
Fair Society, Healthy Lives

The Marmot Review Executive Summary



Strategic Review of Health Inequalities
in England post-2010

Fair Society, Healthy Lives

The Marmot Review Executive Summary



Strategic Review of Health Inequalities
in England post-2010

**Rise up with me against
the organisation of misery**
Pablo Neruda

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 Health 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/ghcg/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.

All reasonable precautions have been taken by the Strategic Review of Health Inequalities in England post-2010 to verify the information contained in this publication. However, the published material is being distributed without warranty of any kind, either expressed or implied. The responsibility for the interpretation and use of the material lies with the reader. In no event shall the Strategic Review of Health Inequalities in England post-2010 be liable for damages arising from its use.

Acknowledgements

The work of the Review was championed, informed, and guided by the Chair of the Commission and the Commissioners.

Report writing team: Michael Marmot, Jessica Allen, Peter Goldblatt, Tammy Boyce, Di McNeish, Mike Grady, Ilaria Geddes.

The Marmot Review team was led by Jessica Allen. Team members included Peter Goldblatt, Tammy Boyce, Di McNeish, Mike Grady, Jason Strelitz, Ilaria Geddes, Sharon Friel, Felicity Porritt, Elaine Reinertsen, Ruth Bell and Matilda Allen.

The Department of Health supported the Commission in many ways. In particular we thank Una O'Brien, Mark Davies, David Buck, Ray Earwicker, Geoff Raison, Maggie Davies, Steve Feast, Martin Gibbs, Chris Brookes, Anne Griffin and Lorna Demming.

We are indebted to the task groups and working committees that informed the Review. They included: Sharon Friel, Denny Vagero, Alan Dyson, Jane Tunstill, Clyde Hertzman, Ziba Vaghri, Helen Roberts, Johannes Siegrist, Abigail McKnight, Joan Benach, Carles Muntaner, David MacFarlane, Monste Vergara Duarte, Hans Weitkowitz, Gry Wester, Howard Glennerster, Ruth Lister, Jonathan Bradshaw, Olle Lundberg, Kay Withers, Jan Flaherty, Anne Power, Jonathan Davis, Paul Plant, Tord Kjellstrom, Catalina Turcu, Helen Eveleigh, Jonathon Porritt, Anna Coote, Paul Wilkinson, David Colin-Thomé, Maria Arnold, Helen Clarkson, Sue Dibb, Jane Franklin, Tara Garnett, Jemima Jewell, Duncan Kay, Shivani Reddy, Cathryn Tonne, Ben Tuxworth, James Woodcock, Peter Smith, David Epstein, Marc Suhrcke, John Appleby, Adam Coutts, Demetris Pillas, Carmen de Paz Nieves, Cristina Otano, Ron Labonté, Margaret Whitehead, Mark Exworthy, Sue Richards, Don Matheson, Tim Doran, Sue Povall, Anna Peckham, Emma Rowland, Helen Vieth, Amy Colori, Louis Coiffait, Matthew Andrews, Anna Matheson, John Doyle, Lindsey Meyers, Alan Maryon-Davis, Tim Lobstein, Angela Greatley, Mark Bellis, Sally Greengross, Martin Wiseman, Paul Lincoln, Clare Bamba, Kerry Joyce, David Piachaud, James Nazroo, Jennie Popay, Fran Bennett, Hillary Graham, Bobbie Jacobson, Paul Johnstone, Ken Judge, Mike Kelly, Catherine Law, John Newton, John Fox, Rashmi Shukla, Nicky Best, Ian Plewis, Sue Atkinson, Tim Allen, Amanda Ariss, Antony Morgan, Paul Fryers, Veena Raleigh,

Gwyn Bevan, Hugh Markowe, Justine Fitzpatrick, David Hunter, Gabriel Scally, Ruth Hussey, Tony Elson, Steve Weaver, Jacky Chambers, Nick Hicks, Paul Dornan, Liam Hughes, Carol Tannahill, Hari Sewell, Alison O'Sullivan, Chris Bentley, Caroline Briggs, Anne McDonald, John Beer, Jim Hillage, Jenny Savage, Daniel Lucy, Klim McPherson, Paul Johnson, Damien O'Flaherty and Matthew Bell.

We are grateful to those who have provided us with information, contacts and data. They included: Edwina Hughes, Gemma Gosling, Neil Blackshaw, Jonathan Champion, Nicola Bent, Duncan Booker, Pauline Craig, Neil Pease, Phil Hatcher, Susie Dye, Steve Cummins, Andrew Connor, Clive Needle, Chris Piper, Pauline Vallance, Angela Mawle, Esther Trenchard-Mabere, Keith Williams, Cathie Shaw, Todd Campbell, Paul Edmondson-Jones, Tommy Gorman, Kerry Townsley, Joseph Dromey, Annette Gaskell, Alison Amstutz, Lia Robinson, Karl Wilkinshaw, Rachel Carse, John Joseph, Jake Eliot, Rob Taylor and Michael Hagen.

We thank the members of the Health Inequalities Programme Board and the Health Inequalities Cross-Government Working Group: Anne Jackson, Bill Gunnyeon, Andrew Lawrence, Daron Walker, Gareth Davies, Patricia Hayes, Liz Brutus, Elspeth Bracken, Rachel Arrundale, Kay Barton, Janice Shersby, Simon Medcalf, Jayne Bowman, Savas Hadjipavlou, Jae Samant, Andrew Elliott, Helen Bailey, Tom Jeffery, Irene Lucas, Sue Owen, Mike Anderson, Stephen Rimmer, Stephen Marston, Helen Edwards, Chris Warmald, Andrew Ramsey, Steve Gooding, Lionel Jarvis, Jonathan Rees, Harry Burns and Chris Tudor-Smith.

We thank the stakeholders who participated in the policy dialogues and open space event and responded to the consultation; a list of participants and respondents can be found on the Marmot Review website at www.ucl.ac.uk/gheg/marmotreview.

