to address social isolation will help improve their effectiveness.

Time period: 2011–2015

1 Prioritise policies and interventions that reduce both health inequalities and mitigate climate change, by:
— Increasing active travel across the social gradient
— Improving access and quality of open and green spaces available across the social gradient
— Improving local food environments across the social gradient
— Improving energy efficiency of housing and reducing fuel poverty.

2 Prioritise integration of planning, transport, housing, environmental and health policies to address the social determinants of health in each locality.

3 Support locally developed and evidence-based community regeneration programmes, that:
— Remove barriers to community participation and action
— Emphasise a reduction in social isolation.

Time period: 2016–2020

1 Implement policies and interventions that both reduce health inequalities and mitigate climate change, including:
— Maintaining active travel across the social gradient
— Maintaining access and quality of open and green spaces available across the social gradient
— Sustained and continued upgrade of housing stock.

2 Implement greater integration of the planning, transport, housing, environmental and health systems to address the social determinants of health in each locality.

3 Increase development of locally designed and evidence-based community regeneration programmes, by making long-term funding available for evidence-based community regeneration programmes.

Time period: 2020 and beyond

1 Monitor policies and interventions that both reduce health inequalities and mitigate climate change for complementarity:
— Maintain and monitor active travel across the social gradient
— Monitor access and quality of open and green spaces available across the social gradient.

2 Fully integrate the planning, transport, housing, environmental and health systems to address the social determinants of health in each locality.

3 Make sustainable investments in community engagement and neighbourhood renewal.

Policy Objective F
Strengthen the role and impact of ill health prevention

Priority objectives

1   Prioritise prevention and early detection of those conditions most strongly related to health inequalities.

2   Increase availability of long-term and sustainable funding in ill health prevention across the social gradient.

F.1   Introduction

As outlined in Chapter 2, the conditions most strongly related to health inequalities, such as cancer and cardiovascular disease, are associated with smoking, alcohol, drug use and obesity. Policy Objectives A to E are concerned with the causes of the causes, of addressing ill health prevention and tackling the social determinants of health in ways not traditionally associated with modifying health behaviours. The purpose of this final Policy Objective is to address health behaviours.

Ill health prevention and health promotion are not the sole domain of the NHS, so it is not the only player in addressing health inequalities. Similarly, public health departments should not be the only part of the NHS responsible for tackling health inequalities. Reducing health inequalities is a responsibility shared between a range of different sectors and services, as described in Chapter 5. Local and national decisions made in schools, the workplace, at home and in government as well as across the NHS, all have the potential to help or hinder ill health prevention.

Wide-ranging definitions can be made of 'ill health prevention' and 'health promotion'. Health England adopts a broad definition of ill health prevention, as 'a clinical, social, behavioural, educational, environmental, fiscal or legislative intervention or broad partnership programme designed to reduce the risk of mental and physical illness, disability or premature death and/or to promote long-term physical, social, emotional and psychological well-being'.[485] This definition underlines the importance of viewing ill health prevention and health promotion as a shared responsibility across local and national governments and in a range of sectors and services. We recommend government adopt a shared and clearer definition of prevention across government departments.

In the words of Starfield *et al*, to 'ensure better health for populations…and better distribution of health…demands a (re)focus on health rather than on preventing specific diseases'.[486] Investing in ill health prevention can, if implemented effectively, improve health and life expectancy as well as reduce spending over the long term, as NICE agrees: 'Promoting good health and preventing ill health saves money… Increased investment in public health is key to increasing efficiency in the health service. A small shift in resource towards public health prevention activity would offer significant short, medium and long term savings to the service and to the taxpayer.'[487]

The evidence base relevant to public health interventions to reduce health inequalities is growing but remains modest. In 2005 it was estimated that of the research published on public health, only 0.5 per cent of articles were related to interventions, with most research *describing* inequalities rather than providing evidence on how to reduce them.[488] The evidence that does exist suggests that ill health prevention generally does work and can reduce costs to the health system.[489]

NICE provides guidance to improve the cost-effective delivery of its public health guidelines. However, levels of evidence about the impacts and cost-effectiveness of interventions concerning ill health prevention are small in some areas.[490]

It is difficult to find methods to measure effectiveness as many effects are in the medium and long term. However, statins, paediatric immunizations, and smoking cessation have been found to be among the most cost-effective ill health preventions.[491]

A wide body of epidemiological and sociological evidence suggests that health inequalities are likely to persist between socioeconomic groups, even if lifestyle factors (such as smoking) are equalised.[492] As this Review has demonstrated, policies to modify health behaviours need to address the social determinants of health. Aiming interventions at individuals will not by themselves reduce health inequalities; 'responsibility for better health should be shared between society and the individual'.[493]

Some individuals may require additional support and giving consideration to the specific health needs of certain populations is essential. For example, many population groups have additional health needs, such as the elderly, people living with disability or mental illness, ethnic minority groups, the homeless, refugees and asylum seekers, Gypsies and Travellers. Population-wide and individual interventions need to be adapted to meet needs within a universal framework.[494]

Some population-wide interventions, such as screening programmes, are taken up to the largest degree by advantaged populations, potentially widening health inequalities.[495] Ill health preventions that seek to change individual behaviour such as smoking, alcohol, what we eat and how we exercise, are more likely to be taken up by those who already aspire to or are in good health. Both population-wide and individually targeted interventions need to be proportionately targeted across the social gradient if they are to reduce health inequalities effectively.

F.2 Recommendations

F.2.1 Increased investment in prevention

> **Recommendation:** Prioritise investment in ill health prevention and health promotion across government departments to reduce the social gradient.

Currently, most investment in ill health prevention and health promotion emanates from the NHS and the Department of Health. However, nearly all the NHS budget goes, either directly or indirectly, on the treatment and care of illness rather than on ill health prevention. In the NHS, there is wide variation in spending on public health programmes in PCTs. For example, in 2006/7 spending on 'healthy individuals' ranged from £240,000 in one PCT to £10.6 million in another.[496] Not only is there a wide variation in spending, but public health budgets are also often seen as the first budgets to raid when wider organisational budgets are pressurised.[497] Public health budgets should not be regarded as optional extras; investing in public health and ill health prevention will help to 'build the foundations of a healthier population for the future', as the Chief Medical Officer reported in 2005.[498]

The absence of an agreement on what constitutes public health spending makes it difficult to assess how expenditure on ill health prevention is allocated and as a result, limits understanding the effectiveness of public health investment. In 2006–7, 4 per cent of the NHS budget, totalling £3.7 billion, was spent on ill health prevention and health promotion.[499] The OECD also measured spending on ill health prevention and public health and while its definition may not be ideal – for example, it includes spending to reduce incidence of MRSA – it provides a starting point for analysis. As Table 4.3 indicates, more ill health prevention spending goes towards secondary prevention, early disease detection and intervention than to the prevention of the onset of disease.

The OECD definition of ill health prevention only includes spending by the Department of Health; it fails to fully demonstrate the scale of all ill health prevention and health promotion investment. For example, it does not capture investment where ill health prevention is not the primary rationale (e.g. sport). As our recommendations show, investment in the social determinants of health is required across government departments.

This Review proposes increasing spending over 20 years, to 0.5 per cent of GDP. In 2008, this would have increased ill health prevention spending to £7,230,565,000. This figure would include expenditure on ill health prevention and health promotion across government departments. A widely accepted definition would help to calculate expenditure.

This recommendation echoes earlier recommendations to increase investment in ill health prevention. For instance, Derek Wanless recommended health promotion expenditure grow in line with expenditure on general practice and hospital care.[500] While expenditure on ill health prevention has increased in the last 10 years, the level of investment Wanless recommended for the 'fully engaged' scenario – where the health of the population improves, the use of resources is more efficient and the health service is responsive, with high rates of technology uptake – has not occurred.

Many policies have addressed ill health prevention, but too often they are detached from mainstream activities and funded as one-off initiatives.[501] Part of the problem for those working in public health is that many funding streams fund pilot projects but then

fail to respond to good evaluations. Many initiatives remain as pilots and cannot secure the necessary routine or mainstream funding to continue, even when they are shown to work. In addition to increasing the amount spent on ill health prevention, government funding at local and national levels needs to shift from short-term projects to longer-term interventions that are evidence-based and designed with robust evaluations. Many of the ill health prevention interventions and programmes are funded over short periods of one to three years, yet it often takes a number of years to witness the effects from these interventions. Failing to provide longer-term funding for small-scale projects that are found to be also effective leads to a loss of knowledge and skills.[502]

Summary
— Investment in ill health prevention and health promotion needs to substantially increase to 0.5 per cent of GDP over 20 years.
— Public health budgets should not be regarded as optional extras.
— A common definition of ill health prevention is needed across government and delivery organisations.
— Increased funding for longer-term projects and follow-up funding for successful pilots is needed.

F.2.2   Implement evidence-based ill health preventive interventions

Recommendation: Implement evidence-based programme of ill health preventive interventions that are effective across the social gradient by:
— Increasing and improving the scale and quality of drug treatment programmes, diverting problem drug users from the criminal justice system
— Focusing public health interventions such as smoking cessation programmes and alcohol reduction on reducing the social gradient
— Improving programmes to address the causes of obesity across the social gradient.

Public health guidance and research should consistently apply health inequalities as a filter. While NICE guidance includes an inequalities filter, systematic reviews would also benefit if they included an inequalities analysis. Many NICE systematic reviews find relevant research concerning the differential impacts of health inequalities on interventions but many include no health equity assessment, stating that the research does not exist. All researchers need to adapt their primary evaluation studies to assess the effectiveness of interventions to reduce health

Table 4.3 Ill health prevention expenditure in England (£m), based on OECD definitions, 2006/7

Primary		
£1,771 billion	£840 million	Maternal and child health, family planning, counselling
	£248 million	Health Protection Agency
	£238 million	Immunization
	£116 million	Obesity/diet/lifestyle
	£56 million	Stop Smoking services
	£53 million	NHS blood and transplant (BT)
	£47 million	Quality and Outcomes Framework (QOF)
	£44 million	School-based group health services, healthy schools programme
	£34 million	Publicity for prevention activities
	£33 million	Charitable expenditure on prevention
	£25 million	National Biological Standards Board
	£24 million	Other infectious diseases
	£4 million	NICE public health guidance
	£4 million	Occupational health for dentists
	£3 million	Reducing MRSA
	£2 million	CJD surveillance
Secondary		
£1.964 billion	£937 million	Dental check-ups
	£396 million	QOF (e.g. monitoring & reducing blood glucose levels, contraception)
	£289 million	Screening (breast, cervical and bowel cancer, Down's syndrome, sickle cell anaemia, retinal, neonatal, audiological)
	£208 million	Sight tests
	£115 million	School-based individual health services
	£19 million	Public health in prisons
Total	**£3.7 billion**	

Source: Organisation for Economic Cooperation and Development (OECD)[503]

inequalities, whether they are carrying out clinical drugs trials or evaluating social policy initiatives. This is particularly the case for interventions that may take place outside the health domain.

The following section provides a sample of evidence-based interventions that can be implemented to reduce health inequalities across the social gradient. It is not an exhaustive list of interventions needed.

Increasing and improving the scale and quality of drug treatment programmes, diverting problem drug users away from the criminal justice system
Chapter 2 described inequalities in the harm caused by problematic drug use. The number of babies born to drug-addicted mothers (dependent on heroin or other opiates) has almost doubled in recent years. In 2006/7, 1,970 women were addicted to drugs at the time of the birth of their children, up from 1,057 in 2002/3.[504] Problem drug use is a problem across England but there are variations in its patterns. Many local authorities with high rates of deprivation also have high numbers of individuals in contact with structured drug treatment, particularly in the North West.[505] Efforts are being made to address the disproportionate effect drugs have on the most vulnerable individuals and communities.[506] In a study of the impact of drugs on four English communities, interviews with those involved in selling drugs showed that many had experienced unsettled early lives. Over half had lived with a foster family, in a children's home or in secure accommodation; many had a disrupted education and over half were excluded from school or left with no educational qualifications. Nearly all had been in contact with the criminal justice system, and over two-thirds had served a prison sentence.[507] Ten to fifteen per cent of the UK's prison population are charged with drugs offences and close to half, between 40 and 50 per cent, are drug dependent, 24 per cent being injecting drug users.

Drug prevention can be a mechanism for reducing inequalities and reducing social exclusion and drug treatment is an essential part of a successful drug policy and of reducing inequalities.[508]

Current treatment policies are based on getting problem drug users (PDUs) into treatment as quickly as possible. The National Treatment Agency (NTA), set up in 2001, is required to meet targets for treatment and waiting times. This has led to an increase in the number of individuals treated; however, the treatment received has not led to a reduction in the number of PDUs. Despite an increasing budget, fewer than three per cent of PDUs are drug-free after treatment, and this has fallen from 3.5 per cent.[509]

Part of the problem is that treatments depend on the use of pharmaceuticals. Less than two per cent of clients receive structured motivational interventions, and sessions typically last 11 minutes. Just over three per cent undergo in-patient treatment (short detoxification stays) and only two per cent have had residential rehabilitation.[510] Improving the reduction of problem drug use would involve investing more in early treatment in long-term programmes rather than on pharmaceuticals or imprisonment.

Drug treatment interventions can be effective at reducing, and in some cases, ceasing an individual's drug use and work most effectively when they address the individual factors of each person.[511] For example, many homeless individuals are PDUs and lack of appropriate and stable accommodation is a barrier to their ability to access and remain in drug treatment services. Therefore, effective treatment for this group should focus on care that responds not only to drug use but also to the problems underlying their drug use.[512] A meta-analysis of drug treatment programmes found positive evidence that structured therapeutic community interventions for drug users in prisons and drug treatments (including drug courts) in the community produced a greater reduction in offending behaviour than standard treatment.[513]

An international review of the effectiveness of drug treatment interventions in reducing drug use or drug-related crime concluded that: 'There is strong evidence that the most effective interventions to reduce drug related crime are therapeutic communities and drug courts.'[514] Some countries have implemented radical policies to successfully reduce the numbers of PDUs. In 2001 drug use was medicalised in Portugal and instead of sending PDUs to prison, they go to specialist 'discussion commissions' (made up of psychiatrists, social workers and legal advisers), which encourage addicts to undergo treatment offered by the government. The effects of medicalising drugs has not led to a growth in the number of addicts in Portugal, but has increased the willingness of PDUs to seek treatment, and to more treatment being available.[515] The number of addicts registered in drug-substitution programmes rose from 6,000 in 1999 to 24,000 in 2008, reflecting a rise in treatment, not drug use.[516] There has been an increased uptake of treatment and a reduction in drug-related deaths.[517]

In addition to Portugal, six countries in Europe – Spain, Italy, the Czech Republic, Estonia, Latvia and Lithuania – have also decriminalised low-level drug possession. The UK rarely imprisons people for possession, particularly of cannabis (0.2 per cent of people found in possession of cannabis go to prison).[518]

Given the links between drug experimentation in childhood and problematic drug use in adulthood, an important part of drug prevention is reducing the number of children trying drugs initially, and preventing the shift from experimental use to addiction. Schools are well placed to reach children before they initiate drug use, or in the early stages of experimentation. Although UK-based studies are generally lacking, there is international evidence (mainly from the US) that school-based prevention programmes can delay the onset of substance use by non-users for a short time, and temporarily reduce use by some current users. A systematic review of school-based programmes found that those based on developing life skills were the most consistent at reducing aspects of drug use in school settings. These programmes also effectively increased drug

knowledge, decision-making skills, self esteem, and resistance to peer pressure.[519]

By proactively treating problem drug use as a medical issue, moving resources to fund evidence-based treatment programmes supporting long-term behaviour change and developing and investing in collaborative partnerships between police, schools, health and social care professionals, the NHS and partners agencies should be able to better address problem drug use and progressively reduce the impact of drugs on England's most deprived communities.

Reducing smoking and alcohol use across the social gradient

As described in Chapter 2, the relationship between socioeconomic status and alcohol is complex. There is a social gradient in the *harms* from alcohol consumption but not in alcohol consumption itself. Over 11 million people in the UK are dependent on alcohol or drink hazardously, yet treatment for alcohol related programmes is only available to six per cent of problem drinkers.[520] Unlike the drug strategy, there are no targets to meet for waiting times and few services are offered to people with alcohol-related chronic disease. There is strong evidence of the effectiveness across the social gradient of using brief interventions to address alcohol problems.[521]

The price of alcohol is also an effective lever for reducing alcohol consumption. Between 1980 and 2007 alcohol became 69 per cent more affordable and in some areas, it is less expensive than a bottle of water.[522] Research consistently shows a clear relationship between alcohol prices and taxes, and consumption.[523] While taxes are generally regarded

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Case Study Reducing health inequalities for those with additional needs

The Health Trainer Programme was launched in 2005 and since then, more than 3,100 Health Trainers (HTs) have seen in excess of 60,000 people. HTs help people from disadvantaged and hard-to-reach communities to access local health services and make healthier lifestyle choices. Half of clients are drawn from the most deprived 20 per cent of local authority areas. Many of the HTs come from, or are knowledgeable about, the communities they work with. In most cases HTs work from locally based services and with clients on a one-to-one basis to assess their health and lifestyle risks. Nearly 90 per cent of Primary Care Trusts have an HT Service.

There has been considerable enthusiasm for the concept among third party organisations, particularly to provide services for those with additional needs or those who are more difficult to reach. There are nearly 80 HTs working with offenders. The British Army has trained 450 Physical Training Instructor HTs, and Royal Mail has trained two cohorts of first aid staff as HTs. The Hampshire Probation Area Health Trainer Service established in late 2006 is an award-winning example of the HT service working with a third party and providing support for those on probation, a group that often requires additional support.

Portsmouth City Teaching PCT commissioned the first four HTs in offender health in January 2007. The PCT commissioned the service because it recognised the huge health inequalities suffered by people on probation, who could be reached and helped by health trainers. It also recognised the educational benefit and potentially improved employment opportunities gained by HTs as a result of the basic transferable skills they are taught.

Based in the Probation Office in Portsmouth and employed by Learning Links (a third sector organisation), HTs work alongside Probation staff. Their role is to give advice and guidance to offenders on how to access local health services and work with the offender to facilitate and help motivate them to make healthier behavioural changes to their lives and lifestyles. For most of the ex-offenders the HT programme is their first employment experience. With the HTs often coming from a similar background, living in the same community and having experienced some of the same health issues, they are more effective in working with the offenders in addressing their needs and empathising with their particular issues.

