

This is a repository copy of *The economics of health inequality in the English NHS:the long view*.

White Rose Research Online URL for this paper:

<https://eprints.whiterose.ac.uk/135409/>

Version: Published Version

---

**Monograph:**

Asaria, Miqdad orcid.org/0000-0002-3538-4417 (2017) The economics of health inequality in the English NHS:the long view. Working Paper. CHE Research Paper . Centre for Health Economics, University of York , Centre for Health Economics, University of York.

---

**Reuse**

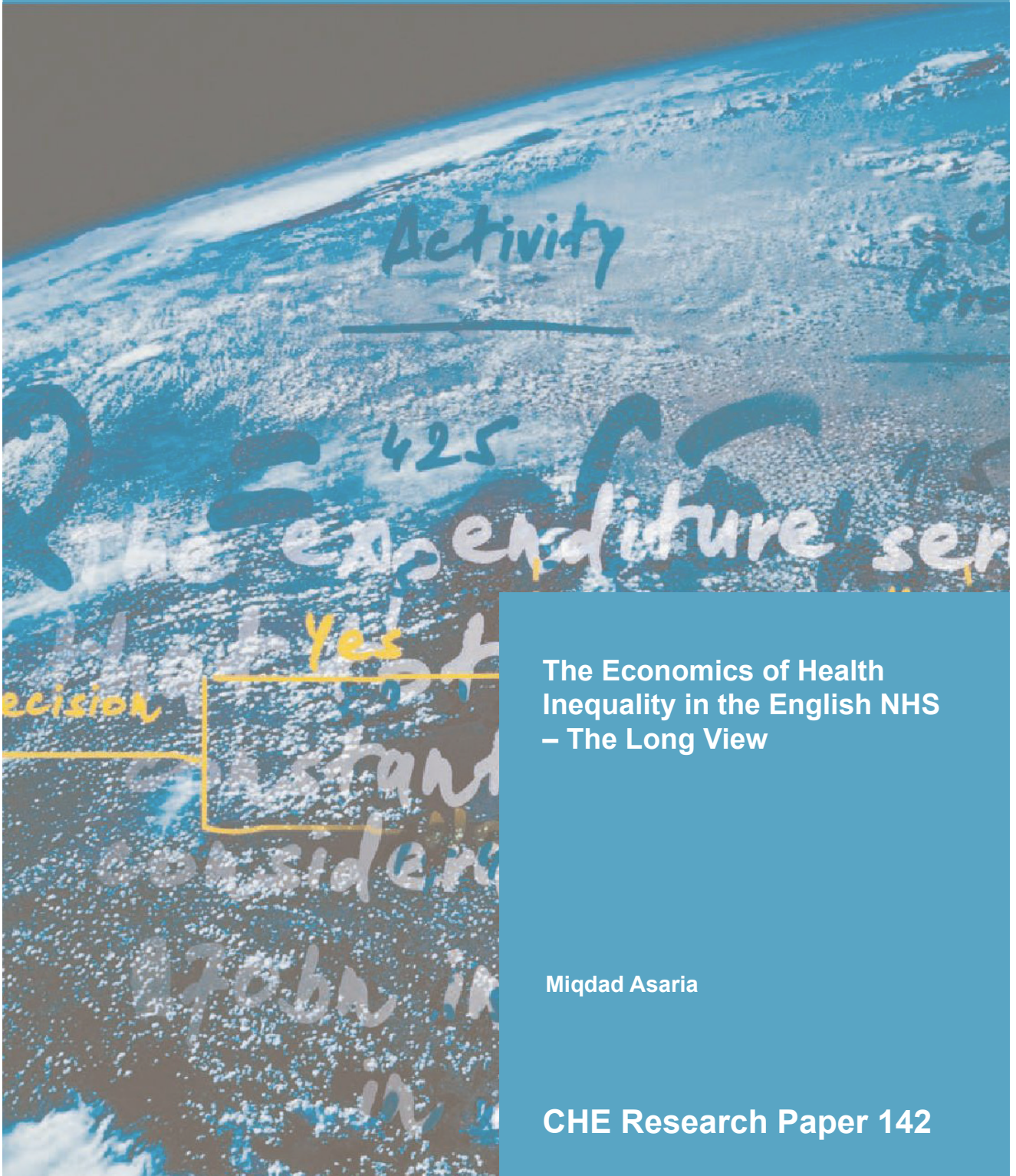
Items deposited in White Rose Research Online are protected by copyright, with all rights reserved unless indicated otherwise. They may be downloaded and/or printed for private study, or other acts as permitted by national copyright laws. The publisher or other rights holders may allow further reproduction and re-use of the full text version. This is indicated by the licence information on the White Rose Research Online record for the item.