We thank our regional partners including Ruth Hussey, Mike Farrar and Danila Armstrong in the North West and in London Boris Johnson, Mayor of London, Pam Chesters and Helen Davies.

The report was copy-edited by Georgina Kyriacou.

We are grateful to UCL for hosting and supporting the Review team and to the thousands of people and organisations who have contributed to discussions with the team, who have attended presentations, provided feedback, thought and comment and helped shape and inform this Review.

The Commissioners

Michael Marmot (Chair)

Tony Atkinson

John Bell

Carol Black

Patricia Broadfoot

Julia Cumberlege

Ian Diamond

Ian Gilmore

Chris Ham

Molly Meacher

Geoff Mulgan

Table of Figures

- 11 Figure 1
Life expectancy and disability-free life expectancy (DFLE) at birth, persons by neighbourhood income level, England, 1999–2003
- 11 Figure 2
Age standardised mortality rates by socio-economic classification (NS-SEC) in the North East and South West regions, men aged 25–64, 2001–2003
- 13 Figure 3
Age standardised percentage of women with a General Health Questionnaire (GHQ) score of 4 or more by deprivation quintile, 2001 and 2006
- 13 Figure 4
The conceptual framework
- 14 Figure 5
Action across the life course
- 17 Figure 6
Inequality in early cognitive development of children in the 1970 British Cohort Study, at ages 22 months to 10 years
- 19 Figure 7
Standardised limiting illness rates in 2001 at ages 16–74, by education level recorded in 2001
- 21 Figure 8
Mortality of men in England and Wales in 1981–92, by social class and employment status at the 1981 Census
- 23 Figure 9
Taxes as a percentage of gross income, by quintile, 2007/8
- 25 Figure 10
Populations living in areas with, in relative terms, the least favourable environmental conditions, 2001–6
- 27 Figure 11
Prevalence of obesity (>95th centile), by region and deprivation quintile, children aged 10–11 years, 2007/8

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

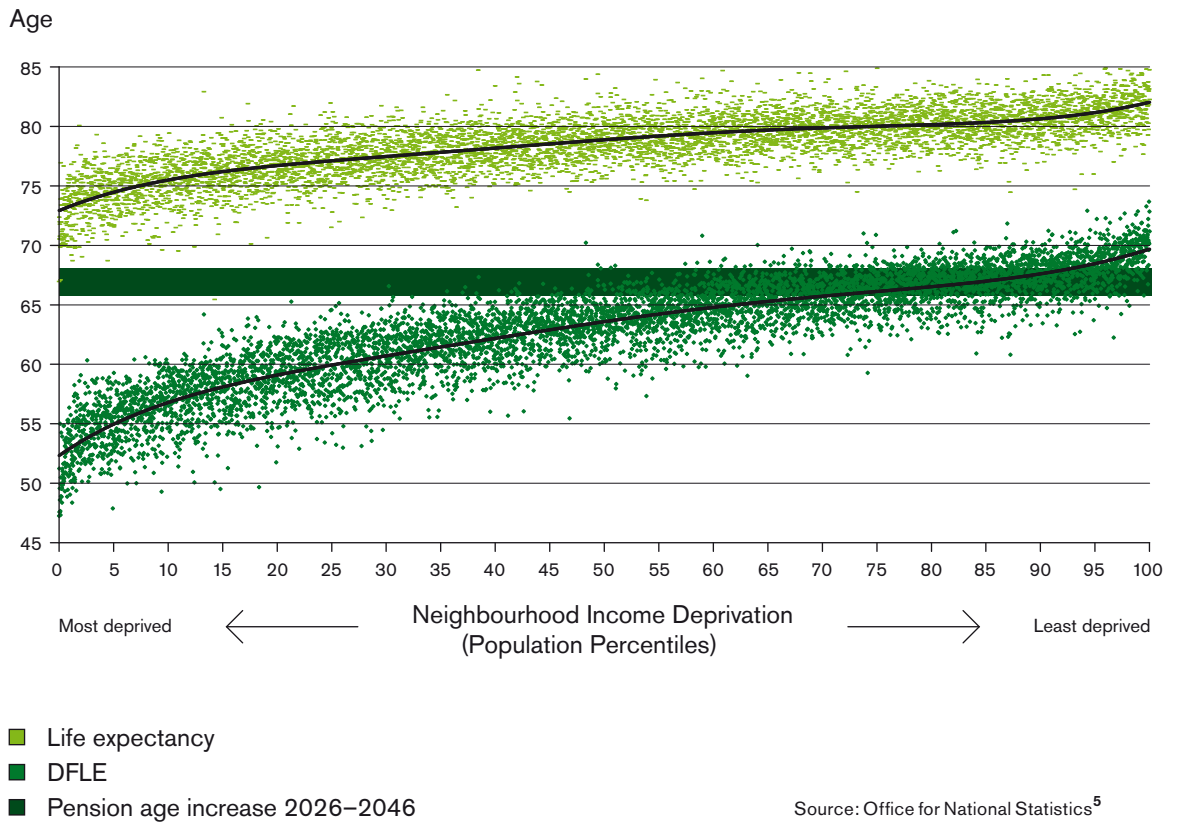
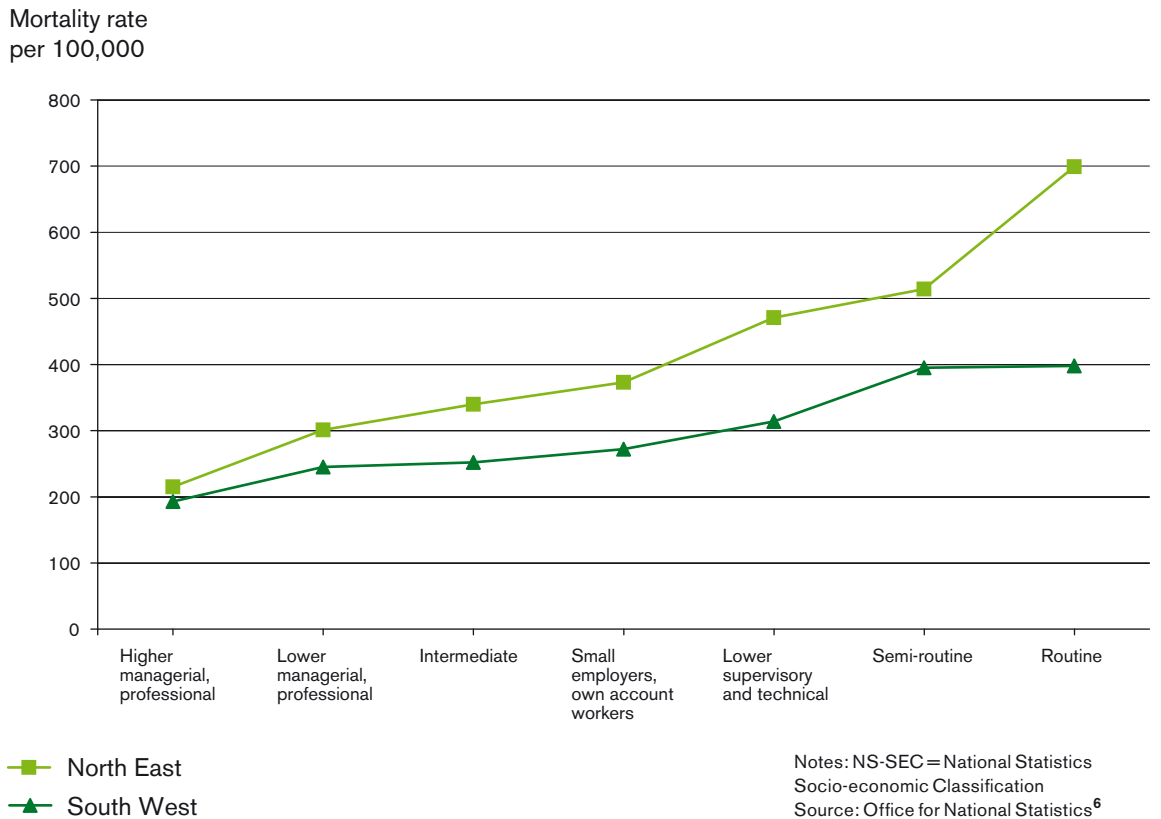