In 2008/9 Portsmouth Probation HTs saw 162 offenders. Some of the issues they worked on included smoking cessation, alcohol reduction, diet and nutrition, physical activity and registering with NHS services. They have carried out a range of tasks including accompanying a client to the dentist for the first time in 20 years and accompanying another to the leisure centre to play badminton and meet new people. Probation staff value HTs' contribution to rehabilitation, and a survey of Offender Managers using the HT service for their offenders found that the HTs were extremely professional and capable.

The Portsmouth City Teaching PCT and the Hampshire Probation Service received the Butler Trust Health Improvement Award for Healthcare and Health Promotion Work, recognising the effectiveness of the partnership between the Probation Service in Portsmouth and the NHS. The award also recognised the innovation of introducing ex-offender Health Trainers into the Probation Service, the significant positive impact HTs have had on the health needs of offenders, and the life-changing experience that being trained and employed as HTs has provided for ex-offenders.

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as regressive, the social patterning of alcohol consumption, where those on lower incomes drink less, means having a minimum price for alcohol may disproportionately *benefit* lower socioeconomic groups.[524]

Tobacco control is central to any strategy to tackle health inequalities as smoking accounts for approximately half of the difference in life expectancy between the lowest and highest income groups. Smoking-related death rates are two to three times higher in low-income groups than in wealthier social groups.[525] Efforts to address smoking across the social gradient have led to a better understanding of the effectiveness of interventions. These interventions involve measures at population level to prevent people from starting smoking and helping them to quit, such as smoking bans, reducing smuggling, restricting advertising and placement, workplace interventions, for example, group therapy, individual counselling, self-help materials, nicotine replacement therapy and social support, and abolishing prescription charges for nicotine replacement therapy.[526]

While there have been improvements in understanding how to improve smoking cessation interventions, Figure 4.11 demonstrates there are still substantial gaps in understanding the effectiveness across the social gradient. This 'supermatrix' assesses the impact of eight interventions on the gradient, by looking at six sources of inequality. In the diagram, studies with hard behavioural outcome measures are indicated with black bars, and studies with intermediate outcome measures with grey bars. The highest bars represent the most suitable study designs and the lowest bars represent the least suitable. Each bar is annotated with the number of other methodological criteria (maximum six) met by that study. In this systematic review, for instance, price has the most impact on the gradient in smoking.

At local levels, greater emphasis in smoking cessation initiatives on the psychosocial reasons for smoking and prioritising deprived and marginalised groups is required, focused particularly on routine and manual socioeconomic groups, and people with mental health problems.[527]

In contrast to the impact of a minimum price on alcohol, increasing taxes on cigarettes is strongly regressive. While increasing the price of smoking is the most effective means of helping smokers quit, for those smokers who do not quit it can increase inequalities, particularly for less affluent smokers.[528]

Addressing the causes of obesity across the social gradient

Tackling the causes of obesity is a complex task. The Foresight report of 2007 identified over 100 causes of obesity.[529] Policy Objective E also addresses issues related to obesity in recommending improvements to the access and quality of green space.

Figure 4.11 Evidence of the effect of smoking cessation interventions across the social gradient[530]
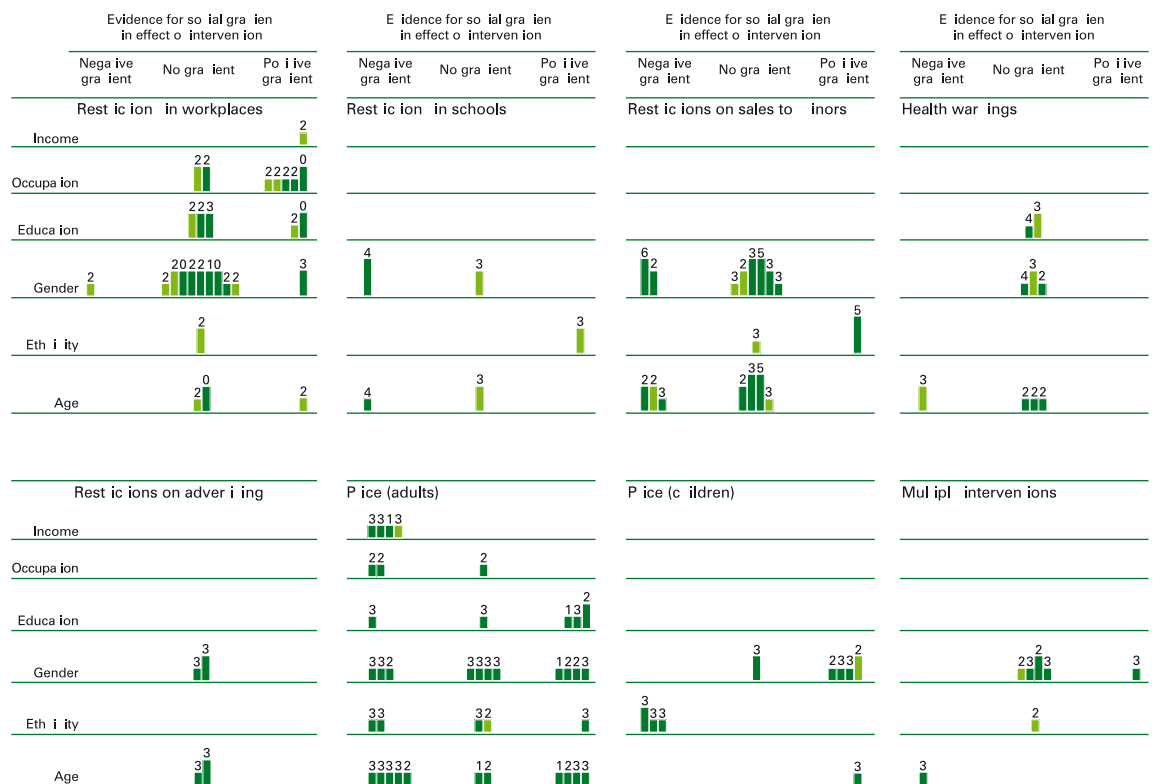
Source: Thomas et al[531]

At the beginning of the decade, obesity was directly responsible for over 9,000 premature deaths a year in England, a figure that has continued to rise each year despite a number of policy efforts.[532] In different ethnic groups obesity varies – see Figure 4.12, although measurement and classification is problematic, and the gradient among social classes is also growing – see Chapter 2. Modelled estimates predict that by 2015 obesity rates are expected to fall for girls from professional backgrounds and rise slightly for boys in this social group while rates among those from lower social classes are expected to keep rising faster for both boys and girls.[533]

Understanding the effectiveness of interventions to reduce obesity across the social gradient is improving. Teenagers' attitudes to diet and weight are partly shaped by their social class, levels of education and employment status.[534] Other studies have found that adults' physical activity increases and sedentary behaviours decrease according to socio-economic group but this relationship is less consistent in children and young people. Teenagers' levels of physical activity vary with income when physical activity is expressed as energy expenditure, but not when expressed in minutes of moderate to vigorous physical activity. Higher-income adolescents play more sport, which has a higher average intensity, but participate less in active transport, which has a lower average intensity. At weekends, children from high income households participate in nearly twice as much sport as children from low income households – see Figure 4.13.[535]

Addressing obesity needs to be based on population-wide interventions.[536] Improving the availability of, and access to, healthier food choices among low-income groups involves population-wide interventions, such as reducing salt and saturated fat in products. Addressing the causes of obesity across the social gradient will require action across the life course and evidence-based interventions to tackle increased levels of obesity in particular social groups.

Summary
— Research on health interventions should include health equity impact assessments.
— Drug policy should be based on medicalised treatment programmes.
— Population-wide interventions on smoking, alcohol and obesity are needed to reduce the social gradient but targeted interventions may be needed to target particular groups.

Case Study Universal and targeted interventions to tackle obesity and reduce health inequalities

Tower Hamlets in East London has one of the highest ethnic minority populations in London. Tower Hamlets was selected as one of nine Healthy Towns in England and is the only London Borough to be part of the programme. It was awarded over £4.5 million to spend in 28 months (from December 2008 to April 2011). The programme aims to transform Tower Hamlets by promoting and supporting health and well-being, seeking to (for example) increase knowledge of healthy choices, improve walking and cycling routes and increase participation in walking and cycling, and improve access to healthier food choices.

The programme targets children and families, particularly Bangladeshi, Somali and low-income groups. The programme adopts a whole-system approach, working across three themes: healthy environments, healthy organisations and healthy communities. Projects supported by the programme are based on three cross-cutting strands – active lives, healthy food and active travel.

The Healthy Borough Programme (HBP) is comprised of 15 projects, covering all of the Borough and targeted programmes including:
— Green Grid to develop a comprehensive strategic plan for creating a network of high-quality walking and cycling routes
— Active Travel Routes and Active Travel Plans to provide better walking and cycling routes and increase levels of usage

— Healthy Spatial Planning, to embed health and well-being objectives in the Local Development Framework
— Parks and Open Spaces, working with black and minority ethnic communities to promote greater use of parks and participation in activities that promote physical activity
— Active Play to ensure greater access and participation in active play
— Women and Girls Swimming Programme
— Healthy Food Outlets, Healthy Food and Healthy Families, to improve the provision of healthy food options and promote healthy diets and food choices in workplaces, schools, colleges, homes and early years settings.

The HBP seeks to ensure community engagement is embedded in all projects. One way of doing this is by offering funding grants (starting at £500) to local communities based on their own ideas and projects that will make healthy eating and physical activity easier.

The HBP is being evaluated for its short-term outputs and longer-term outcomes. The HBP will also be part of the national evaluation of the Healthy Towns programme, which will assess how the Healthy Towns developed and are implemented.

For more information see www.onetowerhamlets.net/healthy_borough.aspx

Figure 4.12 Prevalence of underweight, overweight and obese children in Year 6, by ethnic category, England, 2008/9

Percent

- ■ Obese
- ■ Underweight
- ■ Overweight
- —■— Obese National Average
- —■— Underweight National Average
- —■— Overweight National Average

Source: National Child Measurement Programme [537]
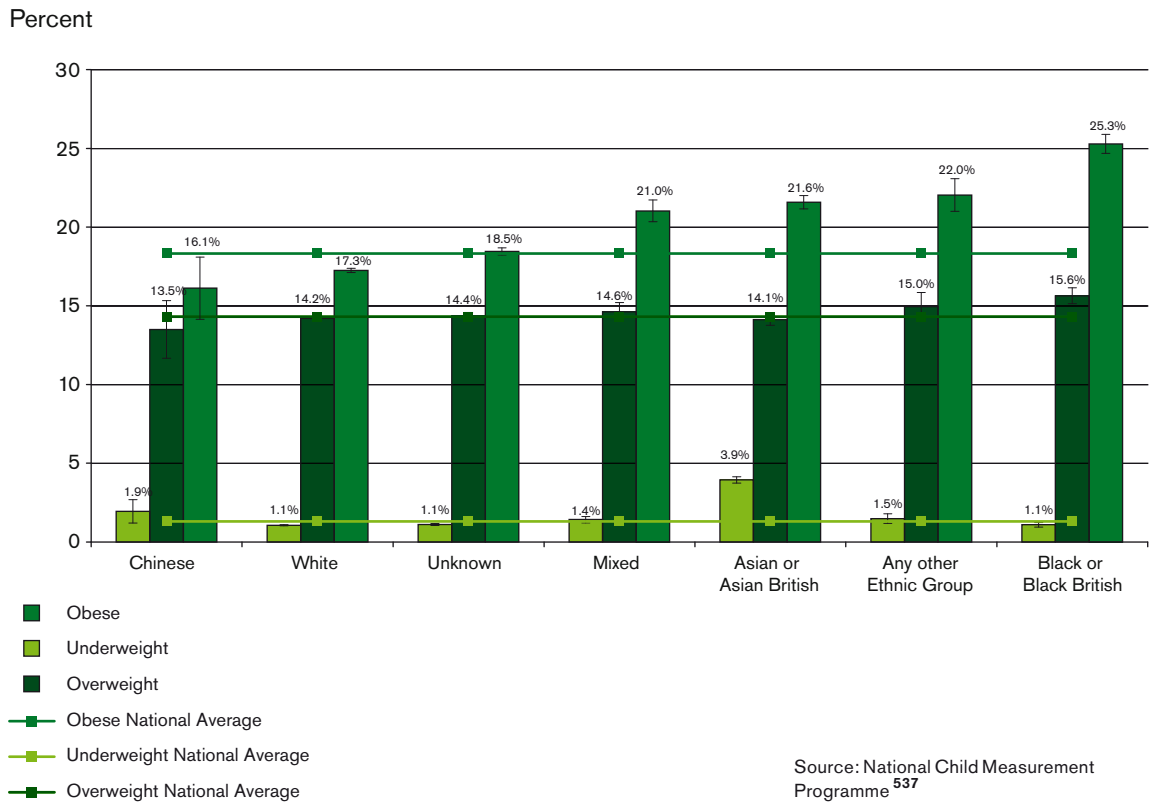
Figure 4.13 Minutes per day spent doing sport, on school and non-school days, across four income bands, 2007

Minutes per day

- ■ 1st Wealthiest
- ■ 2nd
- ■ 3rd
- ■ 4th (poorest)

Source: Carol et al[538]
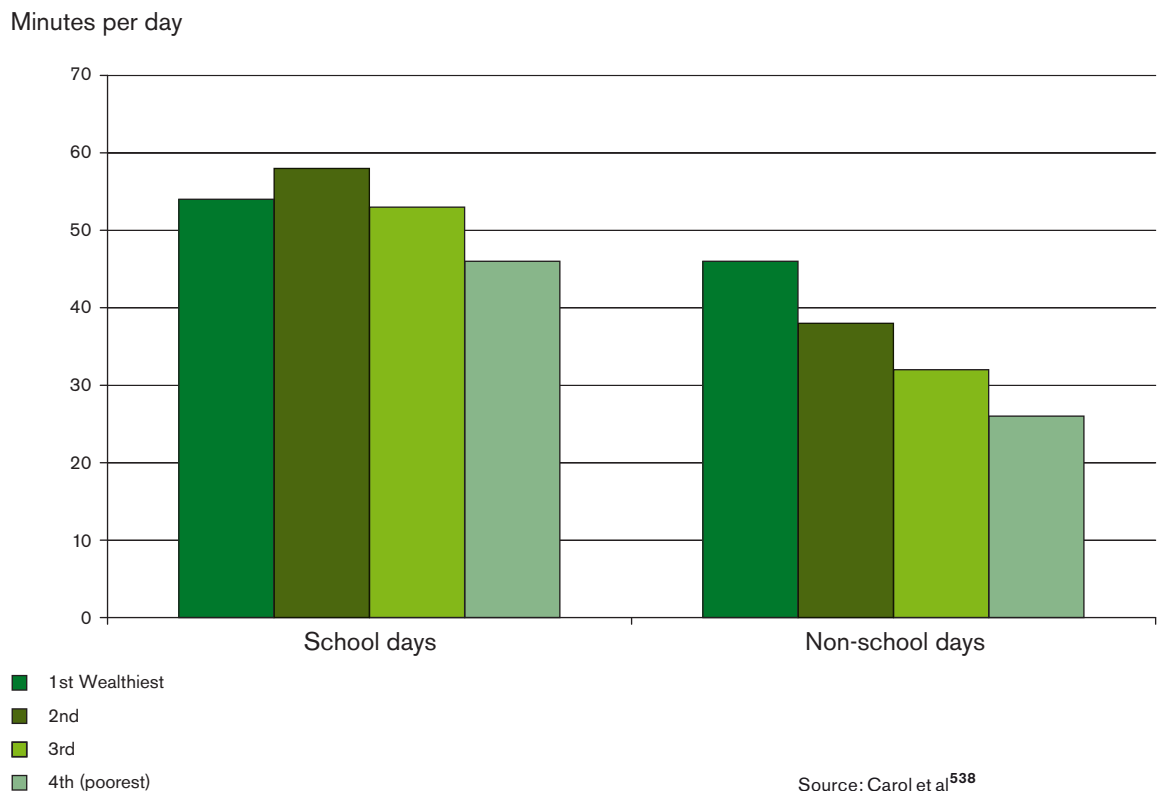
F.2.3 Public health to focus interventions to reduce the social gradient

Recommendation: Core efforts of public health departments should be focused on interventions related to the social determinants of health, proportionately across the gradient.

The aim of this recommendation is to utilise the expertise of public health professionals to help develop local policies to tackle health inequalities. As established and also discussed in Chapter 5, in addition to the NHS, many sectors and professionals have key roles in addressing the social determinants of health.

Public health departments are responsible for a wide range of activities, including health protection, ill health prevention and leading health inequalities strategies. Public health consultants lead the public health profession, but there is a much broader public health workforce, including:

— Health care professionals who are responsible for carrying out public health interventions or spend a great deal of time delivering this work, such as health trainers, health visitors, practice nurses

— Non-health professionals who communicate public health messages and carry out relevant interventions, such as those working in leisure centres, children's centres, housing, planning, transport and environmental departments, teachers and the broader schools workforce.

Many in the public health profession have championed health inequalities at a local level for a number of years. Across public health departments and in

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Case Study Addressing the causes of the causes in ill health prevention and improving health

Hull, the eleventh most deprived local authority area in England, instigated a novel strategy to address ill health over the long term. Seventeen of Hull's 23 wards are in the most deprived 20 per cent of wards in England and in recent years poverty has worsened, with a 26 per cent increase in Jobseeker's Allowance claimants since October 2007. Over a third of children live in an income-deprived household and one fifth live in a house with no central heating. On any given day there are 3,000 young people not in school and 800 young people are classified as not in education, employment or training (NEETs). Hull's GCSE results are improving but remain well below the national average.

In light of the low levels of employment and educational attainment, NHS Hull introduced an *Earning and Learning Strategy* in 2009. Instead of planning short-term interventions, NHS Hull took a long-term and social determinants approach to ill health prevention.

The overarching model of the *Earning and Learning Strategy* (ELS) is to raise aspirations, particularly among the city's young people. All of the activity associated with the ELS seeks to support people to aim higher, not just to improve their health but also to improve educational and occupational attainment. The ELS takes a three-strand approach to address education, employment and health and well-being.