**Takedown**

If you consider content in White Rose Research Online to be in breach of UK law, please notify us by emailing [eprints@whiterose.ac.uk](mailto:eprints@whiterose.ac.uk) including the URL of the record and the reason for the withdrawal request.



Centre For Health Economics



**The Economics of Health  
Inequality in the English NHS  
– The Long View**

Miqdad Asaria

**CHE Research Paper 142**



# The economics of health inequality in the English NHS – the long view

Miqdad Asaria

Centre for Health Economics, University of York, York, UK

February 2017

### **Background to series**

CHE Discussion Papers (DPs) began publication in 1983 as a means of making current research material more widely available to health economists and other potential users. So as to speed up the dissemination process, papers were originally published by CHE and distributed by post to a worldwide readership.

The CHE Research Paper series takes over that function and provides access to current research output via web-based publication, although hard copy will continue to be available (but subject to charge).

### **Acknowledgements**

The author would like to acknowledge Tony Culyer, Richard Cookson and Tim Doran for their infectious enthusiasm for this avenue of inquiry and their thoughtful and probing comments on earlier drafts of this manuscript.

### **Further copies**

Copies of this paper are freely available to download from the CHE website [www.york.ac.uk/che/publications/](http://www.york.ac.uk/che/publications/). Access to downloaded material is provided on the understanding that it is intended for personal use. Copies of downloaded papers may be distributed to third-parties subject to the proviso that the CHE publication source is properly acknowledged and that such distribution is not subject to any payment.

Printed copies are available on request at a charge of £5.00 per copy. Please contact the CHE Publications Office, email [che-pub@york.ac.uk](mailto:che-pub@york.ac.uk), telephone 01904 321405 for further details.

Centre for Health Economics  
Alcuin College  
University of York  
York, UK  
[www.york.ac.uk/che](http://www.york.ac.uk/che)

## **Abstract**

In this paper, I briefly outline some of the key milestones of health inequality policy in England. I describe how socioeconomic inequalities in health, government policy towards it, and the academic literature about it, have evolved over time and in relation to each other. Whilst this historical review is far from comprehensive, its aim is to provide sufficient context within which to interpret current NHS health inequality policy from the perspective of an economist.



In 1837, the national registration of births and deaths in England came into force with recording of cause of death, age at death, and occupation on every death record. This was coupled with the classification of the whole population by age and occupation in the decennial censuses. The production of these key datasets have catalysed and underpinned the wealth of research and policy that have sought to unpick and address socioeconomic inequalities in health ever since.

Amongst the earliest advocates of this research agenda was William Farr, who in 1839 was appointed as the first ‘Compiler of Abstracts’ at the General Register Office (GRO). Farr pioneered the field of social epidemiology with his series of ‘Letters to the Registrar General’ appended to the GRO annual reports.[1] These were filled with insightful observations on the social gradient in mortality, and they proposed and examined a range of hypotheses regarding the causes of this gradient.[2]

Another notable early intervention in the field was that of social reformer Edwin Chadwick. He was invited by the then government to undertake an independent inquiry on sanitation following the influenza and typhoid epidemic in London in the 1830s.[3] In 1842 Chadwick published his response to this inquiry as: ‘The Sanitary Conditions of the Labouring Population of Great Britain’.[4] He found that disease amongst the poor was largely caused by damp, filth, and overcrowded living conditions. His report was not favourably received by the Conservative government of the time, a harbinger of the recurrent tension between academic research and policy making on socioeconomic inequalities in health. After the election of the Whigs in 1847, Parliament passed the 1848 Public Health Act implementing many of the recommendations made by Chadwick. These included establishing and improving water supplies, sewage systems, and refuse collection.