Figure 2 Age standardised mortality rates by socioeconomic classification (NS-SEC) in the North East and South West regions, men aged 25–64, 2001–2003



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 year⁹, 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

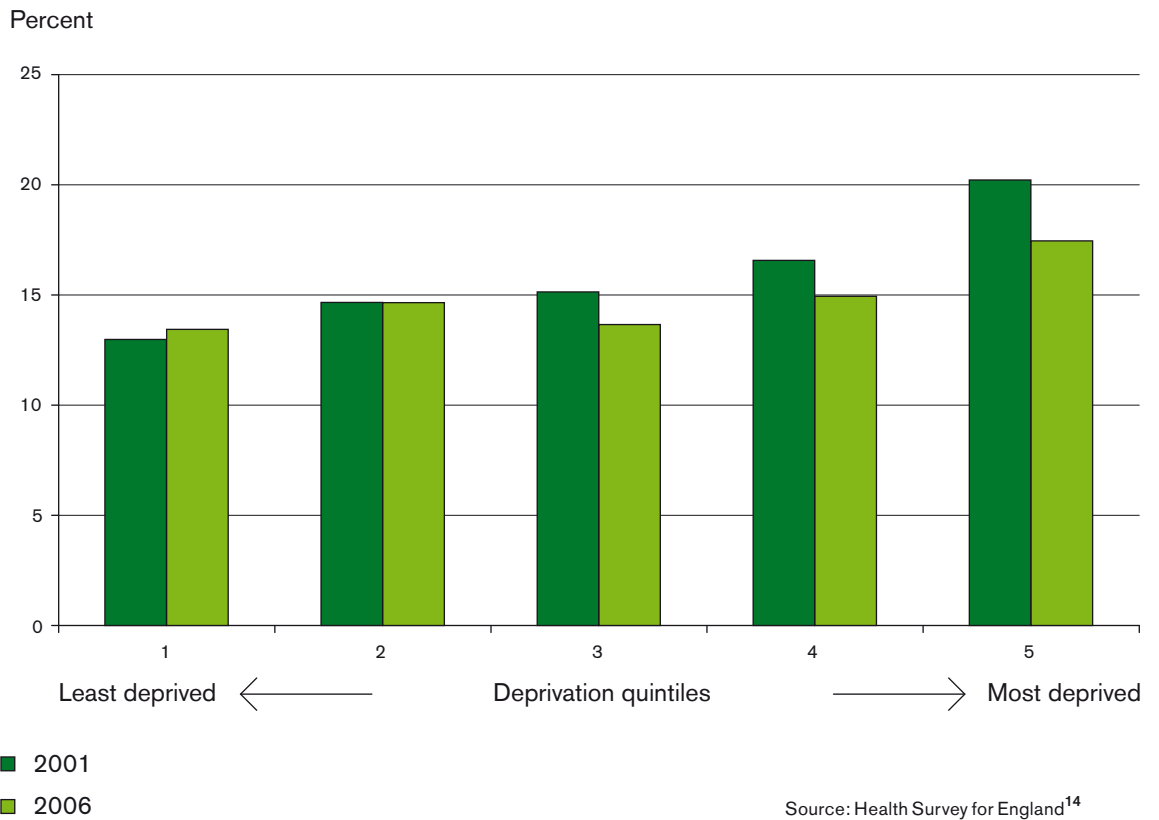
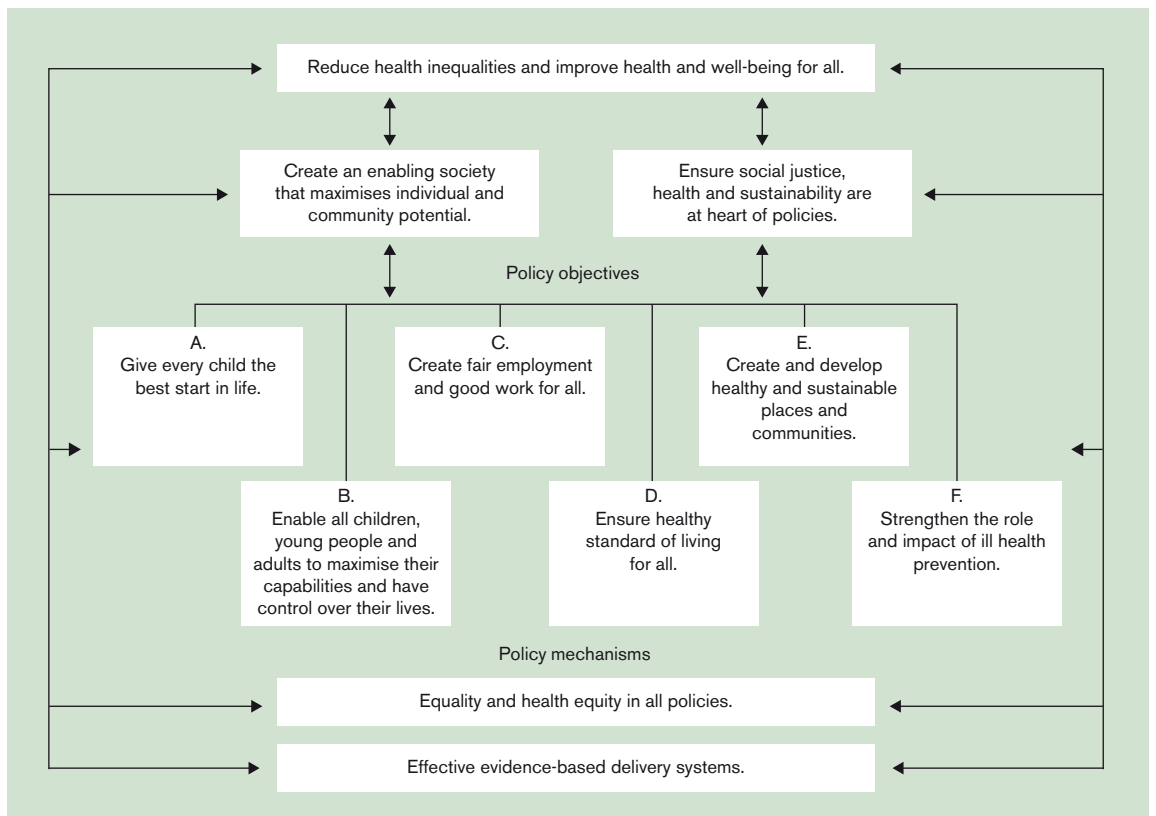