The project works with a number of partners including schools, colleges, health and social care, the NHS, Hull City Council, the local medical school, Jobcentres, Remploy, the third sector, Hull City Football Club and Hull rugby league team. The ELS works with primary and secondary school children and teachers, post-16 education providers, young people looking for work experience opportunities and employment, NEETs, lone parents, school leavers, ex-offenders and the unemployed.

The ELS includes a range of activities: a mentoring programme for Hull schools discussing careers in the NHS, collating an expertise database of health and social care staff willing to give presentations about their roles and services to schools and post-16 providers; a health award to support the promotion of health issues and develop the skills and knowledge of young people on health; a work experience placement coordinator post for a two-year fixed-term contract in partnership with Hull City Council; the creation of an NHS Job Shop in Hull that showcases health and social care careers while offering training and advice on a broad range of roles; development of apprenticeships and programme-led apprenticeships in various roles across the health community (NHS Hull has struggled to recruit and found many local people think the NHS only employs highly qualified staff).

Other activities address employment, education and health and well-being outside the NHS, such as contributing financially and strategically to the relocation of the Hull AFC training ground to within the Hull city boundary, commissioning projects with Hull City AFC and Hull Kingston Rovers (rugby), aiming to increase young people's levels of physical activity and raising life aspirations, and designing and commissioning a 'Better Baby Sitting' scheme for Hull. Programmes will also work closely with employers to improve the quality of work, such as supporting employers when dealing with mental health issues that impact on their workforce and planning a commissioned occupational health service for small businesses in Hull.

For more information see www.hullpct.nhs.uk

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the wider NHS, more efforts can be made to more effectively address the social determinants of health, using evidence-based research. Public health professionals *at all levels* should consistently use evidence to develop local policies and interventions. For example, many public health interventions are based only on providing information, such as leaflets, posters and advertisements. However, this method has been shown to have limited impact across the social gradient. For example, surveys find that mothers are aware that they should give their children healthy meals with more fruit and vegetables, yet even so do not provide these types of meals to their children.[539] The problem is not just about information; in this case, other methods are needed to help encourage healthier cooking: ensuring the availability of cheap healthy food, and encouraging children to eat fruit and vegetables.

As this report has shown, research is needed in many areas to demonstrate effectiveness of interventions, particularly across the social gradient. As NICE guidance recommends, those who carry out interventions, at all levels, should ensure that evaluations include measures of: effectiveness, acceptability, feasibility, equity and safety. Wherever ill health prevention and health promotion take place, whether in primary care, a school or in a leisure centre, evaluations should assess effectiveness across the social gradient. For example, free swimming initiatives and efforts to improve physical activity associated with the Olympics should be evaluated across the social gradient, which involves more than simply assessing the increase in numbers. The impact of interventions should be assessed by measurable indicators of reductions in health inequalities and separately assessed for cost-efficiency.

Summary
— The public health workforce includes a wide range of public health and non-public health personnel.
— More efforts can be made by all working in public health to reduce health inequalities.
— All interventions and strategies should be evaluated.

F.3 Policy Recommendations

Time period: 2011–2015

In addition to the interventions made in Recommendations A–E, the following recommendations are put forward:

1 Prioritise investment in ill health prevention and health promotion across government departments to reduce the social gradient.

2 Increase the development and roll-out of a programme of preventive interventions that are effective across the social gradient, including:
— Increasing the scale and quality of medical drug treatment programmes
— Focus in a public health lifestyle interventions to reduce the social gradient in, for example, obesity, smoking, and alcohol.

3 Refocus the core efforts of public health departments on interventions related to the social determinants of health.

Time period: 2016–2020

1 Refocus mainstream spending across government to increase spending on ill health prevention by 10 per cent per year to reduce health inequalities.

2 Continue the roll-out of a programme of preventive interventions that are effective across the social gradient:
— Channel problem drug users through medical treatment programmes
— Make an evidence-based increase in the intensity of lifestyle interventions aimed at reducing the social gradient.

3 Continue action to focus core efforts of public health departments on the social determinants of health.

Time period: Beyond 2020

1 Investment in ill-health prevention to reach 0.5 per cent of GDP by 2030, with spending focused proportionately across the social gradient

2 Preventive interventions that are effective and evidence-based across the social gradient implemented.

3 Joined up local action to deliver ill health prevention proportionately across the social gradient.

Chapter 5
Making it happen: A framework for delivering and monitoring reductions in health inequalities along the social gradient

5.1 Delivery systems

This chapter considers specific roles and responsibilities in the delivery of reductions in health inequalities across the social gradient. Central and local government, the NHS, the third sector, the education system, the private sector, individuals, families and communities all have significant roles and responsibilities for reducing health inequalities and delivering the interventions and proposals outlined in Chapter 4.

Throughout this chapter key delivery and implementation proposals are highlighted in bold. The proposals were shaped by feedback from a number of sources. These include the reports of the Review task groups, responses to the Review consultation and feedback from a range of conference, seminars and workshops across the country attended by the Review team. The outcome of these formal and informal consultations suggested greater flexibility is desirable across the delivery system. This includes government providing coherent, consistent strategic direction and aspirational targets, while facilitating local partners to engage with the public and communities in finding local community-driven solutions to health inequalities. Local indicators and targets used for monitoring should be nationally comparable.

Details are provided about two major regional partnerships, between the Review team and the North West region and London. The aim of these partnerships has been to work with regional partners as exemplars in implementation and for the Review to learn from their work.

This chapter also sets out the framework needed to set targets and establish indicators of outcome, output and process to underpin the recommendations of the Review and address the issues of research and evaluation.

5.1.1 Taking a whole-system approach
Chapter 3 explored the lessons learned so far from recent strategies to reduce health inequalities. Strategies that rely only on intervention in one part of the system will be insufficient to make the necessary difference to patterns of inequality. A whole-system approach is needed in which organisations and people work together with activity at national, regional, local and individual levels. The national and regional levels are concerned with:

— The imperative of greater social justice and sustainability and the implications for policies to redistribute power and resources, and improve financial systems
— Policies to maintain and improve universal health and welfare systems
— Strategy and policy to enable public services to create and promote the conditions within which individuals, communities and the public take control of their own lives and have a voice.

Locally, the focus should be on:
— Creating opportunities for individuals and communities to set the agenda for change to define local problems and search out local solutions
— Developing, commissioning and improving good-quality, integrated local services co-produced with the public to achieve better outcomes for communities and individuals.
— Appropriate links between these levels and organisations will be necessary to create partnerships to address health inequalities and there needs to be a shift in power and resources towards local communities.

5.1.2 Empowering people: securing community solutions
Without citizen participation and community engagement fostered by public service organisations, it will be difficult to improve penetration of interventions and to impact on health inequalities.[540] The private sector also has a key role to play (see, for example, Section 5.1.7). To achieve this goal community engagement practices need to move beyond what are often routine, brief consultations, to involving individuals in partnerships to define problems and develop local solutions to address those problems. Community interventions should be about:
— Building active and sustainable communities based on principles of social justice. This is about changing power structures to remove barriers that prevent people from participating in the issues that affect their lives.[541]

Promoting this approach sets a new task for political, civic and public service leadership in creating the conditions which enable individuals and communities to take control of their own lives, and in developing and sustaining a wider range of capabilities across the life course.[542] This is set out in Figure 5.1 and the subsequent proposals.

Figure 5.1 Future delivery scenario

Strategic Direction

Increase disability free life expectancy and reduce inequalities across the social gradient

Reduce health inequalities and improve wellbeing for all

Delivery Systems

Improved cross-governmental action with dedicated leadership, secretary of state and executive team

Integrated delivery through greater civic participation, third and public sector partnerships

New model of political, civic and public sector leadership grounded in local democracy + whole system thinking

New roles for third and public sector in creating conditions where individuals and communities take control

Integrated action to deliver on the social determinants of health

Comprehensive and scaled up health equity strategies based on social determinants of health. Downstream and Upstream action at population level, community level, personal level, to address health and wellbeing across the gradient.

Evidence Base

Interventions based on best available evidence focussed on social determinants of health

Systematic evaluation of interventions

Value Base

Equality and health equity in all policies promoting fairness

Evaluation of the impact on health equity and fairness

Source: Adapted from a model in Bernstein et al[543]

— **Political, civic and managerial leadership in public services should focus on creating the conditions in which people and communities take control, to lead flourishing lives, increase health expectancy and reduce disparities in health expectancy across the social gradient.**

5.1.3   The role of national government
Political leadership
In Chapter 3 we described how a lack of coordination across government departments presents a significant challenge for addressing health inequalities. Responsibility for the social determinants of health lies across government. The scale and complexity of the task of reducing health inequalities cannot be underestimated. This Review recommends in this context that robust political leadership should be provided through the Secretary of State for Health with an explicit cross-government remit to deliver on health inequalities. This political leadership should be supported by the appointment of joint, multi-skilled teams working across all relevant government departments to facilitate integrated cross-government policy under the direction of a single lead director with overall authority and responsibility.

— **Cross-cutting political leadership on health inequalities should be vested at Cabinet level with the Secretary of State for Health having lead responsibility, working**

with other ministers across government, to deliver this cross-departmental agenda.
— **A joint multi-skilled cross-cutting team with a single director should support the political leadership.**

Departmental leadership
In considering the issue of key departmental leadership, a more dispersed model could be beneficial in gaining wider ownership across government but might risk dissipating responsibility. The Review therefore proposes that the Department of Health should retain a lead role with all other relevant government departments explicitly specifying their particular role and contribution in delivering on health inequalities based on the social determinants of health. There should also be an explicit requirement that all government policies and strategies be subject to a health equity impact assessment. This would provide a robust platform for concerted action.

— **The Department of Health should retain the lead for health inequalities. Other Government departments should set out explicitly their strategic contribution to reducing health inequalities based on the social determinants of health.**
— **All national and local policies and strategies should be routinely scrutinised through a health equity impact assessment.**

The outcome of consultations undertaken by the Review emphasised the role of government in providing strong, inspirational and consistent leadership based on influence. Direction through nationally set targets should be limited to carefully considered measures that harness and support intended strategic direction. There is also an argument for more dispersed leadership, with national and regional government focusing on broad strategic plans around the social determinants of health. This framework would support a move to a more facilitative approach to local delivery systems and a shift away from nationally imposed targets. It would free up local partnerships to find locally appropriate solutions to locally identified problems and would foster accountability.[544]

Developing awareness among delivery organisations about the centrality of the social determinants in shaping health inequalities should be a central task for the Department of Health, Regional Offices and Strategic Health Authorities. This would help relevant delivery organisations shape more effective intervention and prevent a drift into projects solely focused on individual behaviours and lifestyle (discussed in Chapter 3).

The policy emphasis should address how mainstream spending can best be utilised to reduce health inequalities, rather than relying on new project funding. Interventions should be implemented with an evidence-based evaluation framework, incorporating a health impact assessment. Such action would inform public debate on the effectiveness of policies and disinvestment and investment for future delivery.

The principles set out seek to create new roles and national action to support local delivery based on co-production and the encouragement of public participation and engagement that shifts power away from the centre towards people and communities and facilitates local action and delivery.

— **National government and policy should focus on the provision of clear, broad strategic plans for health inequalities, setting out short, medium and long-term objectives and should facilitate and support local action to define and deliver on local issues.**

Supporting delivery
The creation of support systems based on a model similar to the Health Inequalities National Support Team would enable speedy dissemination of good practice and extend support to local areas where awareness or expertise was lacking or where performance is falling short of the national framework and local expectations.

5.1.4   The NHS
This section will consider the contribution of Primary Care Trusts as commissioners of health services, the roles of NHS Trusts, Primary and Community Health services and Mental Health services.

NHS Primary Care Trusts
The NHS has a significant role to play in policy and programmes involving health promotion, disease prevention and health care. Even though most of the observed social inequalities in health status are not *caused* by what goes on in health care services,

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Case Study Working in partnerships across communities

In the last 10 years Merseyside Fire & Rescue Service in Liverpool has expanded its role to one of 'promoting healthier, safer communities'. This aim is pursued through a vast range of programmes and services, both targeted and universal, and an extensive network of over 120 formal and 80 informal partnerships.

The expanded service includes a universal service of home fire safety checks, installing free smoke alarms, discussing evacuation plans, and checking for potential fire hazards. The visits led establishing the community fire safety team, who visit homes flagged up as vulnerable by home fire safety checks. This team often refer to partners such as social services or housing associations. MFRS have visited over 400,000 homes. A further targeted provision is the team of advocates who have specific knowledge in certain areas and offer a personal service for people most in need of help, including drug and alcohol dependency advocates, disability and older persons' advocates.

Ten youth programmes are available. The focus of these programmes includes promoting healthy lifestyle and fitness, sex education, drugs and alcohol awareness and road safety awareness. One programme is FSN (fire support network) cage football, that aims to improve the fitness of the local youth and reduce anti-social behaviour. Just under 6,000 young people attended the sessions.

Lastly, the MFRS have implemented programmes to create community fire stations. These include on site free gyms, gardens and gardening projects, and community rooms.

MFRS received a Healthy Workplace Award for the extended services offered to their staff and families. They offer an Employee Assistance Programme, focusing on proactive health messages and signposting staff to healthy living. Sickness rates have decreased from 19 days/year in 1994/95 to 5.5 days in 2008/09

This exemplary work has been recognised in the recent receipt of a beacon award in reducing health inequalities and have received previous Beacon awards for "Services to Older People" and for "Early Intervention: Children at Risk".

this does not mean that there is no role for the health care system in *reducing* inequalities in health status. Indeed, the health system has a potentially pivotal contribution to make to tackling social inequalities in health in a number of ways:

— Engaging people and communities in the co-production of world-class commissioning for patient-focused, integrated health services in partnership with local councils, third and private sector organisations.
— Putting its own house in order by commissioning an equitable NHS and addressing those inequalities in health *care* that are contributing to the observed inequalities in *health status*.
— Prioritising the commissioning of services that prevent or ameliorate the health damage caused by living and growing up in disadvantaged circumstances (that is, the health damage caused by wider social determinants of health) by responding systematically to individual and collective health conditions
— Shifting progressively the balance of spend from acute care into primary and preventive care and upstream interventions
— Acting as a champion and facilitator to influence other sectors to take informed action to reduce inequalities in health
— Promoting a culture of evaluation and research involving the public in identifying the most effective interventions to improve health
— Directly influencing other social determinants of health, such as local employment and economies, through effective commissioning and acting as a good 'corporate citizen' in everything from staffing to catering.[545]

NHS Trusts

There are other ways in which the health system can directly influence wider social determinants of health, improving local employment opportunities and proactively seeking to influence the local economy of disadvantaged areas. There is evidence of promising initiatives from around the English regions on all these issues. These include:

— *Tackling poverty by boosting the incomes of patients.* As part of wider anti-poverty strategies, several health sector agencies, in particular primary care organisations, have been experimenting with offering advice about claiming welfare benefits, a service delivered in health care settings. This directly tries to address the links between mental and physical health and income inequality, debt and material deprivation (described in Chapter 2).[546]
— *Improving working conditions.* Creating an organisational culture within NHS Trusts that maximises the participation of staff and reduces stress while supporting staff with effective and timely occupational health services. Such initiatives would not only be cost effective but would also provide a model for all employers. The recommendations of the final report of the NHS Health and Well-being Review (Boorman Review) are particularly relevant.[547] The Boorman Review should be enhanced to ensure that inequalities in staff health are addressed through action on primary prevention for NHS staff in addition to reductions in incidence and duration of sickness absence.
— *Tackling unemployment.* The potentially significant contribution of health services in relation

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Case Study Patrick, Healthwise Hull

Healthwise Hull is a community development programme focused on improving local health and well-being, targeting 3,000 people and seeking to train 300 local health champions to empower individuals within communities to adopt a healthy lifestyle. Its two accredited courses had a positive impact on ex-paratrooper Patrick, who completed both successfully. The training provided the opportunity for Patrick and his family to reflect on their health behaviours and consider how to improve their well-being. While the courses focused on healthy eating, smoking cessation, exercise and emotional well-being, it also encouraged participants to lead the way in voluntarily encouraging members of their community to engage with its messages. Patrick is testimony to this and has helped 545 people from his community work towards a healthy lifestyle.

Through his work as a Community Health Champion, Patrick has established firm links with members of his community by providing training and support in healthy eating, exercise and smoking cessation. Patrick explains, 'I speak to people in my own way… [I] pass on what I've learned personally. I tell them how it can be, if they change.' Patrick uses a variety of means to communicate including booklets and leaflets but his preferred way is to provide a tailor-made programme. He states, 'I get them to keep a diary. Then I sit down with them and say: could you change this or that? I then keep in contact with them to provide support when it's needed.'

The initial Community Health Champion training, combined with Patrick's work experience as a Community Health Champion, enabled him to access further education and paid work. Patrick now works as a health trainer and believes that accessing the course through Healthwise Hull helped him to positively change his career direction and health behaviours. He states, 'It's changed our family. We were in the right place at the right time. Those two courses have changed our lives.'

to work has been recently reiterated by the Government. There is particular emphasis on the value of intensifying medical rehabilitation services to help people recover from or manage their health condition to enable a return to employment.

— *Boosting the local economy.* The health sector can directly reduce poverty and unemployment by harnessing the NHS's purchasing power and position as a major employer. The premise on which this initiative is built is the recognition that the NHS and the public sector have tremendous economic weight. If this purchasing power were harnessed to support local businesses in the most hard-pressed communities, then the benefits might extend to greater social inclusion and equity, as well as improving the health of the community served.[548]

Primary care and community health services

Currently, GPs, like most primary care services – community health services, dentists, pharmacists and opticians, do not see tackling the social determinants of health inequalities as core business.[549] However, it is possible to prioritise health inequalities as a routine part of primary health care and this could be reflected in existing GP contracts and contracting arrangements with other independent contractors and community health services.

Empowering patients

A number of policy initiatives have sought to put patients at the heart of the NHS and primary care and these could be focused on reducing health inequalities. Expert patients' programmes have extended health literacy programmes and support patients in exercising greater levels of expertise in managing long-term conditions. Evaluation of these programmes demonstrates the benefits to patients, their families and the NHS by improving self-management and health literacy.[550]

'Social prescribing' has also been used as a mechanism for linking patients with non-medical sources of support within the community.[551]

Initiatives using local health trainers, community health champions and community development work also show encouraging signs of empowering individuals to participate and take control of their health and well-being. The impact of such innovations on health inequalities has yet to be determined. However, the approach facilitates greater participation of patients and citizens and support in developing health literacy and improving health and well-being.