A long period of sustained economic growth followed resulting in dramatic improvements in the determinants of health. These improvements, coupled with further developments in public health, resulted in what has been termed the ‘epidemiological transition’.[5] Previously, large numbers of people were dying at young ages from infectious diseases. As a result of the ‘epidemiological transition’ life expectancy increased rapidly, and instead people were dying much later in life of chronic diseases such as cardiovascular disease and cancers. Despite these huge strides in improving population health, socioeconomic gaps in health persisted.[6]

One explanation for the continued socioeconomic inequality in health, despite the ‘epidemiological transition’, was that the poor still had little if any access to health care when they got sick. Disease was identified as one of the five ‘Giant Evils’ in the seminal Beveridge report of 1942.[7] The report’s recommendations were felt to be too costly to implement by the Conservative government in power at the time it was published. The opposition Labour Party on the other hand enthusiastically embraced the report. This appeared to chime with post-war public opinion, and resulted in them winning a landslide victory in the 1945 elections. The scale of their election victory gave them a strong mandate to pursue the ideas proposed by Beveridge. In doing so, the English welfare state was built. One of the most ambitious goals of this welfare state was the establishment of the National Health Service (NHS), achieved in 1948. This provided universal health care free at the point of delivery — for the first time giving the poor access to health care.

When the NHS was established in 1948, there was no explicit principle that governed how NHS resources should be geographically allocated. Resource allocation in the NHS therefore naturally followed — and so perpetuated — the existing geographically uneven distribution of government resources. This allocation was skewed towards London and the South East — the most prosperous parts of the country. By the 1970s, it was becoming apparent that richer geographical areas were benefiting more from the NHS than poorer areas, despite having less need for health care among



their populations. This was famously described as the ‘inverse care law’ in a study by Julian Tudor Hart, published in 1971.[8]

From 1971 to 1975, NHS resource allocation began to move towards a more formal approach with the adoption of the ‘Crossman Formula’. This formula took into consideration population size and composition. In 1976, the Resource Allocation Working Party (RAWP) made its first set of recommendations on how to allocate NHS funds to regions. The RAWP formula was based on the principle of ‘equal opportunity of access to health care for people at equal risk’. To estimate these allocations the RAWP formula weighted the population size and composition of areas according to their health care needs, as measured by the standardised mortality ratio. This formula directly informed NHS resource allocation between 1976 and 1995, and its ‘weighted capitation’ principles have underpinned all subsequent funding formulae in the NHS. The key developments in the post-RAWP formulae were in the ways in which they captured health care needs more accurately as more detailed data sets and sophisticated statistical methods became available.[9]

Ideas of ‘health care for all’ and tackling social gradients in health were also gaining international traction during this period, as exemplified by the World Health Organisation’s (WHO) declaration following the Alma-Ata conference on primary health care in 1978.[10] It was in this context that the ruling Labour government commissioned Sir Douglas Black, then Chief Scientist at the Department of Health and Social Security (DHSS), to undertake an independent inquiry into health inequalities. The resulting ‘Black Report’, published in 1980, found that there were large and pervasive inequalities in health across the population.[11] Furthermore, it found that these inequalities had widened rather than narrowed since the introduction of the NHS. There had been a change in government between the time that the report was commissioned, and when it was finally published. The incoming Conservative government led by Margaret Thatcher did not acknowledge the findings of, or embrace the recommendations of, the report.[12]

Following the ‘Black Report’ the Health Education Council (HEC), an independent body funded by the DHSS, commissioned Dame Margaret Whitehead to update the analysis in the report using the most recently available data. This update was published as ‘The Health Divide’ in 1987 — reinforcing the findings and recommendations of the ‘Black Report’.[13] This new report received a similarly frosty reception to that received by the ‘Black Report’ with the press conference organised to announce its launch being cancelled at the last minute. Few if any of the recommendations of these reports were adopted by the government at the time.