Figure 4 The Conceptual framework



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 demonstrated 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

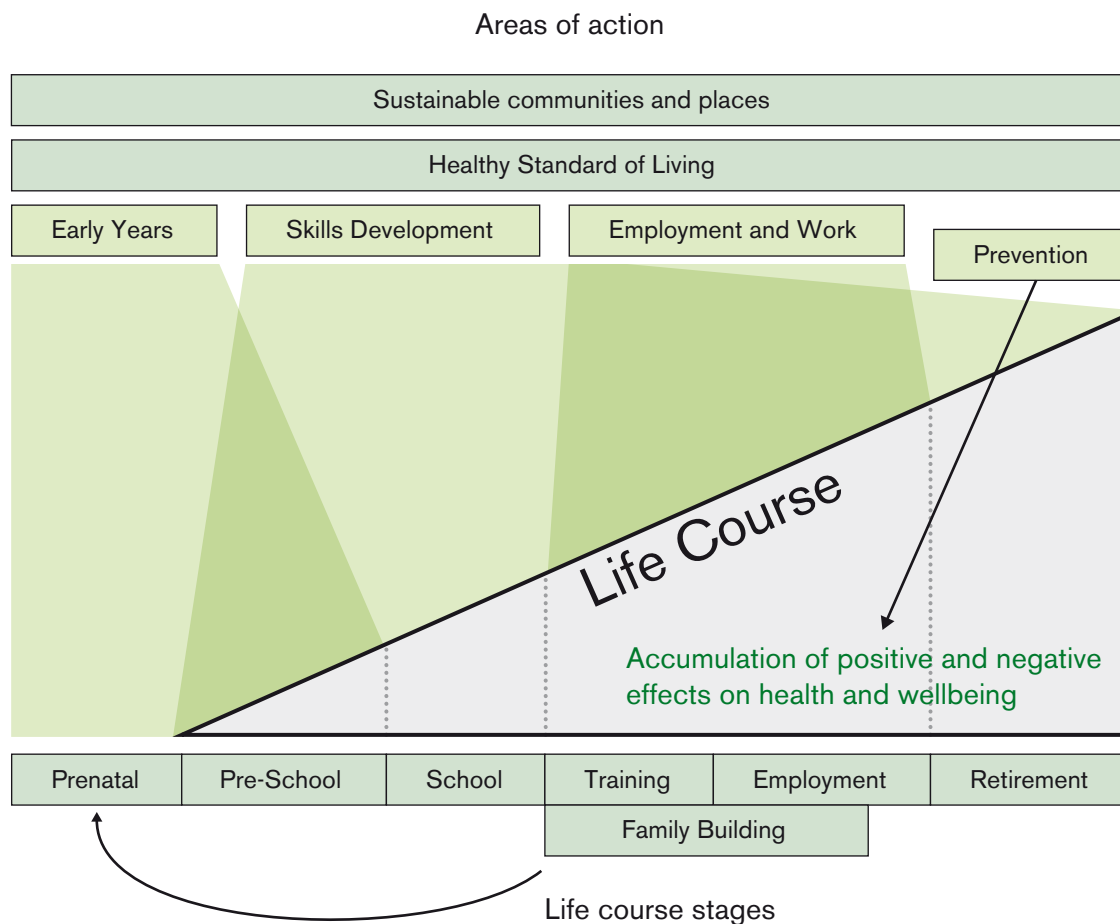




Photo: Anthony Strack/Getty Images

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.