There are also some individuals and groups who become marginalised as a consequence of stigmatised attitudes and who either access services but fail to receive a consistent service or who fail to access primary and community health services at all.[552] This poses a particular challenge to services in meeting health needs where patient mobility, chaotic lives,

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Case Study Working with South Asian taxi drivers to create coronary heart disease champions for achieving better health in Sheffield (CABS)

One Medicare and Sheffield NHS looked at innovative ways to reduce health inequalities by screening, promoting access to services and empowering patients. They targeted South Asian Taxi drivers who had been identified as a high risk for coronary heart disease (CHD) and diabetes and who were known from the local health equity audit to struggle with accessing health care.

Engagement with community leaders took the form of a half-day consultation attended by a number of drivers who were identified and invited through existing contacts. Following this, a two-day training course on CHD was offered to a core group of drivers who would then become 'health champions' for the project.

Meetings were held with the Sheffield Taxi Trade Association to publicise the screening to drivers. The 'champions' were also involved in leafleting other drivers and the screening opportunity was advertised through the local taxi radio system.

Eighty taxi drivers attended the Sheffield City GP Health Centre for cardiovascular screening. As part of the health checks their height, weight, body mass index (BMI) and blood pressure were tested. In addition they were provided with onsite testing for blood glucose, cholesterol, liver and kidney functions in order to provide a 'one stop' check and were given advice to improve their health.

Twenty patients were assessed as being at elevated risk above 20 per cent and therefore needing follow-up. One in four patients was found to have a BMI greater than 30 (above the safe range). A quarter of the patients present on the screening day was a smoker and smoking cessation advice was provided.

Thirty follow-up appointments were made, and 20 taxi drivers attended. Those drivers who were assessed to be requiring further intervention were offered the opportunity to see the GPs in the Sheffield City GP Health Centre or their own family doctor. All patients were satisfied with the service.

A further cohort of 17 drivers was recruited to the project largely through the engagement work of the first group of 'champions'. A subsequent screening was attended by 98 drivers.

One of the most important outcomes of the project has been the impact on the lives of the drivers who participated, and the informal work they are doing with others in the South Asian community to promote awareness and action around the causes of vascular disease.

stigma or patient capability pose significant barriers. There appears to be a lack of overarching strategy to respond to these socially excluded groups. This could be addressed through use of practice improvement models aimed at developing more inclusive working practices in primary care and community health services.[553]

Taking a population perspective in general practice
Since 2004, GP practices in primary care have implemented a quality outcome framework (QOF). This forms part of the General Medical Services (GMS) contract and links financial incentives to the quality of care offered for a range of chronic conditions. In 2007/8, the average general practice earned over £120,000 from QOF at a cost of £1.1 billion to the NHS. The objective of QOF is to improve the quality of care patients are given by rewarding practices for the quality of care the practice provided. However, as currently constructed, full achievement of available points is possible without covering the entirety of any particular practice population. There is no incentive to achieve across the clinical, patient experience or additional service domain for all registered patients. This potentially means that those hardest to reach and most in need are not engaged through QOF. QOF does hold the potential to be a powerful tool which, linked with other data sources, would allow for systematic monitoring of registered patients and enable a practice-based population perspective to be taken and encourage a greater focus on prevention.[554]

Case Study Bromley by Bow Centre

The Bromley by Bow Centre (BBBC) is a large established charity in Tower Hamlets, East London, started 25 years ago as a Church community group offering rent-free space to local artists, and later becoming a nursery. It now hosts the local GP surgery, social enterprises, a children's centre, a healthy living centre, and provides adult education courses, care and health services for vulnerable adults, as well as outreach programmes and a range of advice services. The centre has one, main, four-acre site where many services are provided, and where it has restored a local park as an asset for the local community. It has two satellite sites and also delivers services offsite in GPs' surgeries and community locations. Several artists still have their studios onsite and act as tutors for projects.

The range of services offered at BBBC include:
— Health, well-being, and exercise advice and classes, from smoking cessation and walking groups to swimming and yoga classes
— Care services and personal development courses for adults and people with physical and learning difficulties
— ESOL (English for Speakers of Other Languages) and vocational courses, as well as family learning courses. In 2007/8, 80 per cent of learners gained a qualification, above the national average, while 79 learners found either employment or a long-term voluntary position after taking part on a vocational training course in childcare, health and social care or customer service. BBBC is the third largest provider of adult education in Tower Hamlets.
— Welfare, employment, housing and debt advice and practical support to claim benefits, deal with debt and overcome housing problems; advice and practical support with job searching and job applications; and housing help provided by the local registered social landlord, Poplar HARCA, partnering with BBBC.

— A children's centre, which also provides health services, parenting advice, and family learning sessions.
— Social enterprise start-up support. The Beyond the Barn programme has helped to set up 27 social enterprises since its inception in 2005. Twenty-one are trading successfully and have created over 100 new jobs.

All services are delivered within the centre, where staff from across different services, such as GPs, advisers, tutors and childcare staff, work together to ensure clients access the services they need. GP referral to other advice and support services is common as well as referral to health and exercise classes within the centre.

The charity's turnover is more than £4 million, and it has in excess of 100 full- and part-time staff, 3,000 users and a wide range of partnerships with key local stakeholders. BBBC has a number of core partners based within and near the centre, including the GP partners, Bromley by Bow Church in Community, and Poplar HARCA. Other partners include the local authority, the local PCT, higher and further education colleges, other registered social landlords, and a variety of smaller community and third sector groups.

BBBC is internationally renowned as an exemplary model for its social entrepreneurial approach to community regeneration and in particular, for its effective delivery of integrated services. A number of process evaluation studies carried out on the centre's programme have recognised its distinctiveness, and praised its innovative work. These included a study of evaluation practice in regeneration, a study seeking to quantify the centre's impact on the local economy, and an assessment of its work with older people.

For more information see www.bbbc.org.uk/

Focusing on prevention to address health inequalities

As set out above, primary care could contribute to a range of preventive services, including population screening at a practice level. Evidence suggests that people from lower socioeconomic groups have their cancer diagnosed at a later stage, which subsequently affects treatment options and prognosis. Socioeconomic deprivation is a strong predictor of screening participation; colorectal screening and attendance for relevant tests are lower in deprived groups and similar findings are reported for breast and cervical screening.[555] This means more bespoke initiatives are necessary and if conducted well and targeted to engage disadvantaged people and groups as a preventive and early intervention delivery mechanism, they could contribute to health improvement. An example is the NHS Sheffield CABS Project – see case study on page 155.

Primary care, occupational health and work

Primary care also has a central role in patients' employment, as highlighted in Dame Carol Black's review of health and work.[556] Traditionally, GPs and primary care staff have only basic training in occupational health but there is potential to extend support to patients, especially where this leads to employment. A national education programme is currently being rolled out throughout the UK to increase GPs' competence and confidence in dealing with the clinical issues relating to work and health. Sustaining support to facilitate participation in employment is critical, as set out in Policy Objective C.

Engaging communities

Community engagement can serve as an important lever to reduce health inequalities by influencing service provision. This often operates best in small localities and the involvement of primary care services is critical. Benefits to the community extend beyond the initial intervention and through increased participation lead to greater confidence and competence among individual citizens and can bring many positive real-life changes.[557]

Other models of community engagement include the healthy living centre initiatives, which provide opportunities to engage local people, increase social capital and have financial benefits associated with co-location of services.[558] However, such initiatives need to be embedded in local communities and not be a consequence of large, centrally driven roll-outs. Creating a local focal point with inclusive programmes and activities was identified as a key initiative in focus group work undertaken in 2009 in communities in Hackney, Manchester and Birmingham for the Review.[559] Primary and social care services could develop such centres to address the social determinants of health inequality and promote the provision of integrated neighbourhood-focused services.

— **The Quality Outcome Framework should be revised to ensure that general practices are incentivised to provide 100 per cent coverage of the quality of care for all patients.**

— **Primary care services should develop and adopt inclusive practice that seeks to empower patients and develop their health literacy. Inclusive practice would also emphasise the facilitation of registration of disadvantaged groups who have difficulty in accessing health care.**
— **General Practices should be revitalised to take a more systematic practice-based perspective, informed by QOF and other relevant data, to promote targeted prevention services.**
— **General Practices should scale up responses to occupational health in line with the national initiative.**
— **Primary Care is well placed to act as a focus hub within local communities and should be encouraged and incentivised to adopt this role as a contribution to integrating services and promoting healthier communities.**

Mental health services

The evidence set out in Chapter 2 emphasises the close relationships between physical health and mental well-being. Mental health and well-being has a significant influence in all spheres – achievement, life style, physical health, resilience and recovery, employment, relationships, and civic participation and engagement.[560] Mental Health Services for children and adults within the NHS, and the Local Authority and the third sector, have vital roles to play in promoting positive mental health and well-being and ensuring effective partnership working and fully integrated commissioning and service provision.

The Review places significant emphasis on early years development and behaviours. Access to support services when needed is important, especially when there are mental health issues. Early interventions have an important contribution to the promotion of good parenting and building resilience. High quality pre-school programmes are also effective in improving children's self esteem and behaviours.

Responses to the Department of Health consultation on *New Horizons* continue to highlight the difficulties in accessing Child and Adolescent Mental Health Services and action is needed to address this issue. Early intervention and access to psychological therapies is crucial in addressing early onset mental illness and stress. This suggests that the system across Children's Services, including schools, needs greater integration. Schools promoting positive mental health and early identification and referral are gateways into services for at-risk children and their families. Key workers can provide both input and signposting into wider support services.

Access to Adult Mental Health Services has been subject of a National Service Framework (NSF) since 1999 and much has been achieved as a consequence. Continuation of reform of mental health provision was explored in the *New Horizons* report.[561] That emphasised a need to build on the National Service Framework with an emphasis on preventing ill health and on early intervention, tackling stigma,

strengthening transition and personalised care through a care programme approach.

Ease of access to a range of integrated social and health care services focused on recovery, psychological therapy and outreach is critical. Out of hours support is important in supporting recovery and enabling people receiving secondary care services to continue in employment or re-enter the labour market. Work contributes to maintaining and recovering self confidence and self esteem and reduces social exclusion by extending social networks and support, as described in Policy Objective C.

— **Early intervention is needed across the social gradient to support children and their families with mental health and behavioural issues, via integrated provision across Children's Services and schools.**
— **Adult Mental Health Services should focus on integrated and jointly commissioned services that seek to address prevention, early intervention, tackle stigma, strengthen transition arrangements and provide personalised and innovative care focused on recovery.**

5.1.5   The role of Local Government

Local Government plays a crucial role in the lives of citizens' and in the prospects of the areas for which they are responsible. Local Councils are directly responsible for a broad range of services: both directly delivering some, and commissioning organisations to deliver others. They also have an important role in shaping and monitoring services in their area, for example in relation to local environmental standards. And they are a major player in local strategic partnerships and other groupings which bring service providers together.

The Local Performance Framework is intended to strengthen their role in promoting partnership working between local delivery agents and enabling local areas to tackle cross-cutting issues collectively. The key elements are:
— **Local Strategic Partnerships (LSPs)**
  Multi-agency partnerships bringing together the different parts of the public, private, community and voluntary sectors locally.
— **Sustainable Communities Strategy (SCS)**
  The overarching plan for promoting and improving the economic, social and environmental well-being of an area
— **Local Area Agreements (LAAs)**
  These establish priorities for a local area, as agreed between central government and the Local Authority and its partners in the LSP.
— **Comprehensive Area Assessments (CAA)**
  An independent system for measuring local performance.
— A duty on PCTs and Local Authorities to undertake a **Joint Strategic Needs Assessment (JSNA)** of the future health, care and wellbeing needs of the local population

Councils are therefore well placed to bring all agencies – public, private, third sector – to tackle cross-cutting issues which affect their residents and their community. Local Government has a key role as a:
— Major employer within local areas
— Commissioner of services
— Community leadership and democratic renewal
— Exercise of powers in health and well-being as part of the local sustainable community strategy
— Community safety and place shaping
— Provider of children's services, including education, and adult social care, leisure services, planning and so on.

These roles emphasise the influence and contribution that Local Authorities can make to the social determinants of health and to reducing health inequalities. As set out earlier, Councils have sometimes been reticent in leading on health inequalities either because the NHS was seen as the lead agency or there has been a lack of understanding of the key drivers.[562]

Local Councils have the power to secure the economic, environmental and social well-being of the local population. They are therefore in a key position to mobilise action to tackle health inequalities and improve well-being. Evidence from the Reducing Health Inequalities Beacon Councils 2008/9 provides examples of excellent work, although there are concerns about scaling up both partnerships and interventions if intransigent health inequalities are to be addressed and the gaps narrowed. In some areas new arrangements for more integrated health and social care provision have emerged, with joint commissioning and integrated provision. 'Total place' pilots are also underway, exploring the scope for achieving better outcomes and greater efficiency from closer joint working.

Action to address health inequalities will mean raising the awareness of the social determinants of health among Local Government, including elected members. There is a real challenge to increase political and workforce capacity and confidence in addressing the social determinants and a need to disseminate successful initiatives while also understanding the limitations of lifestyle interventions. There is also a need to scale up interventions to achieve better outcomes.

Critical to any success is the issue of collaborative partnership working. Health inequalities cannot be addressed by any single organisation or indeed any one sector. Any approach needs to be forged in strong partnership working across disciplines and sectors. This requires a positive exercise of community leadership alongside commissioning.

— **Greater emphasis should be given to the pivotal role of Local Councils in delivering health improvement and reducing health inequalities in leading local partnerships, supported by Primary Care Trusts who lead the local NHS.**

Adult social care

The evidence set out in Chapters 1 and 2 describes how life expectancy is rapidly increasing (although unequally). The population has aged significantly over the past 25 years. In 2008, 16 per cent of the population was over 65 years old. If the current trend continues, 23 per cent will be over 65 years old by 2033, which represents 3.2 million people. The over-fifties are the largest users of health and social care services.[563] The impacts of the ageing population and levels of long-term illness and disability hold enormous implications for these services. Tight eligibility criteria have been introduced as a way of managing demand. Recipients of social care services are likely to be the most socially disadvantaged and most will have a long-term debilitating illness or disability.

According to Age Concern, approximately one in five older people lives in poverty.[564] Data from the Health Survey for England 2005 show that disparities exist between low and high socioeconomic groups in a number of health indicators for older people, with people in the lowest quintile of income reporting poorer general health, lower levels of fruit and vegetable consumption and higher degrees of mobility problems and lower-limb impairment.[565] Similarly, the prevalence of ischemic heart disease among older people is higher in the most deprived areas. Diabetes prevalence and uncontrolled hypertension are also inversely related to income.[566] Chandola *et al* illustrated, using longitudinal data from the Whitehall II study, that people from lower occupational grades showed a steeper decline in physical health than those in higher grades.[567] Differences in self-reported health were also found between occupational grades, and a widening of relative inequality was demonstrated with increasing age.

Adult social care therefore makes a significant contribution to health and health inequalities. The recent emphasis on personalisation of services has had a positive impact but the current lack of coherence in the overall policy framework is a cause for concern. Promotion of the active engagement of service users can serve as a springboard for enhancing the lives of users who might be marginalised or stigmatised, enabling them to exercise greater degrees of control and responsibility. The current drive within the NHS to improve the quality of health care in 'Transforming Community Health Services' also holds potential for the greater integration of health and social care and joint action on health inequalities.

Future action to address these issues should include continued efforts to identify those disadvantaged individuals and groups who are not currently in receipt of services.

— **The impact of health inequalities on an ageing population with increased incidence of disability and life-long illness holds significance for future strategies and policies. Such strategies require adequate funding.**
— **Long-term strategies should be debated and developed alongside effective mechanisms for adequate and sustainable investment to address health inequalities.**

Children's Services

The framework for Children's Services was set out in 2003 in the seminal Green Paper *Every Child Matters*. This created a strategy underpinned by the Children Act 2004, in which vulnerable children and young people would be protected within a framework of universal services to improve the well-being of every child. The *Children's Plan*, *National Service Framework for Children, Young People and Maternity Services* and the child health strategy, *Healthy Lives Brighter Futures*, built on these foundations. The focus has been on developing better partnership working, joint commissioning and integrated services. Children's Trusts have developed in different localities at different speeds and in different ways, reflecting diverse needs and local contexts. The Apprentice, Skills, Children and Learning Act 2009 strengthens Children's Trust cooperation arrangements more generally by standardising what has been shown to be effective practice. The Act establishes Children's Trust Boards on a statutory basis and adds new statutory partners – schools, colleges and Jobcentre Plus.

The Children and Young People's Plan (CYPP), prepared by the Children's Trust Board, becomes a joint strategy agreed by partners with the aim of promoting cooperation at each organisational level across agencies. The Plan will show how partners on the Children's Trust Board will work together to commission and deliver services that are child and family centred, improve local outcomes for children integrate, services better and focus on closing the gaps in outcomes for disadvantaged groups against a background of improved outcomes for all children.

A key task of the Children's Trust Board is to ensure that the interests of children, young people and families are understood throughout the LSP so that the social determinants of health can be addressed. This includes embedding the CYPP in the Sustainable Community Strategy (SCS) and articulating the impact of wider cross-cutting issues which do not have a specific child focus, such as local housing, regeneration and transport plans, and embedding actions on these issues in the preparation of the Local Development Framework. New draft guidance on Children's Trusts will be published in March 2010.

The new Children's Trust Board and CYPP represent an important change which provides a unique opportunity to drive forward better partnership working, including the opportunity to pool or align budgets around agreed cross cutting outcomes. This will enable the health sector to draw on support from its partners to deliver its priorities, while contributing to the priorities of other partners.

It is important that recommendations from this review in respect of early years services and the child care workforce are considered within any revised guidance and in subsequent strategic developments.

— **Any revised guidance for children's services must take into account the evidence and recommendations of this Review, with**

particular reference to early years, education and workforce development set out in Policy Objective A.