In 1997 a Labour government was elected on the back of a socially progressive political agenda. One of the first acts of this new government was to commission Sir Donald Acheson, former Chief Medical Officer (CMO), to conduct an independent inquiry into health inequalities. The ‘Acheson Report’ was published in 1998.[14] For the first time for a report of this kind, it was received by a sympathetic government. The report again confirmed the findings of the ‘Black Report’, and made a number of recommendations for inter-departmental actions to tackle the social determinants of ill-health.

In response to the ‘Acheson Report’ the government launched an ambitious and well-funded raft of policies to tackle socioeconomic inequalities in health. These included the ‘Sure Start’ programme to provide early learning opportunities for children living in poverty; the creation of ‘Health Action Zones’ where local strategies to improve health in deprived areas were implemented; the introduction of a national minimum wage; and a ‘New Deal’ to help the young and the long term unemployed into work. Alongside these, a number of more general investments were made in housing, education, urban regeneration, and healthcare.[15,16] ‘Spearhead’ local authority areas

were identified as the areas of the country with the worst health and deprivation, and explicit targets were set to close the gap between these areas and the rest of the country.[17]

The National Institute for Clinical Excellence (NICE) was created in 1999. Part of its remit was to introduce the use of rigorous economic evaluation to decide which treatments the NHS should pay for, thus ending the ‘postcode lottery’ in drug prescribing in primary care. NICE also worked to establish clinical best practice guidelines to ensure uniform standards of care across the health service. These functions were in part seen as a way to stop those better able to navigate the system getting better care in the NHS.[18] NICE merged with the Health Development Agency in 2005 to become the National Institute for Health and Clinical Excellence — taking on additional public health responsibilities. Its remit was further widened following the Health and Social Care Act (2012)[19] to include social care, and it was again renamed, this time as the National Institute for Health and Care Excellence.

A host of measures were also introduced to strengthen primary care including: the ‘Quality and Outcomes Framework’ (QOF) in 2004, a pay for performance programme to improve the quality of care provided by General Practitioners (GPs); and the ‘Equitable Access to Primary Medical Care’ programme of investment, in which £250 million was invested to increase the number of GPs in under-doctored areas between 2008 and 2012.

Despite this comprehensive and sustained assault on socioeconomic inequalities in health, by the end of the thirteen years of Labour government in 2010, their attempts at tackling inequalities were widely considered to have failed.[20,21] It was not that the policies implemented did not improve the health of the poor, rather it was that during the same period the health of the rich improved too. In fact income inequality widened over this period, and the health of the rich improved even faster than the health of the poor, thus health inequality failed to improve. Reflections on the failure of these strategies have concluded that at the time they were launched there was a wealth of research describing and explaining socioeconomic inequality in health, however, there was little evidence available on effective strategies to tackle health inequality, and still less evidence on the cost-effectiveness of such strategies.[22,23] Furthermore, it became increasingly accepted in the academic literature that action on health inequality could only succeed in conjunction with action on income inequality.[24–28] This did not appear to be a priority for the government of the time, and indeed one of the leading figures in this administration, Peter Mandelson, was notorious for his comment about being “intensely relaxed about people getting filthy rich as long as they pay their taxes”.[29]

The ‘Marmot Review’ was published in 2010 as the final action on health inequalities by the outgoing Labour government.[30] The review confirmed that substantial health inequalities remained, and it proposed a wide programme of actions to tackle the social determinants of health. With the change of government in 2010, and the onset of the programme of austerity measures, the recommendations of the ‘Marmot Review’ were not as enthusiastically embraced as those of the ‘Acheson Report’ that preceded it.