Policy recommendations

- 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 that reduce adverse outcomes of pregnancy and infancy
 - Providing paid parental leave in the first year of life with a minimum income for healthy living
 - Providing routine support to families through parenting programmes, children's centres and key workers, delivered to meet social need via outreach to families
 - Developing programmes for the transition to school.
- 3 Provide good quality early years education and childcare proportionately across the 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 to meet quality standards.

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.

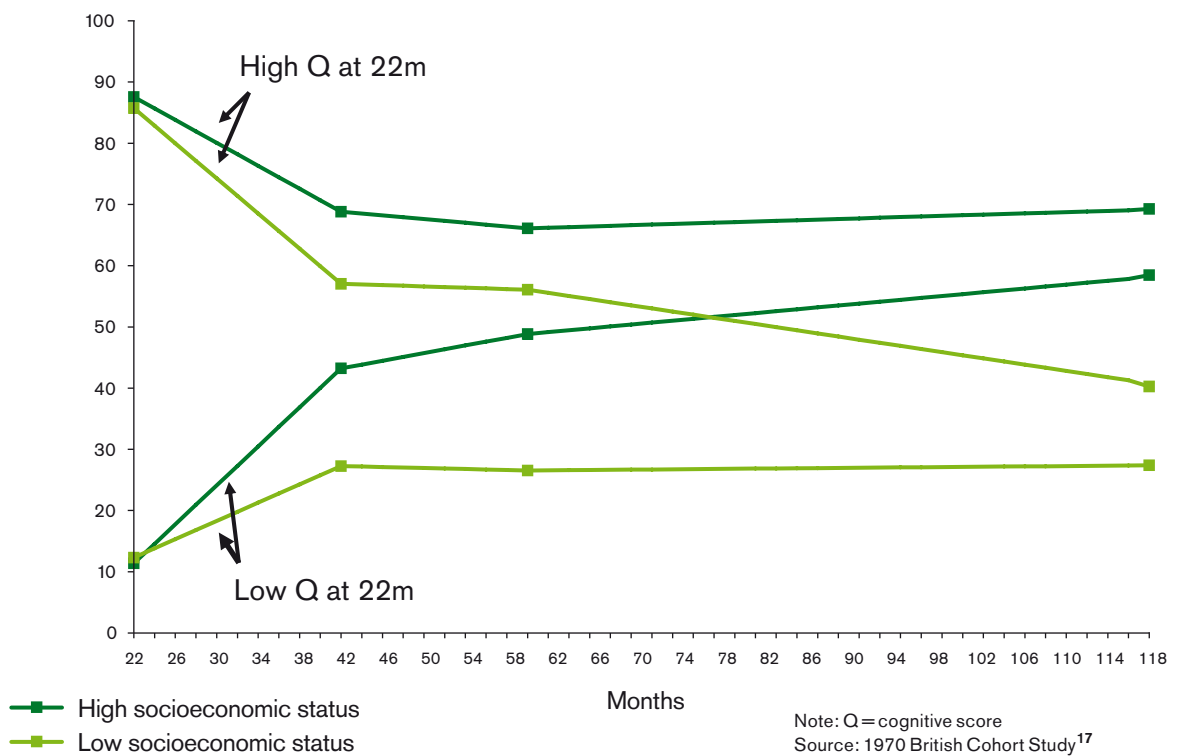
We are therefore calling for a 'second revolution in the early years', to increase the proportion of overall expenditure allocated there. This expenditure should be focused proportionately across the social gradient to ensure effective support to parents (starting in pregnancy and continuing through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



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.

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,

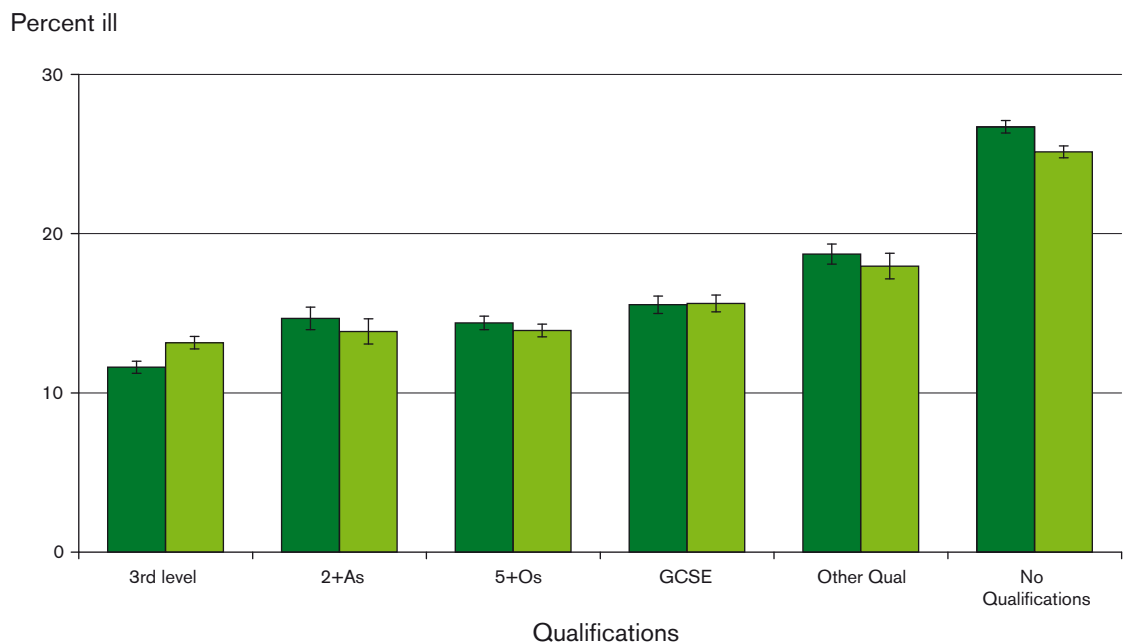
housing concerns and pregnancy and parenting. Such training and support should be developed and located in every community, designed specifically for this age group.