— **Furthermore, future plans for children and young people's services should specifically address the social determinants of health and the impact on health inequalities. The Children's Trust Board, in preparing the CYPP, should help PCTs address local health inequalities and deliver improved health outcomes for children and young people by developing a shared local vision between the Local Authority, PCT and others on the Children's Trust Board which will agree partners' contributions and drive progress through the CYPP.**

5.1.6　　The role of the third sector

The third sector includes 140,000 general charities, 55,000 social enterprises, 4,500 cooperatives, 1,830 Housing Associations with £55 billion of assets, mutuals and faith communities.[568] The third sector has a major role to play in developing local engagement and partnerships through establishing and drawing on links with local people, families and communities. The third sector is well placed to access communities and identify assets that would extend community networks, engaging and supporting individuals and developing community infrastructure through self-help, unpaid work and voluntary endeavour. The sector is diverse, which can be both its strength and weakness.[569]

While the real and potential contribution of the third sector to reducing health inequalities is recognised, there remain concerns about how well the sector is supported, both to deliver its services and to effectively engage as a strategic partner. The funding of many third sector organisations is precarious and increasingly dependent on statutory sources. Trends in charitable giving combined with other economic conditions, for example, lower returns from investments and higher costs to charities as employers, have led to limited availability of voluntary funds for even large, national charities.

The majority of voluntary organisations in the health and social care sector are now heavily dependent on grants and contracts from national and local government and, increasingly, the NHS. The growth of commissioning, and the corresponding reduction in grant funding for the voluntary sector; has led to increased competition for contracts both between different third sector organisations and between the third sector and the private and statutory sectors.

There is increasing concern that the current commissioning environment disadvantages the third sector generally and may even threaten the survival of smaller voluntary organisations. The range of factors includes:

— The inability of smaller organisations to marshal the resources, including the time, skills and knowledge, to effectively compete for tenders

— Commissioning practices favouring larger organisations and the statutory sector, for example, clustering services to be put out to tender in a single contract can lead to smaller and niche providers being squeezed out

— Short-term contracts with insufficient time for development and consequences for staff recruitment and retention

— The growing requirement for contracts to be delivered on tighter funding, leaving little scope for developmental work and innovation.

There is also concern about the inconsistency of engagement of the third sector as a key partner in national, regional and local strategic planning. Although there are good examples of third sector involvement, for example in some LSPs, there are still challenges in ensuring that the diversity of the sector is adequately represented. The support for voluntary sector infrastructure varies between local authorities and there is continuing concern that representational structures tend to exclude smaller and volunteer-led organisations.[570]

— **LSPs should engage the third sector in a systematic way to maximise the potential in engaging local communities, tapping into local communities and supporting and fostering individual and collective empowerment and capacity-building to contribute to the development of civic participation.**

— **The diversity of the sector needs to be fostered and supported, acknowledging the contribution it can make in engagement, participation and community services in addressing health inequalities.**

— **Issues of sustainable funding need to be addressed as part of the compact between statutory partners and the third sector.**

5.1.7　　Role of private sector employers

Employers have a central role to play in preventing ill health and in promoting health and well-being. In Chapter 2 and Chapter 4, Policy Objective C, we outlined the importance of good work in reducing workplace stress and health inequalities. There has been some reluctance on the part of employers to actively address such issues, despite clear evidence that the costs of not addressing stress and other work-related causes of ill health are significant.

LSPs could provide guidance and incentivise employers to offer advice and funding for initiatives in health in the workplace. This could include the provision of vocational training and return to work schemes, as well as supporting the employment of those suffering from disabilities or ill health.

Occupational health has traditionally been detached from mainstream health care and access to it varies greatly between sectors and according to size of the industry or employer. Occupational health and vocational rehabilitation should be fully integrated into the NHS, providing a *Fit for Work* model for the unemployed and those on incapacity benefits. Occupational health services for small employers, as well as support services for large employers' health teams should be developed. Such a model could provide guidelines, resources and security to employers,

improving the health of the workforce, and for hiring and retaining people that have experienced long-term unemployment or ill health or disability.

The Department for Business, Innovation and Skills has a key role in encouraging exemplary practice. It could encourage employers to input into addressing other determinants of health, for example through voluntary uptake of the 'healthy living wage', along with previous initiatives such as *Investor in People* and *Living Wage* awards. There is also a need to recognise organisations with smaller resources that provide advice and support to their employees on lower incomes to access benefits and health services.

Unpaid work is often a step into paid employment for those who need more skills, work experience and an unthreatening and flexible environment to gain confidence to enter the labour market.

— **Issues concerning prevention, early intervention, improvements to health and safety, the impact of good leadership and management have a critical impact on workforce health and development. The Department for Business, Innovation and Skills and Department for Work and Pensions have key roles in overseeing effective implementation of best practice in promoting physical and mental well-being of the workforce. This is detailed in Annex 2, sections C2, C3 and C4.**

5.1.8 Enhancing partnerships

The WHO Commission on Social Determinants of Health global report *Closing the Gap in a Generation* highlighted that the problems of health inequalities are complex, multi-causal, cross sector and multidimensional.

Partnership working has played a key role in policymaking to address health inequalities. While there are examples of vibrant joint working, in many instances it has fallen short of expectations. Robust leadership is required for partnership working at local and regional levels through:

— Developing awareness of the underlying causes of health inequalities, freeing up people and agencies to take risks, building intensity and scale in strategic and systematic interventions supported by mainstream funding rather than focusing on short-term projects and initiatives.

— Creating new kinds of partnerships in a delivery model based on co-production that encourages genuine public engagement in decision-making, shifting the balance of power towards local people and away from professionals and formal institutions.

Leading partnerships

Evidence from spearhead areas suggests that the current LSP framework requires considerable development and enhancement.[571] Improvements would include greater clarity and articulation of strategic direction between agencies, underpinned by an explicit agreement of priorities. A move away

from national target-driven implementation, which often reinforces silo working, and a shift to limiting targets to those essential to driving strategy may facilitate a whole-system approach. This would allow local policy-makers, service providers and citizens to assess and respond to specific local problems with more explicit local accountably for delivery on health inequalities.

Within such a framework, local leadership is important in championing partnership working on health. Political leaders and Chief Executives of Local Councils, as well as Chief Executives and Boards of PCTs and Directors of Public Health, have critical but not exclusive roles to play.

The Review has argued earlier (section 5.1) that what is required is robust political, civic and executive leadership based on a whole-system approach. This should be supported by organisational development programmes across the public services and the creation of visible and measurable outcomes for citizens and communities.[572]

LSPs are tasked with developing and publishing a sustainable community strategy for their areas, setting out plans and action to be taken to promote social, economic and environmental well-being. Each partnership has a sub-partnership with a remit for local health and well-being. LSPs do not have legal powers or resources of their own. They seek to ensure that different organisations work together to identify local needs, develop a long-term sustainable community strategy for an area and deliver services more effectively. Resource decisions must be taken by constituent statutory organisations. This raises major questions on the status of the LSP, especially in the light of the change in status of Children's Trust Boards. Ownership, commitment and accountability may be enhanced by similarly establishing LSPs on a statutory basis and being explicit about the responsibility and accountability of statutory members to deliver agreed local commitments.

This strengthening of accountability would enhance the prospect of Sustainable Local Community Strategies being integrated with the range of individual agency strategies such as LAAs, CAAs, Local Authority Corporate Plans, PCT World Class Commissioning Strategic Plans and NHS Operating Plans, creating a golden thread through which local policies establish coherence and explicit strategic direction.

— **LSPs should be established on a statutory basis and the accountability of statutory partners should be explicitly stated in order to facilitate partnership working on the social determinants of health.**
— **National and local leadership should demonstrate the importance and priority of addressing health inequalities explicitly as part of all local sustainable community strategies.**
— **Leadership skills require enhancement at all levels and should be supported by a national Organisational Development and Leadership Programme, sponsored**

jointly by the Departments of Health and Communities and Local Government, and the Cabinet Office.

Systematic engagement of communities in partnership

Community engagement on a systematic basis is an essential element in partnership working for addressing health inequalities. Without this, reducing health inequalities will not be possible. This represents the fully engaged community scenario of the Wanless Report.[573]

Systematic engagement is necessary at a number of levels:
— City/district-wide, drawing meaningful input into strategy, service planning and performance management from a wide range of voluntary, community and faith organisations
— Locality level, drawing on third sector organisations and community groups at smaller ward level, including engagement in locality commissioning of health and council services
— Neighbourhood level, connecting into neighbourhood management.[574]

This approach requires mapping community assets, identifying barriers to participation and influencing and building community capacity through systematic and sustained community development.

— **All LSPs should implement effective participation strategies aimed at empowering individuals and promoting community development to enhance community assets and facilitate community solutions to health inequalities.**

Joint appointments and joint teams

The development of LSPs has further potential for joint appointments across partner agencies, especially between PCTs and Local Authorities. This is particularly so in relation to jointly appointed and funded Directors of Public Health, initiated to facilitate a cross-cutting strategic approach to tackling public health issues. Currently 80 per cent of Directors of Public Health are appointed between PCTs and Local Authorities. Directors of Public Health occupy a key position in delivering on health inequalities. The role in advising LPSs and the partner agencies on the local impact of health inequalities and making progress in addressing these through the local sustainable community strategy should be strengthened. This independent advisory role could be linked with the Overview and Scrutiny Panel role and Local Involvement Networks (LINks), to develop more explicit local accountability and monitor progress.

There is considerable variation in the adoption of other joint appointments. Some areas have fully integrated teams focused on health and health inequalities; others have taken more limited action with marked differences in staffing levels. Benefits of such appointments lie in increased understanding about roles and responsibilities, reduction in organisational boundaries and improved engagement and leadership across organisations. These appointments could be supported by joint commissioning and sustainable finance arrangements consistent with best practice.[575]

Extension of joint appointments would facilitate greater integration of public sector services. The current 'Total Place' pilots have yet to be evaluated but hold the potential to facilitate partnership. Alternative models include extension of cross agency commissioning for health equity and more integrated provision. The creation of community hub facilities was identified as a high priority in focus group work with excluded groups in Birmingham, Hackney and Manchester.[576]

The workforce implications of taking concerted action on health inequalities must be taken into account. Responding effectively requires action by a broad range of professions and sectors including housing, planning, transport, education, social care, and health care as well as public health. Each has a different training and culture, which creates major difficulties. The Egan Report identified the shortage of generic skills for those care professions involved in developing sustainable communities.[577] The task is greater given the breadth of the health inequalities agenda. National action is essential to skill up the relevant professions to meet the demands of the new agenda.

— **The current practice in setting up joint appointments holds the potential to enhance partnership working.**
— **Joint commissioning units and integrated provision should become a requirement for local government and PCTs using sustainable joint financing in accord with Audit Commission Guidance.**
— **National action is required to skill up the workforce involved in addressing health inequalities across the wide range of diciplines and agencies involved in delivery, based on the social determinants of health.**

Local Area Agreements

Each LSP publishes a sustainable community strategy, which is underpinned by a local performance framework called a Local Area Agreement (LAA). These have extended the role of LSPs and increasingly given them greater focus, although there are some significant differences in the reported impact of LAAs between Unitary, County LSPs and District LSPs, with less impact reported in the latter.[578]

LAAs have proved effective in providing a platform for local agreement about priorities and developing a joint vision for future action with common strategies and targets. However, there has been limited progress in joint activity on commissioning and pooling budgets. There is also mixed evidence from LSPs that the duty to cooperate has been effective or made a positive difference to the quality of partnership or delivery. Subsequent sections on monitoring will address issues of local accountability on progress.

Joint Strategic Needs Assessment

The Local Government and Public Involvement in Health Act 2007 required local authorities and PCTs to produce a Joint Strategic Needs Assessment (JSNA) of the health and well-being of their local communities. The majority of LSPs in the 2008 survey identified the development of the JSNA as improving the focus on health outcomes and inequalities.[579] This, linked to the World Class Commissioning Programme being implemented through PCTs, has potential for improving the focus on better quality care, improved health and well-being and a reduction in health inequalities across local communities through joint working and partnership.

To be effective, a JSNA must be informed by accurate and shared national, regional, district and local intelligence, with local community issues identified through active engagement. Consultation undertaken during this Review highlighted some difficulties and reticence in agencies sharing information.[580] This requires review and clarity of guidance to agencies involved in LSPs.

— **Guidance should be issued to clarify information exchange between key partners to inform and enhance joint protocols concerning information and intelligence exchange to enhance joint planning.**
— **All local joint planning should be grounded in local communities and informed by national, regional, district and local neighbourhood intelligence and set within common agreed and transparent priorities.**

5.1.9 Partnerships for implementation

Two partnerships have been developed: between the Review team and the North West region and London. Brief details are set out below:

North West partnership

Closing the health gap between all citizens continues to be a major focus for the North West. This is not only a matter of social justice but is crucial for building a sustainable economy with a healthy workforce and functioning, capable, self-reliant communities.

Forming a partnership with the Review team has created an enhanced momentum and interest in the region to tackle health inequalities. Professor Sir Michael Marmot visited the region several times during 2009, and those opportunities were used to inform and involve a wide range of people. The region was able to use the latest evidence from the Review to bring people together to identify priorities for the North West. At one event they used the forum of 'open space', where over 200 people including councillors, police, local government, third sector, housing sector, academia, representatives from Local Involvement Networks, as well as the health sector came together to identify realistic yet creative approaches to current and future challenges in narrowing the health gaps.

The approach has started to create solutions to people's questions, such as:
— How do we involve people, organisations and communities to enjoy life and live longer?
— How can we give every child born in the North West the best possible start?
— How can we support public demand for social justice?
— How can we best beat the impact of the recession?
— How do we move from theory and evidence about the gap to realistic organisational, local and individual action?

Over the coming months the region will be working with a wide range of stakeholders to produce a plan for action over the next 10 years. This will underpin the objectives in the forthcoming Regional Strategy 2010. The aim is to build on the immense assets of the region to secure the best health and well-being for all.

The London Partnership

A partnership has been established between the Mayoral Office and the Review team to support the implementation of the London Health Inequalities Strategy. Professor Sir Michael Marmot presented at two major conferences to inform the debate and to galvanise key stakeholders for action.

The Greater London Authority Act gives the London Mayor unique responsibilities to produce a health inequalities strategy for the capital. The draft strategy was launched for public consultation in August 2009 and due for completion on 10 January 2010.

The draft strategy proposes action for London to be a city where all people can live fit, flourishing and involved lives. Its aims are to:
— Empower individual Londoners and communities to improve health and well-being.
— Improve access to London's health and social care services, particularly for Londoners who have poorer health outcomes.
— Reduce income inequalities and minimise the negative health consequences of relative poverty.
— Increase opportunities for people to access the potential benefits of work and other forms of meaningful activity.
— Develop and promote London as a healthy place for all – from homes to neighbourhoods and the city as a whole.

A joint working group has been established to consider the action plan for implementation following the closure of consultation in order to make the strategy a reality for London.

5.2 Framework for targets and indicators to assess performance improvement

5.2.1 The framework

On the basis of the conceptual approach and the recommendations identified in Chapter 4, Annex 2 lists the types of indicators appropriate for monitoring process, outputs and outcomes in each of the areas of action (see Figure 5.2). It is envisaged that where these are to be used to set objectives and hold delivery organisations to account, they will need to be SMART (Specific, Measurable, Achievable, Relevant and Time-bound). This has a number of implications:

— Different indicators may be required to support and measure performance improvement in the short (2012–15), medium (2016–19) and long term (2020 and beyond).
— Some indicators may not currently be measurable. But there needs to be a realistic prospect that measurement tools would be put in place to fit with the relevant timescales.
— Performance indicators need to be defined in a way that would make it possible for the agencies concerned to achieve the improvements being sought by the strategy.
— To ensure relevance and specificity, as the strategy develops over time, the detailed indicators may change.

As indicated in Sections 5.2 and 5.3, aspirational targets should be set at a national level and supported by a framework of locally measurable indicators. As part of accountability arrangements for local partnerships such as CAAs and LAAs, local agencies should select targets from this framework that match local needs and provide a basis for performance improvement to be assessed. Implicit in this use of indicators is the need for comparability across areas on a national basis, to ensure that fair and valid assessments of performance improvements can be made.

5.2.2 Existing sets of indicators

In selecting indicators and targets, we do not start with a blank canvas. Within the Department of Health's current Strategic Framework, there is an increasing emphasis on local accountability [581]. The NHS is held to account through a set of indicators, referred to as 'vital signs' [582]. Not all of these are set as targets. Instead, there is a stepped, three tier approach, with PCTs required to deliver plans to the Department only on tier 1 indicators. For tier 2 indicators, PCTs agree plans with Strategic Health Authorities (SHAs), while for tier 3 indicators, PCTs, with local partners, agree which indicators to prioritise based on local benchmarking and the outcomes of the JSNA undertaken by PCTs and local authorities.

A considerable amount of work has been undertaken previously in the UK to develop indicators of health inequalities, social inequality, area inequality and for equality and human rights purposes. There is

Figure 5.2 Framework for indicators and targets
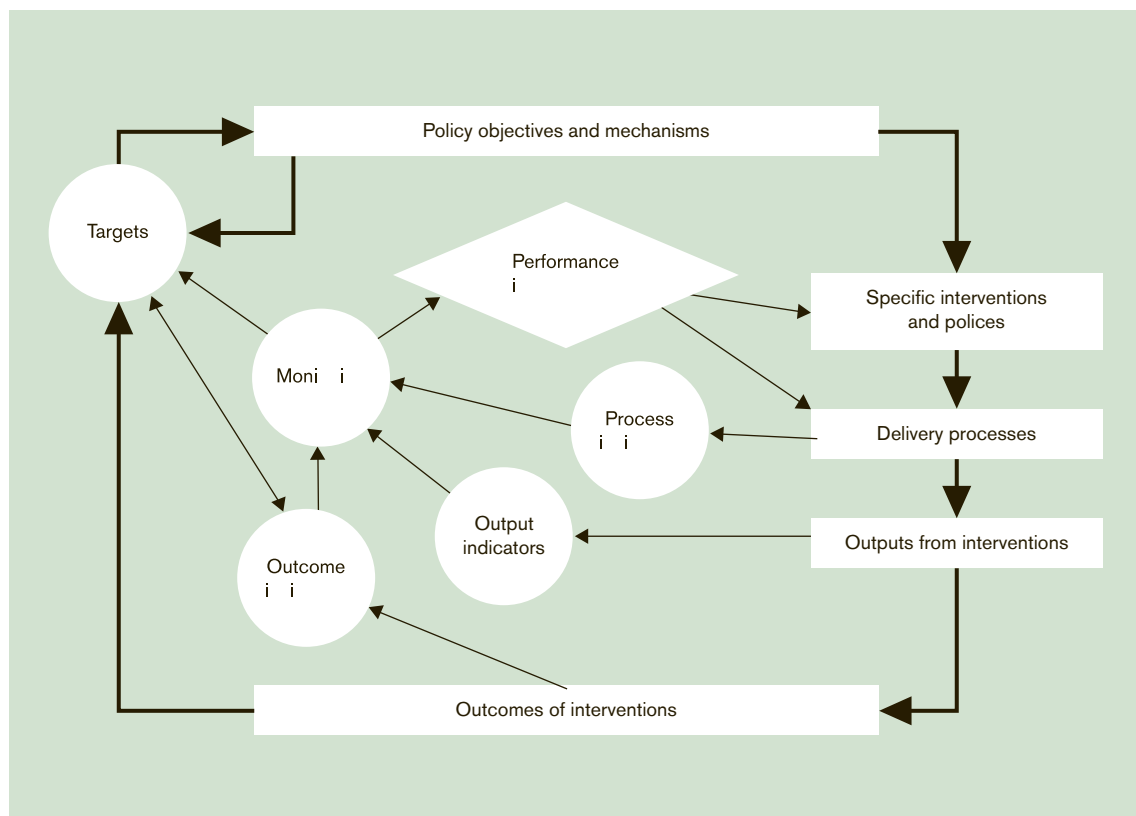
merit in using or further developing existing indicators, where these are appropriate for this purpose.