The idea that in order to tackle socioeconomic inequality in health it is crucial to tackle the social determinants of health, ‘the causes of the causes’,[31] has been at the core of each of the landmark reports commissioned by the government over the years. Furthermore, the recommendations made by each of these landmark reports have shown an appreciation for the distinction between ‘upstream’ structural population wide strategies that have the potential to reduce socioeconomic inequality in health,[32,33] as compared to ‘downstream’ agentic strategies — requiring behaviour change — that are likely to increase health inequality.[34,35]

Most recently, government public health strategy has largely side-stepped making the significant structural interventions that have been advocated by the academic and clinical public health communities. Key examples include government responses to academics' recommendations on alcohol minimum pricing,[36,37] and childhood obesity.[38] Instead, the government has focused on voluntary agreements with industry partners,[39] and recommendations targeted at individuals to take responsibility for their own health.[40,41]

Reflecting back over the last 200 years or so of health policy in England we see that great progress has been made in improving the health of the population overall – though when we look more closely we find that at each key historic juncture in health policy these improvements have come at the expense of increasing socioeconomic inequalities in health. Policy makers, particularly those who have a true commitment to reducing socioeconomic inequalities in avoidable sickness and premature death, would do well to draw lessons from this history and explicitly consider the impact of their policy proposals on health inequality rather than assume that promises of improvements in the health of the mythical average citizen will solve the problem of health inequality. In fact, history would suggest that unless carefully designed with the explicit goal of reducing health inequality in mind, such 'cost-effective' policies will only act to exacerbate this health divide.

## References

- 1 Farr W. Letter to the registrar general. *First Annu Rep Regist Gen* 1839.
- 2 Whitehead M. William Farr's legacy to the study of inequalities in health. *Bull World Health Organ* 2000;78:86–7. <http://www.ncbi.nlm.nih.gov/pmc/articles/PMC2560600/>
- 3 Oliver A. Reflections on the development of health inequalities policy in England. *Heal Care Anal* 2010;18:402–20. doi:10.1007/s10728-010-0144-x
- 4 Chadwick E. *Report on the Sanitary Condition of the Labouring Population of Great Britain*. London: : HM Stationery Office 1842.
- 5 Omran AR. The epidemiologic transition: a theory of the epidemiology of population change. *Milbank Mem Fund Q* 1971;49:509. doi:10.2307/3349375
- 6 Wilkinson RG. The epidemiological transition: from material scarcity to social disadvantage? *Daedalus* 1994;123:61–77. <http://www.ncbi.nlm.nih.gov/pubmed/11639364>
- 7 Beveridge WH, et al. *Social Insurance and Allied Services*. 1942.
- 8 Tudor Hart J. The inverse care law. *Lancet* 1971;297:405–12. doi:10.1016/S0140-6736(71)92410-X
- 9 Smith P. Resource allocation and purchasing in the health sector: the English experience. *Bull World Health Organ* 2008;86:884–8. doi:10.2471/BLT.07.049528
- 10 World Health Organisation. *Declaration of Alma-Ata: International Conference on Primary Health Care*. Alma-Ata: 1978. [http://www.who.int/publications/almaata\\_declaration\\_en.pdf](http://www.who.int/publications/almaata_declaration_en.pdf)
- 11 Black D. *Inequalities in Health: the Black Report*. 1980.
- 12 Gray AM. Inequalities in health. The Black report: a summary and comment. *Int J Health Serv* 1982;12:349–80. <http://www.ncbi.nlm.nih.gov/pubmed/7118327>
- 13 Whitehead M. *The Health Divide: Inequalities in Health in the 1980's: a Review Commissioned by the Health Education Council*. Health Education Authority 1987.
- 14 Acheson D, Barker D, Chamber J, et al. Report of the independent inquiry into inequalities in health (Acheson Report). *London Station Off* 1998.
- 15 Department of Health. *Saving Lives: Our Healthier Nation*. 1999. [https://www.gov.uk/government/uploads/system/uploads/attachment\\_data/file/265576/4386.pdf](https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/265576/4386.pdf)
- 16 Department of Health. *Reducing Health Inequalities: an Action Report*. London: 1999. [http://webarchive.nationalarchives.gov.uk/20130107105354/http://www.dh.gov.uk/prod\\_consum\\_dh/groups/dh\\_digitalassets/@dh/@en/documents/digitalasset/dh\\_4042496.pdf](http://webarchive.nationalarchives.gov.uk/20130107105354/http://www.dh.gov.uk/prod_consum_dh/groups/dh_digitalassets/@dh/@en/documents/digitalasset/dh_4042496.pdf)
- 17 Department of Health. *Tackling Health Inequalities: A Programme for Action*. 2003. [http://webarchive.nationalarchives.gov.uk/20130107105354/http://www.dh.gov.uk/prod\\_consum\\_dh/groups/dh\\_digitalassets/@dh/@en/documents/digitalasset/dh\\_4019362.pdf](http://webarchive.nationalarchives.gov.uk/20130107105354/http://www.dh.gov.uk/prod_consum_dh/groups/dh_digitalassets/@dh/@en/documents/digitalasset/dh_4019362.pdf)