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



■ Males
■ Females

Note: Vertical bars (I) represent confidence intervals
Source: Office for National Statistics Longitudinal Study¹⁸

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.

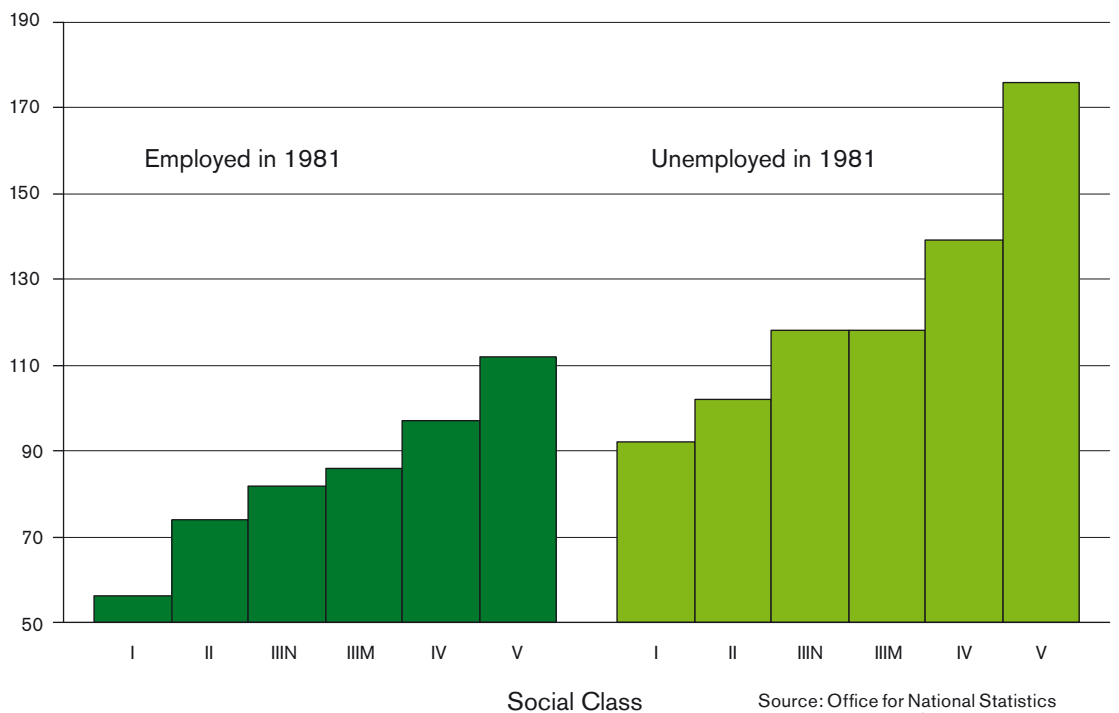
Work is good – and unemployment bad – for physical and mental health, but the quality of work matters. Getting people off benefits and into low paid, insecure and health-damaging work is not a desirable option.



photo: NHS South West

Figure 8 Mortality of men in England and Wales in 1981–92, by social class and employment status at the 1981 Census

Standardised
Mortality Rate



Source: Office for National Statistics Longitudinal Study¹⁹

Policy Objective D

Ensure a healthy standard of living for all

Priority objectives

- 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.

Policy recommendations

- 1 Develop and implement standards for minimum income for healthy living.
- 2 Remove ‘cliff edges’ for those moving in and out of work and improve flexibility of employment.
- 3 Review and implement systems of taxation, benefits, pensions and tax credits to provide a minimum income for healthy living standards and pathways for moving upwards.

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.

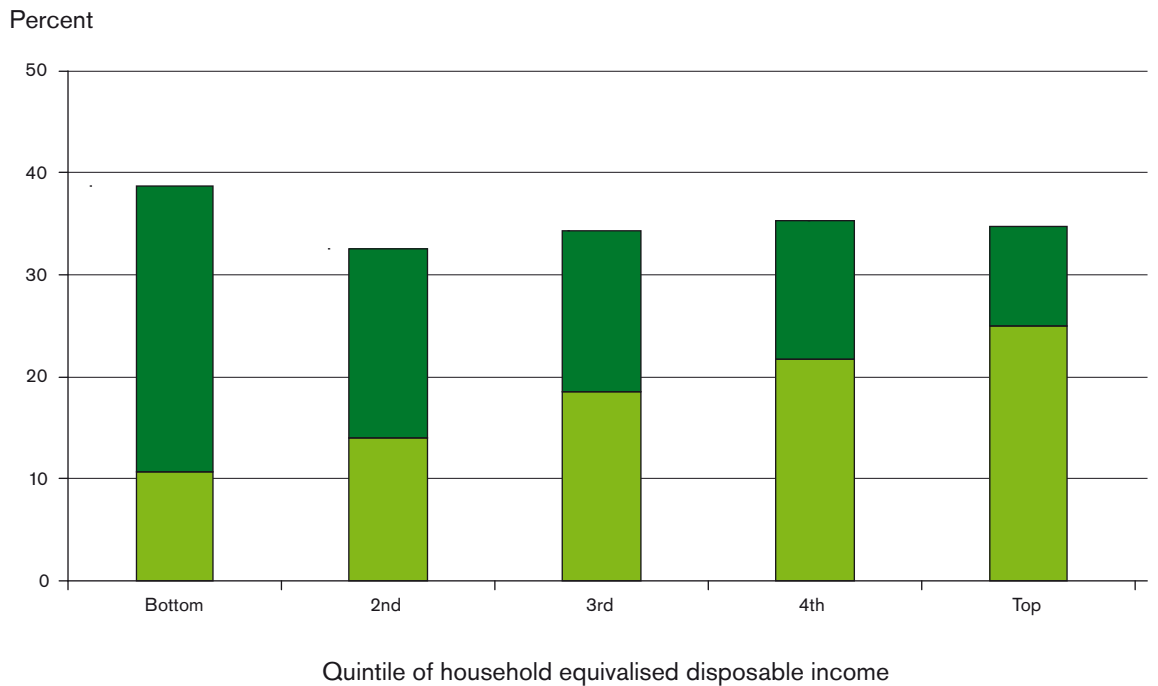
What can be done to reduce income inequalities?