In 2008 the Department for Communities and Local Government issued a set of 185 national indicators (NIS) for English Local Authorities and Local Authority partnerships. In 2009 an updated set of 188 indicators was issued.[583] That set is intended to underpin the performance framework for local government and provide national outcomes and a single basis for measuring performance. The NIS covers four dimensions: stronger and safer communities; children and young people; adult health and wellbeing and tackling exclusion and promoting equality; local economy and environmental sustainability. Examples of other relevant indicator sets include:

— The 'basket of indicators' developed by the London Health Observatory, monitoring the existing health inequality targets
— The indicators (and potential disaggregation of these) identified in Table 5 of 'Ten Years On'[584]
— The range of equality characteristics identified in the equality monitoring framework developed by the Equality and Human Rights Commission. While the Equality Measurement Framework (EMF) is not a performance measurement framework, it does provide a baseline of evidence for evaluating progress and deciding priorities
— The health poverty index, which makes it possible to contrast groups, differentiated by geography and cultural identity, in terms of their 'health poverty' (a combination of both their present state of health and future health potential or lack of it)
— Health Profiles, which provide a snapshot of health for each local council in England using key health indicators, enabling comparison locally, regionally and over time. They are designed to help local councils and the NHS decide where to target resources and tackle health inequalities in the local area
— The Index of Multiple Deprivation 2007, which combines a number of indicators, chosen to cover a range of economic, social and housing issues, into a single deprivation score for each small area in England
— The Neighbourhood Statistics website, which provides access to nationally available data about small geographic areas (www.neighbourhood. statistics.gov.uk).

5.2.3 Components of the framework

The indicators must capture the following dimensions on which interventions can impact:
— Life course
— Social determinants
— Health outcomes (morbidity, mortality, wellbeing).

Life course approach

The life course approach underpins monitoring of how action on social determinants impacts on outcomes. It recognises that the most powerful outcomes that result from interventions at each stage in the life course are to be found later in life. In general, the earlier the intervention, the greater are these subsequent outcomes. This has significant implications for the timeframe for anticipating that outcomes will be observed. Outcome indicators within the framework must include some that adequately capture the health and other social consequences of interventions both in early years and subsequently.

Social determinants

The dimensions of social determinants, for which indicators must be included in the framework (some of which will need to be developed as part of the strategy) are listed in Box 5.1.

Two key issues that must be addressed in measuring each of these dimensions of social determinants are:
— Does the availability of data on a particular topic limit attention to national indicators that can be applied locally, but will generally not have

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Box 5.1 Dimensions of social determinants

— Adequate standards of living
— Decent work
— Fair employment
— Good start
— Education
— Appropriate skills
— Opportunities
— Physical environment
— Capability
— Social support and social capital:
  – Family
  – Community
  – Networks
— Service provision
— Relative income inequality
— Financial capability

Box 5.2 Issues affecting selection of indicators

— Importance
— Feasibility and cost
— Availability
— Clear relevance to interventions
— Technical Issues
— Critera/guidance:
  – Breadth
  – Balance
— Smallest population for which indicator is reliable
— Information governance
— Impact
— Indicator sets
— Data sources

relevance to local circumstances, or does it enable a wider choice – topics that can be underpinned by locally relevant indicators that, nonetheless, contribute to achieving the outcomes being measured at national level?

— Each of the social determinants does not act individually, so indicators will be strongly inter-related. For this reason, caution will be required in the use of proxy indicators of determinants.

Health and well-being indicators

The measurement of health outcomes is central to assessing the success of the strategy. These need to relate to the major conditions associated with health inequalities – those on which the recommendations and associated interventions are intended to have a significant effect (in terms of scale and impact). The outcomes need to reflect improvement in both the quality and length of life across the social gradient.

A key aim of the proposed strategy is to improve both health and well-being across the social gradient. For this reason, there is a need to capture health status, measured through subjective perceptions, such as general health, limiting long-term illness and disability, as well as through diagnosed morbidity indicators obtained through surveys or routine clinical practice in the NHS, such as the growing amount of information becoming available though the Secondary Uses Service (SUS).

It will be equally important to develop outcome indicators based on some of the different cultural aspects of what constitutes well-being – looking at measures beyond health, such as positive attitudes. Several indicators of well-being are currently collected across different data sources:

— Early Child Development Index
— SF-36
— EQ-5D
— SF-6D
— GHQ-12
— Quality of life (participation, esteem)
— Life satisfaction
— Mental state

However, none is currently collected at a scale that would enable routine monitoring below national level. Field trials are needed to establish the feasibility of large-scale routine collection on a nationally consistent basis.

As important as measures of individual well-being are indicators of community and societal well-being. These can be developed to measure the impact on the social gradient. At community level, this can be achieved by focusing on a range of desirable issues that are currently socially graded (for example, sustainable housing, safer roads, community empowerment). The National Indicator Set provides a basis for selecting some of the indicators needed by local partnerships. Similarly, at national level, macro-level indicators can be used that correlate with social division (for example, income inequality, environmental harm). This follows from proposals from the Sarkozy Commission[585] internationally and the development of UK indicators of societal well-being.[586]

5.2.4   Selection of indicators

Based on the previous discussion, the issues that need to guide the selection of indicators are summarised in Box 5.2.

An indicative framework, covering all the recommendations listed in Chapter 4, is given in Annex 2.

5.3   National targets

Aspirational national targets are required to ensure a strategic focus on reducing inequality and achievement of the intended health gain. The implication of the conceptual framework that has underpinned this Review is that these targets need to relate to long-term improvements in health outcomes and in the more immediate outputs from our highest priority recommendations, those relating to development in childhood, which most strongly influence the subsequent life course.

National health outcome targets across the social gradient

It is proposed that national targets in the immediate future should cover:
— **Life expectancy (to capture years of life)**
— **Health expectancy (to capture the quality of those years).**
Once an indicator of well-being is developed that is suitable for large-scale implementation, this should be included as a third national target on health inequality.

National targets for child development across the social gradient

It is proposed that national targets should cover:
— **Readiness for school (to capture early years development)**
— **Young people not in education, employment or training (to capture skill development during the school years and the control that school leavers have over their lives).**

National target for social inclusion

It is proposed that there be a national target that progressively increases the proportion of households that have an income, after tax and benefits, that is sufficient for healthy living.

The types of indicators needed to monitor processes, outputs and outcomes in the full range of recommendations in this report are outlined in Annex 2. Examples of the detailed indicators that are currently available are given on the Marmot Review website, www.ucl.ac.uk/gheg/marmotreview.

This wider set of indicators is intended to be for discretionary use by local partnerships.

5.4 Issues in implementing the framework

On the basis of the lessons learned from the current health inequality strategy, a number of key questions were identified in Section 3.6, concerning implementation of a framework for indicators and monitoring.

5.4.1 What dimensions of inequality should be covered?

Ethnicity and individual socioeconomic status have many alternative definitions. Decisions must be made about which measures to use, and then these measures must be built into routine information systems. Very different methods are required in measuring and monitoring the size of inequalities and changes over time if the objective is to focus solely on the most disadvantaged, reduce the gap between the poor and the affluent, or level the social gradient.

— **Indicators should be comparable nationally, across the UK and, where international standards are well developed, to other countries**

5.4.2 To what timescale should targets relate?

The report of the Commission on Social Determinants of Health set as a goal 'closing the gap in a generation'. Some of the recommendations in this report will take even longer to feed through, as they affect experience of a new generation through their life course, for example, the impact of early years education and later schooling on subsequent labour market participation and accumulation of pension wealth. In contrast, the relatively short time horizons for the current inequality targets in England militate against life course approaches. In terms of what can be achieved in making progress towards the Review's recommendations, in the short term this argues for giving greater emphasis to objectives that focus on initiating social and organisational processes and obtaining a range of outputs, and for giving greater emphasis to the health outcomes in the long term.

Targets can be aspirational, setting out improvements we would like to see in indicators of health outcomes (or health actions, behaviours, and so on). However, as indicated in Section 5.10, targets set for organisations (including strategic partnerships) should ideally be SMART. In particular, they must be capable of being affected by those organisations, through direct action or influence, in the specified time scale. For example, current targets are based on mortality data. While these can be affected by health policy, changes that the NHS or other public bodies can achieve in a short time tend to be negligible compared with the underlying long-term behavioural, socioeconomic and societal factors that they and others need to influence.

— **Targets for LSPs must be achievable through their direct action or influence in the timescale specified when they are set.**

5.4.3 On what type of areas or individual characteristics should indicators and targets be based?

A key issue in defining indicators and setting targets is whether the focus of attention is on administrative units, individuals grouped by geographic area (residence or catchment area) or by social determinants or individuals' personal characteristics based on their life course.

The current national health inequalities targets provide examples of two approaches: the life expectancy target is to narrow the gap in average life expectancy defined at local authority level, and the infant mortality target defines the gap as between groups based on individuals' socioeconomic status. Other high-level inequality targets have used geographically grouped data in a variety of ways – spearhead targets and teenage pregnancy targets define different targets for different local authorities, the LAA 'within-area targets' define geographical target areas within local authorities.

Using individual characteristics has the advantage of avoiding the problems of drawing inappropriate conclusions from changes at an area level (discussed in Chapter 3), but relies on the availability of data at individual level for analysis. Where reliable individual data are not available at local level, this makes it impossible to analyse or monitor the indicator or target locally and a proxy or synthetic estimate needs to be used. This is particularly an issue for rare events (for example, infant mortality) or population groups that form only a small minority of an area (for example, ethnic groups in many areas).

If target areas were to be defined in terms of outliers converging to the average, then the targets would, at least to some extent, be achieved, misleadingly, through well-recognised statistical processes associated with random variation. This will be less of an issue when the variable is sufficiently robust at the area level being used, not changing or fluctuating rapidly over time. This can be avoided if a distributional target is chosen, for example by focusing on the gradient or aspects of the range of variation. However, for area-based strategies the constant change in the position of a local area on the distribution can make it very difficult to set a coherent local strategy and to monitor the effects of interventions. This needs to be reflected in the way in which local targets and indicators are set and relate to those at national level.

By setting targets based on a target subgroup within local areas (for example, the most deprived fifth), undue emphasis is given to relatively unstable local indicators of outcome. Where there are few enough outcome events within a whole district, limiting local monitoring to changes among a small fraction of the people in the area makes this issue much worse. By focusing on reducing differences across the social gradient, this can, to some degree, be avoided.

— **Targets and indicators should, wherever possible, be focused on the reduction of differences across the social gradient.**

5.4.4 Measuring the social gradient in health

Since the development of the 2004 inequalities targets, various studies have investigated alternative methods of analysing and monitoring inequalities over time. The methods investigated include:

— Absolute range (absolute difference between rates in the most and least deprived groups)
— Relative range (ratio of rate in the most deprived areas to rate in the least deprived areas – *currently used for the existing targets*)
— Slope index of inequality (SII) and relative index of inequality (RII) (which are sensitive to the mean health status of the population and can be interpreted as the absolute effect on health of moving from the lowest socioeconomic group through to the highest)
— Concentration index (which allows analysis of the extent to which poor health is concentrated among those in the most disadvantaged groups)
— Population attributable risk (PAR) (which measures the proportion of disease in the study population that is attributable to exposure to a particular factor and thus could be eliminated if that exposure were eliminated).

These different methods have pros and cons. For example: ratios in themselves do not give information about absolute improvement and will not inform about performance across the intermediate groups of population; the SII and RII only work well if there is a reasonably linear relationship between deprivation and the health indicator of interest. This frequently requires transforming the available data (for example, using logarithmic scales), which can detract from the ease with which it can be understood. It is also important to note that measures of inequality will not necessarily work locally, when gradients that exist at a national level might not apply in particular areas.

In Scotland, the task force that produced the Equally Well approach to health inequalities in 2008 was set up and had advice from a group of government and external experts on appropriate high level population measures of health inequalities. This group proposed a set of headline indicators of health outcomes. For each of these headline indicators, the expert group proposed the use of three measurement approaches in order to give a comprehensive picture of inequalities across the whole population. This addresses the problem with previous area-based health inequalities targets that only sought to improve the health of people living in the most deprived areas.

Relative Index of Inequality (RII)
How steep is the inequalities gradient? This measure describes the gradient of health observed across the deprivation scale, relative to the mean health of the whole population.

Absolute range
How big is the gap? This measure describes the absolute difference between the extremes of deprivation – the rate in the most deprived minus the rate in least deprived group.

Scale
How big is the problem? This measure describes the underlying scale of the problem and past trends.

These different measures give insight into different aspects of inequalities. The most fundamental of these differences is between absolute and relative measures of inequality.

— **To avoid misleading conclusions and creating perverse incentives, indicators need to reflect both absolute and relative reductions made to inequalities, based on the measures described in this report.**

5.5 Data availability

The current data set for monitoring health inequalities in England comprises the two health inequalities targets, targets for reducing inequalities in smoking prevalence and cancer and CVD under age 75, as well as 12 headline indicators, and the local basket of health inequalities indicators. These were necessarily designed around the limitations of data systems and the demands of monitoring progress (they needed to be regularly updateable, robust enough to detect changes over time, compatible with broader policy objectives and so on). They do not necessarily provide an integrated, comprehensive and transparent approach to tracking progress in tackling health inequalities through action on the social determinants.

5.5.1 Limitations of the data infrastructure, both nationally and at local level

In considering how to address the shortcomings of available data, consideration will need to be given to the feasibility of making improvements in the timescale required, inconsistencies that may be created in existing time series, the lack of any previous data to measure 'before and after' effects when new collections are introduced, the cost of new systems and collections and the burden on the public and organisations responsible for collection and processing.

Concern has been expressed that the task of addressing limitations in local data systems is imposing a significant burden of additional data collection (for example, with the need to develop new systems to measure, and process data on, the health of local populations). It also raises issues about confidentiality and safe data storage and what is feasible within current information governance constraints.

5.5.2 Improving timeliness

For targets set on health outcomes, it is common for the data to become available only after a considerable time-lag. For example, mortality data that depend on death registrations and considerable data processing tend to be at least nine months behind at the time of their publication. Especially in cases where rates are changing rapidly, such as with premature coronary heart disease mortality, this means that monitoring

is never sufficiently timely to support management action.

Furthermore, in order to overcome year-on-year variations, the custom is to group multiple years of data, for example the most recent three years or the most recent five years. While this introduces stability to the process, it also means that monitoring is that much less timely.

Timeliness issues can be addressed through forecasting methods that maximise use of information that is available. More consideration could be given to the use of such methods to ensure timeliness in monitoring health indicators and progress against targets.

5.6 Addressing the problems with area-based measures

As discussed in Chapter 3, by measuring changes only at broad area levels (for example, administrative area level), we cannot tell whether or not any improvements being made are confined to the more affluent living in an otherwise generally deprived area. The introduction of within-area inequalities targets attempted to address this problem, but these targets were independent of the national targets and were still focused on areas where socioeconomic circumstances varied greatly from household to household.

These issues would pose less of a problem if small area data were used to define indicators and targets (for example, Super Output Areas), as long as the numbers being measured in the small areas were sufficient to enable analysis. Other advantages of using small area data are:
— All areas would have had a stake in the target
— Measures of inequality would be more sensitive to change
— The target could be scaled from national to regional to local level
— There could be a greater focus on gradients across an area.

5.7 Evaluating the impact of interventions

5.7.1 The need for evaluation
The Health Select Committee has identified the need for interventions on health inequalities to be more adequately evaluated.[587] In Chapters 3 and 4 we noted the limitations to the evidence on effectiveness that is available from past interventions. While there is often evidence of the general health effects of interventions, there is a dearth of evidence in respect to the impacts and cost-effectiveness of interventions on health inequalities. As a recent Public Health Research Consortium report shows,[588] this is the case in terms of both primary studies and systematic reviews. Similarly, more research has been conducted on the effects on health inequalities of downstream interventions, than for upstream interventions.

All too frequently, interventions and policies are implemented without building into their design the capacity to undertake a thorough evaluation of the outcomes. This is inherently difficult in a social context where the link between the intervention and outcomes of interest may be separated by a number of intermediate stages and a long time lag. There is also a tendency to roll out small-scale interventions before there has been adequate time to assess effectiveness – making sound comparisons extremely difficult. Nonetheless, as highlighted in the 2009 Health Select Committee Report into health inequalities,[589] there are a number of basic steps that can be taken to ensure that novel interventions are implemented in a way that significantly reduces the challenges involved in evaluating social interventions.

5.7.2 Evaluating an impact on the social gradient
There are a number of issues that require attention in assessing whether new policies and interventions are having an impact in bringing about a change in the social gradient in health. While we focus here on this specific issue, the points are derived from some of the basic rules for testing any relationship between an intervention and its presumed effects.

Factors for consideration include:
— The scale used for the outcome variable
— The relation between the outcome and the explanatory variable
— The nature of the intervention
— The size of the effect.

Evaluation
— **Where new interventions are implemented as part of the health inequalities strategy, they should initially be designed as time-limited pilot studies with an integral evaluation strategy built in. Scaling up should only be undertaken once sufficient time has elapsed to observe that the intervention has had a positive effect and to record its impact.**

Chapter 6
Key polices over the life course

Pre-birth and early years (up to age five)

Give every child the best start in life	— Increase investment in early years development — Holistic support for families from before birth — Priority for maternal health interventions — Increase paid parental leave in the first year — Evidence-based parenting support programmes, children's centres, advice, assistance — Provision of good quality early years education and childcare — Improve quality of early years workforce — Support the transition to school
Enable all children, young people and adults to maximise their capabilities and have control over their lives	— Schools develop a 'whole child' approach with extended school services
Create fair employment and good work for all	— Better jobs suitable for lone parents, carers, people with mental/physical health problems
Ensure healthy standard of living for all	— Minimum income for healthy living — Review systems to remove 'cliff edges' to facilitate flexible employment
Create and develop healthy and sustainable places and communities	— Mitigate effects of climate change — Improve active travel — Improve access and quality of green and open spaces — Improve the food environment — Reduce fuel poverty — Integrate local delivery systems to address social determinants of health — Improve community capital and reduce social isolation
Strengthen the role and impact of ill health prevention	— Increase investment in ill health prevention — Reduce social gradient in obesity — Focus public health efforts to reduce social gradient

Children and young people in full-time education (ages 5–16)

Give every child the best start in life	— Holistic support for families from before birth — Evidence-based parenting support programmes, advice and assistance — Support the transition to school
Enable all children, young people and adults to maximise their capabilities and have control over their lives	— Reduce the inequalities in educational outcomes — Schools develop a 'whole child' approach with extended school services — Develop school-based workforce, working across school-home boundaries — Increase access to lifelong learning, including work based learning and apprenticeships
Create fair employment and good work for all	— Better jobs suitable for lone parents, carers, people with mental/physical health problems
Ensure healthy standard of living for all	— Minimum income for healthy living — Review systems to remove 'cliff edges' to facilitate flexible employment
Create and develop healthy and sustainable places and communities	— Mitigate effects of climate change — Improve active travel — Improve access and quality of green and open spaces — Improve the food environment — Reduce fuel poverty — Integrate local delivery systems to address social determinants of health — Improve community capital and reduce social isolation
Strengthen the role and impact of ill health prevention	— Increase investment in ill health prevention — Increase availability and quality of drug treatment programmes — Reduce social gradient in obesity, smoking, alcohol — Focus public health efforts to reduce social gradient

Early adulthood (ages 17–24)

Give every child the best start in life	— Holistic support for families from before birth — Priority for maternal health interventions — Increase paid parental leave in the first year — Evidence-based parenting support programmes, advice and assistance
Enable all children, young people and adults to maximise their capabilities and have control over their lives	— Reduce inequalities in educational outcomes — Schools develop a 'whole child' approach with extended school services — Develop school-based workforce, working across school-home boundaries — Increase access to lifelong learning, including work based learning and apprenticeships — Resources for 16–25 year olds on life skills, training and employment advice
Create fair employment and good work for all	— Intervene early with active labour market programmes — Improve quality of work — Workplaces adhere to equality legislation — Effective prevention of physical and mental health problems at work — Improve flexibility in employment. — Better, more suitable jobs for lone parents, carers, people with mental/physical health problems
Ensure healthy standard of living for all	— Minimum income for healthy living — Review systems to remove 'cliff edges' to facilitate flexible employment — Implement progressive taxation
Create and develop healthy and sustainable places and communities	— Mitigate effects of climate change — Improve active travel — Improve access & quality of green & open spaces — Improve the food environment — Reduce fuel poverty — Integrate local delivery systems to address social determinants of health — Improve community capital and reduce social isolation
Strengthen the role and impact of ill health prevention	— Increase investment in ill health prevention — Increase availability and quality of drug treatment programmes — Reduce social gradient in obesity, smoking, alcohol — Focus public health efforts to reduce social gradient

Adults of working age (ages 25–64)

Give every child the best start in life	— Holistic support for families from before birth — Priority for maternal health interventions — Increase paid parental leave in the first year — Evidence-based parenting support programmes, advice and assistance
Enable all children, young people & adults to maximise their capabilities and have control over their lives	— Schools develop a 'whole child' approach with extended school services. — Develop school-based workforce, working across school-home boundaries. — Increase access to lifelong learning, including work based learning and apprenticeships
Create fair employment & good work for all	— Intervene early with active labour market programmes. — Improve quality of work. — Workplaces adhere to equality legislation. — Effective prevention of physical and mental health problems at work. — Improve flexibility in employment. — Better, more suitable jobs for lone parents, carers, people with mental/physical health problems
Ensure healthy standard of living for all	— Minimum income for healthy living. — Review systems to remove 'cliff edges' to facilitate flexible employment. — Implement progressive taxation
Create and develop healthy and sustainable places and communities	— Mitigate effects of climate change — Improve active travel — Improve access and quality of green and open spaces — Improve the food environment — Reduce fuel poverty — Integrate local delivery systems to address social determinants of health — Improve community capital and reduce social isolation
Strengthen the role and impact of ill health prevention	— Increase investment in ill health prevention — Increase availability and quality of drug treatment programmes — Reduce social gradient in obesity, smoking, alcohol — Focus public health efforts to reduce social gradient

Adults of retirement age (65+)

Give every child the best start in life

Enable all children, young people and adults to maximise their capabilities and have control over their lives	— Increase access to lifelong learning, including work based learning and apprenticeships

Create fair employment and good work for all	— Improve quality of work — Workplaces adhere to equality legislation — Effective prevention of physical and mental health problems at work — Improve flexibility in employment and retirement — Better, more suitable jobs for lone parents, carers, people with mental/physical health problems

Ensure healthy standard of living for all	— Minimum income for healthy living — Review systems to remove 'cliff edges' to facilitate flexible employment — Implement progressive taxation

Create and develop healthy and sustainable places and communities	— Mitigate effects of climate change — Improve active travel — Improve access and quality of green and open spaces — Improve the food environment — Reduce fuel poverty — Integrate local delivery systems to address social determinants of health — Improve community capital and reduce social isolation

Strengthen the role and impact of ill health prevention	— Increase investment in ill health prevention — Increase availability and quality of drug treatment programmes — Reduce social gradient in obesity, smoking, alcohol — Focus public health efforts to reduce social gradient

Annex 1
Structure and organisation of the review

In November 2008, Professor Sir Michael Marmot was asked by the Secretary of State for Health to chair an independent review to propose the most effective evidence-based strategies for reducing health inequalities in England from 2010. The strategy will include policies and interventions that address the social determinants of health inequalities.

The Review had four tasks

1 **Identify, for the health inequalities challenge facing England, the evidence most relevant to underpinning future policy and action**

2 **Show how this evidence could be translated into practice**

3 **Advise on possible objectives and measures, building on the experience of the current PSA target on infant mortality and life expectancy**

4 **Publish a report of the Review's work that will contribute to the development of a post-2010 health inequalities strategy**

Structure and organisation of the Marmot Review

The Review has been steered by a Commission chaired by Professor Sir Michael Marmot and comprising ten commissioners:

— Professor Sir Michael Marmot (Chair)
— Professor Sir Tony Atkinson
— Professor Sir John Bell
— Professor Dame Carol Black
— Professor Patricia Broadfoot
— Baroness Cumberledge
— Professor Ian Diamond
— Professor Ian Gilmore
— Professor Chris Ham
— Baroness Meacher
— Professor Geoff Mulgan

The tasks set down for the Review were shaped by three working committees, supported by expert-led task groups.

Working Committee 1

Working Committee 1 (WC 1) was asked to identify new evidence in the key policy areas where action is likely to be most effective in reducing health inequalities in the short (2010–15), medium (2016–19) and long term (2020 and beyond). WC 1 assessed evidence about the efficacy of interventions to reduce health inequalities in nine policy areas:

1 Early child development and education
2 Employment arrangements and working conditions
3 Social protection
4 Built environment
5 Sustainable development
6 Economic analysis
7 Delivery systems and mechanisms
8 Priority public health conditions
9 Social inclusion and social mobility.

This Committee made recommendations identifying potentially effective actions in reducing health inequalities for Working Committees 2 and 3 to develop.

The Committee ran from January to May 2009. The report based on its work can be found at www.ucl.ac.uk/gheg/marmotreview/Documents.

Working Committee 2: Monitoring progress

Working Committee 2 was asked to identify new targets for improving health equity and the metrics needed to monitor progress both in the short and long term. It assessed the evidence identified by WC 1 and indicated what data sources exist, or could realistically be developed, to measure progress and set targets in the short, medium and long term. WC 2 ran from May to September 2009, contributing to the interim report submitted to the Department of Health at the end of September 2009.

Working Committee 3: Policy and implementation

Working Committee 3 explored how the evidence produced by the first working committee could be translated into practical and effective policy recommendations. It assessed the best systems and levers for delivery across government and local agencies. WC 3 ran from April 2009 to September 2009, contributing to the interim report submitted at the end of September 2009.

Health Inequalities Programme Board

A senior level government cross-departmental reference group supported and informed the work of the Review, with regular meetings and a working level group.

Running alongside the Review were numerous meetings, discussions and consultations, presentations and seminars with community groups, health sector representatives, housing associations and organisations, the Local Government Association, IDeA (the Improvement and Development Agency for local government), health care organisations, regional government, other government departments, local public health and local government leaders, Primary Care Trusts, third sector and other delivery organisations, and the public. The Review was also be informed by the European Commission expert working group on social determinants and health inequalities and a range of national governments.

The Review ran a consultation on the first interim report which had 6,289 visits to the website and 135 responses, and which helped shaped the Review's direction. The consultation responses are summarised at www.ucl.ac.uk/gheg/marmotreview/consultation.

Three policy dialogues were based on policies relating to the social determinants of health. Presentations and transcripts are at www.ucl.ac.uk/gheg/marmotreview/Documents/PDDocuments.

Qualitative work

The Review team commissioned qualitative work to explore the impact of inequalities and community empowerment with particular groups.

The work was undertaken by Opinion Leaders on behalf of the National Social Marketing Centre and University College London.

The main task of the qualitative work was to explore the concept of empowering communities to improve well-being from the perspective of disadvantaged groups – single parents, people with mental health problems from black and minority ethnic backgrounds, and people with low-level stress and mental health problems. Perceptions of inequalities and potential solutions were explored.

The work can be found at www.ucl.ac.uk/gheg/marmotreview/documents. Further documents and reports from the Review can also be found at that address.

Annex 2
Framework of indicators to assess performance improvement in delivering Review recommendations

Policy Objective A

Give every child the best start in life.

A1 Increase the proportion of overall expenditure allocated to the early years and ensure expenditure on early years development is focused progressively across the social gradient

A2 Support families to achieve progressive improvements in early years development, including:

Priority objectives

1   Reduce inequalities in the early development of physical and emotional health, and cognitive, linguistic, and social skills.

2   Ensure high quality maternity services, parenting programmes, childcare and early years education to meet need across the social gradient.

3   Build the resilience and well-being of young children across the social gradient.

(i) Giving priority to pre and post natal interventions that reduce adverse outcomes of pregnancy and infancy

(ii) Providing paid parental leave in the first year of life with a minimum income for healthy living

(iii) Providing routine support to families through parenting programmes, children's centres and key workers, delivered to meet social need via outreach to families

(iv) Developing programmes for the transition to school

A3 Provide good quality early years education and childcare proportionately across the gradient. This provision should be:

(i) Combined with outreach to increase the take-up by children from disadvantaged families

(ii) Provided on the basis of evaluated models and meet quality standards

Delivery mechanisms and interventions	Process indicators	Output indicators	Outcome indicators	Delivery agencies
Identify extent of spend nationally and locally and build increases into spending reviews.	Level of spend.	Growth in services and quality.	Aspirational targets for child development.	HMT, DCSF, Local authorities, local partnerships.
See details below.	Increased number and quality of parenting programmes and increased take-up across the gradient.	Improved parenting skills and values.	Improvement in the cognitive, linguistic, emotional, behavioural and physical outcomes for children aged 2–3 across the gradient.	DCSF, DWP, local authorities, NHS, third sector, employers.
Ante natal care, home visiting.	Engagement with women at risk across the social gradient (e.g. ante natal care). More parents in receipt of quality home-visiting support across the gradient e.g. quantity, reach and quality of health visiting in year 1.	Risk reduction (e.g. smoking in pregnancy), breast feeding rates. Parenting skills improved across the gradient.	Improved birth outcomes (e.g. mother's age, gestional age, birthweight and infant death).	DH, DCSF, NHS.
Include in legislation on workers entitlements.	Take up of parental leave.	Child development milestones.	Improvement in the cognitive, linguistic, emotional, behavioural and physical outcomes for children aged under two.	DWP, HMT employers.
Provide health visiting, family nurse partnerships, SureStart, child care, intensive social and behavioural interventions, community-based parenting skill programmes.	Health visiting and family nurse engagement in each early year of child's life (e.g. quantity, reach and quality measures). SureStart engagement across the social gradient.	Child development milestones.	Improvement in the cognitive, linguistic, emotional, behavioural and physical outcomes for children.	DCSF, local authorities, the third sector, private providers.
Provision of skilled key workers across the transition for all. Targeting of those with greater social and emotional needs.	Children and parents supported across the social gradient.	Social and emotional skills at age six.	Added value of school at seven years (e.g. physical, emotional, behavioural and cognitive).	DCSF, local authorities, the third sector, private providers.
Early years provision (e.g. quantity, reach and quality).	Increase in no. of children accessing quality early education & childcare across the gradient. Increased recruitment of well-qualified staff into the early years workforce, including the no. of early years settings with staff with graduate qualifications.	Development of under-three programmes to incorporate a greater level of structured play and involvement of schools with families.	Readiness for school at five years (e.g. physical, emotional, behavioural and cognitive).	DCSF, local authorities, the third sector, private providers.
Provision of skilled workers to target those with greater social and emotional needs.	As above, focused on those with greatest social need.	As above, focused on those with greatest social need.	As above, focused on those with greatest social need.	DCSF, local authorities, the third sector, private providers.
Implementing a model based on piloting, evaluation and roll-out for all new innovations.	Increase in evaluated pilots and use of proven programmes.	Improved quality standards in early education.	Improved readiness for school at five years for those going through proven programmes.	DCSF, NHS R&D, ESRC and other research funders, local partnerships.

Policy Objective B

Enable all children, young people and adults to maximise their capabilities and have control over their lives.

Priority objectives

1 Reduce the social gradient in skills and qualifications.

2 Ensure that schools, families and communities work in partnership to reduce the gradient in health, well-being and resilience of children and young people.

3 Improve the access and use of quality life-long learning across the social gradient.

B1 Ensure that reducing social inequalities in pupils' educational outcomes is a sustained priority

B2 Prioritise reducing social inequalities in life skills by:

(i) Extending the role of schools in supporting families and communities and taking a 'whole child' approach to education

(ii) Consistent implementation of the full range of extended services in and around schools

(iii) Developing the school based workforce to build their skills in working across school-home boundaries and addressing social and emotional development, physical and mental health and well-being

B3 Increase access and use of quality life-long learning opportunities across the social gradient, by:

(i) Providing easily accessible support and advice for 16-25 year olds on life skills, training and employment opportunities

(ii) Providing work-based learning for young people and those changing jobs/careers, including apprenticeships

(iii) Increasing availability of non-vocational life-long learning across the life course

Delivery mechanisms and interventions	Process indicators	Output indicators	Outcome indicators	Delivery agencies
School/community partnerships, extend full service schools, working with parents in the community. Extending provision of social, behavioural, psychiatric and other special needs support progressively across the social gradient.	Level of appropriate resources.	Reduction of within school gradients in levels of attainment. Young people studying beyond compulsory ages and in apprenticeships.	Qualifications at 16 and 24 years.	DCSF, schools, local authorities.
As detailed below.	As detailed below.	Reduction in between school gradients in values, leadership and performance (eg. OFSTED data, teacher turnover, exclusions, truancy). Reduction in within-school performance gradients.	Educational attainment, social and emotional development and physical and mental health at 7, 11, 13 & 15 years. Reduction in numbers not in employment, education or training at ages under 19 and 19–21. Reduction in offending and antisocial behaviour rates.	Education, social services, youth justice system, third sector, Connection, NHS CAMS, civic society and communities.
School/ community partnerships, extend full service schools, working with parents in the community, expanded remit for PSHE, extending leisure and cultural activity.	Increased proportion of schools adopting full service school approaches.	Reduction in between school gradients in values, leadership and performance (e.g. OFSTED data, teacher turnover, exclusions, truancy).	Reduction in within-school performance gradients. Reduction in numbers not in employment, education or training at ages under 19 and 19-21. Reduction in offending and antisocial behaviour rates.	DCSF, schools.
Extend full service schools and provision of social, behavioural, psychiatric and other special needs support progressively across the social gradient.	Increased proportion of schools adopting full service school approaches and delivering programmes to prevent mental health difficulties among children and young people.	Attitudinal and behaviour change. Increased opportunities (e.g. resilience, capability, volunteering).	Reduction in numbers not in employment education or training at ages under 19 and 19–21. Reduction in offending and antisocial behaviour rates.	DCSF, schools, local authorities, third sector and private sector.
Appropriate training programmes (both in-service and during initial training).	Improved training and qualifications of school and family support staff to address social and emotional development, health and well-being within both schools and families.	Output indicators as for B2 (i) and B2 (ii).	Outcome indicators as for B2 (i) and B2 (ii).	Universities, teacher training institutions.
Increased provision of opportunities in settings that are appropriate across the social gradient.	Increase in training and development, opening up of recruitment and progression opportunities.	Increase in people studying beyond compulsory ages and in apprenticeships. Increased numbers participating in programmes to improve other life skills.	Increase in skills across the life course (e.g. educational and vocational attainment, subjective assessments of life skills and adult education).	Secondary and further education, Social Services, Criminal Justice System, employers, third sector, communities.
Appropriate settings for the provision of advice and training.	Increase in training and development uptake by young people.	Increase in young people studying beyond compulsory ages and in apprenticeships. Increased numbers participating in programmes to improve other life skills.	Reduction in numbers of young not in employment, education or training . Reduction in offending and antisocial behaviour rates.	DCSF, schools, local authorities.
Appropriate training programmes (both in-service and during initial training).	Increase in work experience/ apprenticeships across the social gradient.	Increase in appropriately trained workforce.	Reduction in numbers of young people not in employment, education or training.	
Workplace experience. Volunteering programmes. Programmes dealing with the social gradient in skills, mental health, problem drug and alcohol abuse and anti-social behaviour and offending.	Increase in uptake of work experience/apprenticeships across the social gradient. Increase in numbers accessing programmes to address skill deficits, mental health, problem drug and alcohol abuse and anti-social behaviour and offending.	Increased opportunities (e.g. resilience, capability, volunteering).	Increased community participation rates. Reduction in mental health, problem drug use, offending and antisocial behaviour rates.	