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.



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



■ All indirect taxes
■ All direct taxes

Source: Office for National Statistics²¹

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.

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.

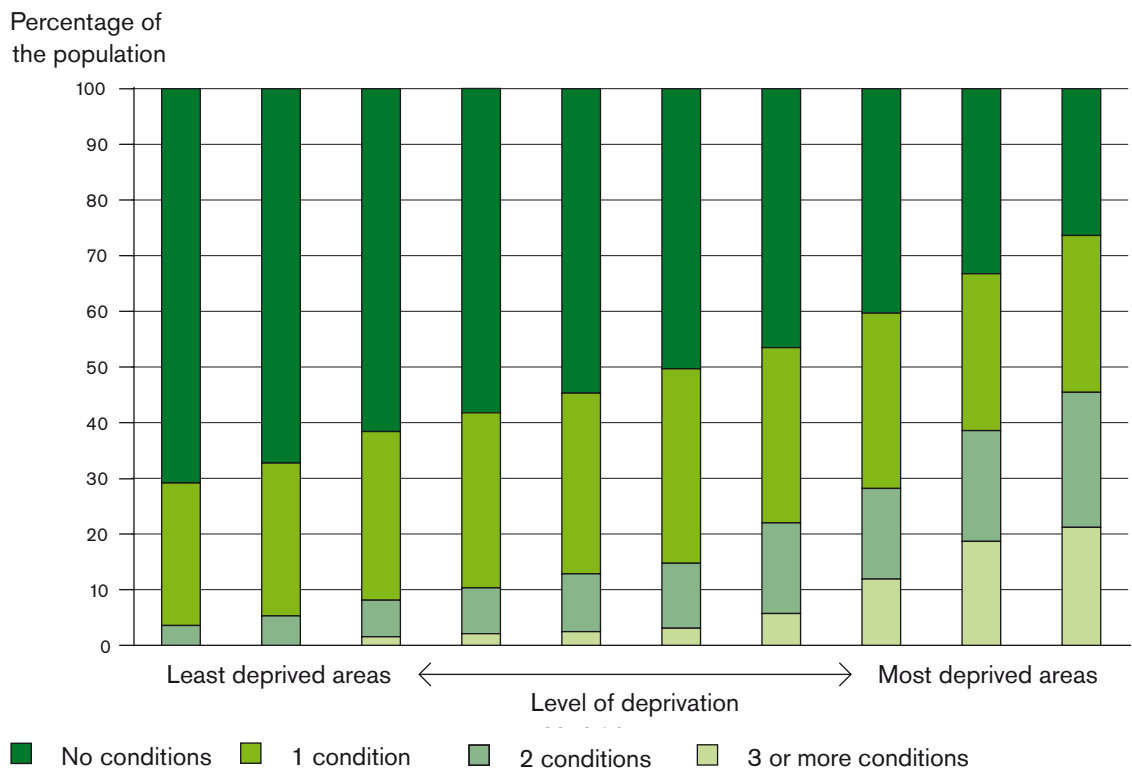
Building healthier and more sustainable communities involves choosing to invest differently. For example, the Commission for Architecture and the Built Environment estimates that the budget for new road building, if used differently, could provide 1,000 new parks at an initial capital cost of £10 million 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



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 Affairs²³

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.

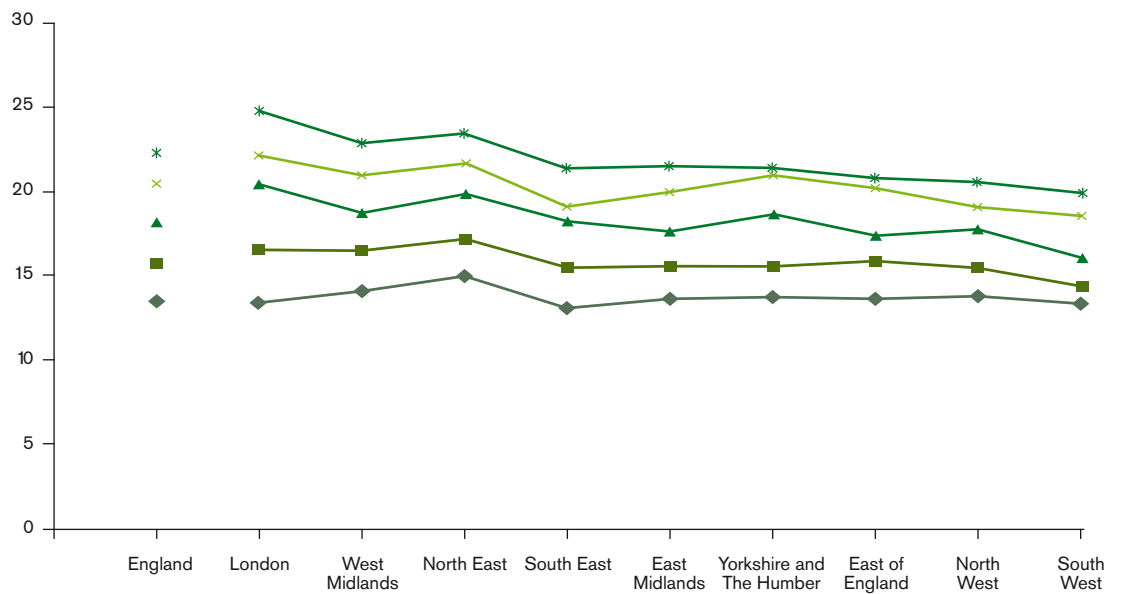
At present only 4 per cent of NHS funding is spent on prevention. Yet, the evidence shows that partnership working between primary care, local authorities and the third sector to deliver effective universal and targeted preventive interventions can bring important benefits.