Policy Objective C

Create fair employment and good work for all.

Priority objectives	**C1 Prioritise active labour market programmes to achieve timely interventions to reduce long-term unemployment**

1 Improve access to good jobs and reduce long-term unemployment across the social gradient.

2 Make it easier for people who are disadvantaged in the labour market to obtain and keep work.

3 Improve quality of jobs across the social gradient.

C2   Encourage, incentivise and, where appropriate, enforce the implementation of measures to improve the quality of work across the social gradient by:

(i) Ensuring public and private sector employers adhere to equality guidance and legislation

(ii) Implementing guidance on stress management and the effective promotion of wellbeing and physical and mental health at work.

C3   Develop greater security and flexibility in employment, by:

(i) Prioritising greater flexibility of retirement age

(ii) Encouraging and incentivising employers to create or adapt jobs that are suitable for lone parents, carers and people with mental and physical health problems

Delivery mechanisms and interventions	Process indicators	Output indicators	Outcome indicators	Delivery agencies
Employment skills escalators, Fitness for Work, incentives and conditionality.	Schemes to save or create jobs or otherwise allow people to retain contact with the labour market.	Jobs saved or created. Other indicators of labour market attachment.	Reduced levels of long term unemployment. Income from employment.	DWP, HMRC, Job Centre Plus, employers, employer organisations , GPs, occupational health.
Promoting consistent messages from stress management guidelines, with a focus on mental health and well-being.	Increased access to good work (including stress management, work life balance, occupational health).	Uptake of stress counselling and relevant leadership training. Effort reward imbalance.	Psychosocial outcomes (e.g. sickness absence, stress at work, stress-control imbalance). Opportunities for progression (e.g. upward occupational mobility).	DWP, BIS, NHS, employers, unions, HSE and NICE.
Widespread adherence to principles of equality by employers and public services.	Changes in employer attitudes to skill development, recruitment and progression. Regulatory framework.	Increase in training and development, opening up of recruitment and progression opportunities.	Equality monitoring framework indicators.	DWP, BIS, employers, unions, EHRC
Promoting consistent messages from stress management guidelines, with a focus on mental health and well-being.	Increased use of good management practice to reduce stress at work . Coherence of stress management guidance. Improved attitudes to effort reward imbalance. Availability of stress counselling and relevant leadership training.	Increased access to good work (including stress management, work life balance, occupational health).	Employee health outcomes.	DWP, BIS, NHS, employers, unions, HSE and NICE
Increase in Government and employer schemes to promote flexibility. Job security (e.g. reduce involuntary part-time, temporary or contract working). Changes in benefit structures, employment subsidies, employer attitudes. Minimum wage regulations.	Security built into regulations and employment contracts. Increased number of Government and employer schemes that promote security of employment and flexibility.	Increase in numbers of employees with secure contracts and in jobs providing flexibility.	Employee health outcomes.	DWP, BIS, employers, unions
Flexibility in regulations, pension provision and employment contracts Employer-led initiatives.	Increased availability of flexible retirement packages and pre- and post- retirement work.	Increased numbers flexible retirement packages and pre- and post- retirement work.	Change in employment rates before and after the statutory pensionable age.	DWP, employers, unions, occupational pension providers.
Greater use of direct and indirect incentives. Employer-led initiatives. Early entry to employment support for those at risk of becoming unemployed (e.g. for those in insecure jobs or with physical or mental health problems).	More incentives available Increased availability of flexible work patterns for those affected (e.g. voluntary part-time, temporary or contract working, voluntary choice of retirement age, volunteering).	Increase in numbers of those affected in jobs providing flexibility.	Employee health outcomes. Reduction in the numbers of those affected in the poverty trap and other benefit-related cliff edges.	DWP, HMT, BIS, unions, employers.

Policy Objective D

Ensure healthy standard of living for all.

Priority objectives	**D1** Develop and implement standards for a minimum income for healthy living
1 Establish a minimum income for healthy living for people of all ages.	**D2** Review and implement systems of taxation, benefits, pensions and tax credits to provide a minimum income for healthy living standards and facilitate upwards pathways
2 Reduce the social gradient in the standard of living through progressive tax and other fiscal policies.	
3 Reduce the cliff edges faced by people moving between benefits and work.	**D3** Remove 'cliff edges' for those moving in and out of work and improve flexibility of employment

Delivery mechanisms and interventions	Process indicators	Output indicators	Outcome indicators	Delivery agencies
Implement a minimum income for healthy living across the range of household types to be reviewed bi-annually.	Minimum income for healthy living by component (e.g. life cyle stage, source of income). Changes in benefit structures, employment subsidies, employer attitudes. Minimum wage regulations.	Reduction in the numbers below the minimum income for healthy living relevant to their life cycle circumstances.	Reduction in adverse health outcomes attributable to living on low incomes.	DWP, HMT, employers, unions.
Give priority to progressive tax & fiscal measures which have proportionately beneficial impact on lower income households. Ensure no new perverse incentives created. Introduce more progressive pensions, increasing with age to counter increasing levels of poverty with age.	Reduction in regressive taxes Employment, benefits system, tax credits aligned to meet minimum income for healthy living standards. Levels of benefits received and take up rates provide improved support for minimum income for healthy living.	Income ratios reduced. Reductions in numbers living below minimum income for healthy living Income security increased (e.g. reduced persistent and recurrent poverty).	Reduction in adverse health outcomes attributable to living on low incomes. Changes in benefit structures.	DWP, HMT.
Conduct a review of systems of taxation, benefits, pensions and tax credits to achieve the reduction of 'cliff edges' faced by those taking up employment. Set tax and benefits rules to avoid creating perverse incentives and reduce cliff edges. Employer-led initiatives.	Reduced financial cliff-edge distinctions for those entering or leaving employment. Incentives to take up employment enhanced. Availability of Government and employer schemes to promote flexibility. Employer attitudes.	Fewer people affected by cliff edges (e.g. reduction in the numbers out of employment, on incapacity benefits and trapped by other benefit-related cliff edges).	Reduced levels of unemployment and economic inactivity. Reduced adverse health outcomes associated with unemployment, insecure work or attributable to living on low incomes.	DWP, HMT, employers.

Policy Objective E

Create and develop healthy and sustainable places and communities.

Priority objectives

1   Develop common policies to reduce the scale and impact of climate change and health inequalities.

2   Improve community capital and reduce social isolation across the social gradient.

E1   Prioritise policies and interventions that both reduce health inequalities and mitigate climate change, by:

(i) Improving active travel across the social gradient

(ii) Improving good quality open and green spaces available across the social gradient

(iii) Improving the food environment in local areas across the social gradient

(iv) Improving energy efficiency of housing across the social gradient

E2   Fully integrate the planning, transport, housing, environmental and health systems to address the social determinants of health in each locality

E3   Support locally developed and evidence-based community regeneration programmes that:

(i) Remove barriers to community participation and action

(ii) Reduce social isolation

Delivery mechanisms and interventions	Process indicators	Output indicators	Outcome indicators	Delivery agencies
Removing barriers to active travel, improving safety.	Greater accessibility to active modes of travel in all areas. Improved road layouts/ separation of modes of travel. Street safety initiatives.	Increase in active miles travelled/people using active modes of travel. Reduction in traffic accident rates involving active travel and in street crime and disorder.	Improved fitness levels across the social gradient. Reduction in car travel.	DfT, Home Office, CLG, local planning/transport agencies/ policy-makers.
Creation of good quality open space in all areas where it is lacking.	Reduction in walking distance to quality green space. Street and park safety initiatives.	Reduced social gradients in stress, greater levels of exercise. Reduction crime and disorder in streets and parks.	Improved fitness levels across the social gradient.	CLG, DEfRA, Home Office, local community safety partners.
Economic incentives. Regulation and planning. Infrastructure investment. Education and guidance.	Reduction in local concentration of fast food outlets. Improved food options in local shops.	Reduction in consumption of unhealthy food across the social gradient and increase in healthy eating.	Health benefits associated with healthy eating across the social gradient.	CLG, BIS, DEfRA, local planning/policy-makers, commercial property developers, retailers
Active energy management schemes. Changes to benefit system. Regulation of utilities. Housing improvement programmes.	Affordability of fuel for those in poverty. Reduction of numbers in poorly insulated housing. Reduction in use of high energy alternatives (e.g. transport, heating, lighting).	Reduced energy usage across the social gradient.	Fuel poverty outcomes. Carbon footprints.	CLG, BIS, DEfRA, local planning, housing associations, commercial builders, property developers.
Economic incentives. Regulation and planning. Infrastructure investment. NHS estates policy. Education and guidance. Integrated transport policies.	Greater travel options. Reduction in car use. Increase in walking and cycling.	Reduction in stress associated with living in isolated and deprived neighbourhoods.	Reduced gradients in ill health associated with social isolation and adverse impacts of travel e.g.pollution, and accidents.	CLG, DEfRA, DH, DfT, CLG, BIS, local planning/transport agencies/policy-makers, NHS, local authorities, housing associations, commercial builders, property developers, transport companies, retailers.
Support community groups with long-term funding.	Increased opportunities for participation and community activity among local residents.	Greater participation and community activity among local residents.	Improved well-being of local residents affected by regeneration.	CLG, NHS, local authorities, third sector.
Support community groups with long-term funding. Ensure transport systems facilitate mobility.	Increased opportunities for participation and community activity among local residents. Integrated transport links and street safety initiatives.	Reduction in social isolation of elderly/deprived communities.	Reduced gradients in ill health associated with social isolation and area deprivation.	DfT, CLG, BIS, DEfRA, local planning/transport agencies/ policy makers, housing associations, commercial builders, property developers, transport companies, retailers.

Policy Objective F

Strengthen the role and impact of ill health prevention.

Priority objectives
1 Prioritise prevention and early detection of those conditions most strongly related to health inequalities. 2 Increase availability of long-term and sustainable funding in ill health prevention across the social gradient.

Policy recommendations

F1 Prioritise investment in ill health prevention and health promotion across government departments to reduce the social gradient.

F2 Implement evidence-based programmes of ill-health preventive interventions that are effective across the social gradient by:

(i) Increasing and improving the scale and quality of drug treatment programmes, diverting problem drug users from the criminal justice system

(ii) Focusing public health interventions such as smoking cessation programmes and alcohol reduction on reducing the social gradient

(iii) Improving programmes to address the causes of obesity across the social gradient

F3 Focus core efforts of public health departments on interventions related to the social determinants of health proportionately across the gradient

Delivery mechanisms and interventions	Process indicators	Output indicators	Outcome indicators	Delivery agencies
Ensure that effort and resources in lifestyle and behavioural interventions are focused on having a progressive impact on the social gradient.	Access to advice on healthy living that is appropriate across the social gradient. Take up of preventive services across the social gradient, including early diagnosis and treatment.	Improvement in healthy living indicators across the social gradient. Increased numbers actively involved in specific disease prevention programmes across the social gradient.	Improved disease specific outcomes (incidence, prevalence, mortality).	NHS, Social Care, Local Authority planning, CLG, DH, third sector, retailers, food manufacturers, Food Standards, tobacco, alcohol, pharmaceutical industries.
Greater emphasis on evidence based prevention in NICE programme.	Increased availability of advice on cost effective preventive interventions. Greater use of cost effective preventive interventions	Greater effectiveness of preventive programmes.	Reduction in preventable and avoidable death and disability.	NICE, NHS
Medicalisation of the response to problem drug usage.	Availability of active recruitment programmes. Diversion from the criminal justice system.	Reduction in the numbers involved in problem drug use and in criminal activity to fund their usage.	Reduction in adverse health outcomes of problem drug use and the social and economic cost of drug-related crime.	NHS, MoJ, HO, ACPO, third sector
Refocusing of needs assessment. Development of evidence based interventions that are effective across the social gradient.	Increase in scale and intensity of evidence based preventive interventions that are effective across the social gradient.	Increased numbers actively involved in specific disease prevention programmes across the social gradient. Reduction in numbers of people across the social gradient involved in behaviours that have adverse health consequences.	Reduction in preventable and avoidable death and disability across the social gradient.	DH, NHS, local authorities
Refocusing of needs assessment. Development of evidence based interventions that are effective across the social gradient.	Increase in scale and intensity of evidence based preventive and health promotion interventions that are effective across the social gradient.	Reduction in the obesogenic environment and behaviours leading to obesity. Increase in aspects of healthy living that reduce obesity.	Reduction in levels of obesity and diseases associated with obesity across the social gradient.	DH, NHS, local authorities
Refocusing of needs assessment.	Increase in plans, guidance and advice on preventive interventions across the social gradient. Increased scale and intensity of interventions focused on the social gradient.	Increased numbers of people across the social gradient benefiting from interventions.	Reduction in preventable and avoidable death and disability across the social gradient.	DH, NHS, local authorities

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List of abbreviations

ACPO	Association of Chief Police Officers
ADHD	Attention-deficit Hyperactivity Disorder
AFC	Association Football Club
AHC	After Housing Costs
ALMP	Active Labour Market Programme
BHC	Before Housing Costs
BHPS	British Household Panel Survey
BIS	(Department of) Business, Innovation and Skills
BMI	Body Mass Index
BMJ	British Medical Journal
CAA	Comprehensive Area Agreement
CAB	Citizen's Advice Bureau
CABE	Commission for Architecture and the Built Environment
CAMHS	Child and Adolescent Mental Health Service
CASE	Centre for Analysis of Social Exclusion
CHD	Coronary Heart Disease
CIH	Chartered Institute of Housing
CLG	Communities and Local Government (Department for)
CO_2	Carbon Dioxide
COMEAP	Committee on the Medical Effects of Air Pollutants
COPD	Chronic Obstructive Pulmonary Disease
CJD	Creutzfeldt-Jakob Disease
CSDH	Commission on Social Determinants of Health
CYPP	Children and Young Persons' Plan
DALY	Disability Adjusted Life Years
DCSF	Department for Children, Schools and Families
DECC	Department of Energy and Climate Change
DEfRA	Department for Environment, Food and Rural Affairs
DfES	Department for Education and Skills (until 2007, now part of DCSF)
DFLE	Disability Free Life Expectancy
DfT	Department for Transport
DH	Department of Health
DWP	Department for Work and Pensions
EHRC	Equality and Human Rights Commission
ELS	Earning and Learning Strategy
EMF	Equality Measurement Framework
EPHPP	Effective Public Health Practice Project
EPPE	Effective Provision of Pre-School Education
EU	European Union
FNP	Family Nurse Partnerships
FSM	Free School Meal
GCSE	General Certificate of Secondary Education
GDP	Gross Domestic Product
GHQ	General Health Questionnaire

GMS	General Medical Services	NBER	National Bureau of Economic Research
GP	General Practitioner	NDC	New Deal for Communities
HBP	Healthy Borough Programme	NDLP	New Deal for Lone Parents
HMSO	Her Majesty's Stationery Office	NEET	Not in Education, Employment or Training
HMT	Her Majesty's Treasury	NESS	National Evaluation of Sure Start
HMRC	Her Majesty's Revenue and Customs	NHS	National Health Service
HO	Home Office	NI	National Insurance
HR	Human Resources	NIACE	National Institute of Adult Continuing Education
HSE	Health and Safety Executive		
HT	Health Trainer	NICE	National Institute for Clinical Excellence
IFS	Institute for Fiscal Studies	NIS	National indicators set
IMD	Index of Multiple Deprivation	NRDC	National Research and Development Council for Adult Literacy and Numeracy
IM	Infant Mortality		
IPPR	Institute for Public Policy Research		
IPS	Individual Placement and Support	NSF	National Service Framework
IQ	Intelligence Quotient	NS-SEC	National Statistics Socio-economic Classification
JSNA	Joint Strategic Needs Assessment		
LA	Local Authority	NTA	National Treatment Agency
LAA	Local Area Agreement	NVQ	National Vocational Qualification
LE	Life Expectancy	NWPHO	North-West Public Health Observatory
LSE	London School of Economics		
LSHTM	London School of Hygiene and Tropical Medicine	OECD	Organisation for Economic Co-operation and Development
LSOA	Lower Super Output Area	Ofsted	Office for Standards in Education, Children's Services and Skills
LSP	Local Strategic Partnership		
MIHL	Minimum Income for Healthy Living	ONS	Office for National Statistics
MIS	Minimum Income Standard	PAR	Population Attributable Risk
MoJ	Ministry of Justice	PCT	Primary Care Trust
MRSA	Methicillin-resistant Staphylococcus Aureus	PDU	Problem Drug User
		PM	Particle Matter
MVPA	Moderate to Vigorous Physical Activity	PPS	Policy Planning Statement
		PSA	Public Service Agreement
NAPP	National Academy of Parenting Practitioners	PSHE	Personal, Social, Health and Economic Education

QCDA	Qualifications and Curriculum Development Agency
QOF	Quality and Outcomes Framework
RCA	Royal College of Anaesthetists
RCGP	Royal College of General Practitioners
RCM	Royal College of Midwives
RCOG	Royal College of Obstetricians and Gynaecologists
RCPCH	Royal College of Paediatrics and Child Health
RII	Relative Index of Inequality
RSA	Royal Society for the Encouragement of Arts, Manufactures and Commerce
SCIE	Social Care Institute for Excellence
SDH	Social Determinant(s) of Health
SES	Socio-Economic Status
SEAL	Social and Emotional Aspects of Learning
SEL	Social and Emotional Learning
SHA	Strategic Health Authority
SII	Slope Index of Inequality
SMART	Specific, Measurable, Achievable, Relevant and Time-bounded
SOGE	Sustainable Operations on the Government Estate
SoS	Secretary of State
SSLP	Sure Start Local Programme
UCL	University College London
UKPHA	United Kingdom Public Health Association
WFTC	Working Family Tax Credits
WHO	World Health Organisation

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