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



- ◆ Quintile 1 (least deprived)
- Quintile 2
- ▲ Quintile 3
- × Quintile 4
- * Quintile 5 (most deprived)

Source: National Obesity Observatory, based on National Child Measurement Programme²⁴

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.

List of abbreviations

DEFRA	Department for Environment, Food and Rural Affairs
DFLE	Disability Free Life Expectancy
GCSE	General Certificate of Secondary Education
GHQ	General Health Questionnaire
MIHL	Minimum Income for Healthy Living
NHS	National Health Service
NS-SEC	National Statistics Socio-economic Classification
ONS	Office for National Statistics

References

- 1 Frontier Economics (2009) Overall costs of health inequalities. Submission to the Marmot Review. www.ucl.ac.uk/gheg/marmotreview/Documents; Suhrcke M (2009) The economic benefits of reducing health inequalities in England Submission to the Marmot Review. www.ucl.ac.uk/gheg/marmotreview/Documents
- 2 Frontier Economics (2009) Overall costs of health inequalities. Submission to the Marmot Review. www.ucl.ac.uk/gheg/marmotreview/Documents.
- 3 Commission on Social Determinants of Health (2008) CSDH Final Report: Closing the gap in a generation: Health equity through action on the social determinants of health. Geneva: World Health Organization.
- 3 Commission on Social Determinants of Health (2008) CSDH Final Report: Closing the gap in a generation: Health equity through action on the social determinants of health. Geneva: World Health Organization.
- 4 Commission on Social Determinants of Health (2008) CSDH Final Report: Closing the gap in a generation: Health equity through action on the social determinants of health. Geneva: World Health Organization; p.43.
- 5 Office for National Statistics (2009) Health expectancy at birth. <http://www.statistics.gov.uk/StatBase/Product.asp?vlnk=12964>
- 6 Siegler V, Langford A and Johnson B (2008) Regional differences in male mortality inequalities using the National Statistics Socio-economic Classification, England and Wales, 2001-03. http://www.statistics.gov.uk/downloads/theme_health/HSQ40-winter-2008.pdf
- 7 Frontier Economics (2009) Overall costs of health inequalities. Submission to the Marmot Review. www.ucl.ac.uk/gheg/marmotreview/Documents; Suhrcke M (2009) The economic benefits of reducing health inequalities in England Submission to the Marmot Review. www.ucl.ac.uk/gheg/marmotreview/Documents
- 8 Frontier Economics (2009) Overall costs of health inequalities. Submission to the Marmot Review. www.ucl.ac.uk/gheg/marmotreview/Documents.
- 9 Frontier Economics (2009) Overall costs of health inequalities. Submission to the Marmot Review. www.ucl.ac.uk/gheg/marmotreview/Documents.
- 10 Morris S (2009) Private communication.
- 11 McPherson K and Brown M (2009) Social class and obesity - effects on disease and health service treatment costs. Submission to the Marmot Review. www.ucl.ac.uk/gheg/marmotreview/Documents
- 12 Stiglitz J, Sen A, Fitoussi J (2009) Report of the Commission on the Measurement of Economic Performance and Social Progress, available at <http://www.stiglitz-sen-fitoussi.fr/en/index.htm>
- 13 Sen A (1992) Inequality Reexamined. Oxford: Oxford University Press.
- 14 Unpublished statistics provided by the IMPACTsec Research Team, Dept of Epidemiology and Public Health, UCL.
- 15 Waldfogel J (2004) Social mobility, life chances, and the early years, CASE Paper 88, London: London School of Economics.
- 16 Waldfogel J (2004) Social mobility, life chances, and the early years, CASE Paper 88, London: London School of Economics.
- 17 Feinstein L (2003) Inequality in the early cognitive development of British Children in the 1970 cohort, *Economica* 70: 3-97.
- 18 Office for National Statistics Longitudinal Study. <http://www.ons.gov.uk/about/who-we-are/our-services/longitudinal-study>
- 19 Bethune A (1997) 'Unemployment and mortality' in Drever F and Whitehead M (Eds.) Health inequalities: Decennial supplement, ONS Series DS no. 15. London: The Stationery Office: 156-167.

- 20 Wilkinson R and Pickett K (2009) *The Spirit Level: Why more equal societies almost always do better*. London: Allen Lane.
- 21 Jones F, Annan D and Shah S (2009) The redistribution of household income 1977 to 2006/07. *Economic & Labour Market Review* 3 (1): 31-43.
- 22 Bird D (2009) Government advisors demand urgent shift in public investment to green England's cities. London: CABE. <http://www.cabe.org.uk/press-releases/public-investment-to-green-cities>
- 23 Department for Environment, Food and Rural Affairs (2007) Sustainable development indicators in your pocket 2007 - http://www.ltnetwork.org/SITE/UPLOAD/DOCUMENT/defra_sustain.pdf pp. 97.
- 24 The NHS Information Centre (2009) National Child Measurement Programme: England, 2008/09 school year. DH/DCSF. <http://www.ic.nhs.uk/statistics-and-data-collections/health-and-lifestyles/obesity/national-child-measurement-programme-england-2008-09-school-year>
- 25 <http://www.london.gov.uk/thelondonplan/> and <http://www.nwregionalstrategy.com/>

Fair Society, Healthy Lives

The Marmot Review

www.ucl.ac.uk/marmotreview

Published by The Marmot Review
February 2010
© The Marmot Review

ISBN 978-0-9564870-0-1