- 18 Morris S, Devlin N, Parkin D. *Economic Analysis in Health Care*. Chichester: : John Wiley & Sons 2007.
- 19 Department of Health. *Health and Social Care Act (2012)*. 2012. <http://www.dh.gov.uk/health/2012/06/act-explained/>
- 20 National\_Audit\_Office. Tackling inequalities in life expectancy in areas with the worst health and deprivation. London. *The Stationery Office* 2010.
- 21 Department of Health. *Tackling Health Inequalities : 10 Years On*. 2009. [http://webarchive.nationalarchives.gov.uk/20130107105354/http://www.dh.gov.uk/prod\\_consum\\_dh/groups/dh\\_digitalassets/documents/digitalasset/dh\\_098934.pdf](http://webarchive.nationalarchives.gov.uk/20130107105354/http://www.dh.gov.uk/prod_consum_dh/groups/dh_digitalassets/documents/digitalasset/dh_098934.pdf)
- 22 Mackenbach JP. Can we reduce health inequalities? An analysis of the English strategy (1997-2010). *J Epidemiol Community Health* 2011;65:568–75. doi:10.1136/jech.2010.128280
- 23 Bambra C, Smith KE, Garthwaite K, et al. A labour of Sisyphus? Public policy and health inequalities research from the Black and Acheson Reports to the Marmot Review. *J Epidemiol Community Heal* 2011;65:399–406. doi:10.1136/jech.2010.111195
- 24 Kawachi I, Kennedy BP. *The Health of Nations: Why Inequality is Harmful to your Health*. New York: : The New Press 2002.
- 25 Dorling D. *Unequal Health: The Scandal of Our Times*. Bristol: : Policy Press 2013.
- 26 Bambra C. *Health Divides: Where You Live Can Kill You*. Bristol: : Policy Press 2016.
- 27 Wilkinson R, Pickett K. *The Spirit Level*. London: : Allen Lane 2010.
- 28 Graham H. Social determinants and their unequal distribution: clarifying policy understandings. *Milbank Q* 2004;82:101–24. doi:10.1111/j.0887-378X.2004.00303.x
- 29 Wighton D. Mandleson Plans a Microchip Off the Old Block. *Financ. Times*. 1998.
- 30 Marmot M, Bell R. Fair society, healthy lives. *Public Health* 2010. doi:10.1016/j.puhe.2012.05.014
- 31 Rose G. *The Strategy of Preventive Medicine*. Oxford: : Open University Press 1993.
- 32 McLaren L, McIntyre L, Kirkpatrick S. Rose’s population strategy of prevention need not increase social inequalities in health. *Int J Epidemiol* 2010;39:372–7. doi:10.1093/ije/dyp315
- 33 Rose G. Sick individuals and sick populations. *Int J Epidemiol* 1985;14:32–8. doi:10.1093/ije/14.1.32
- 34 Capewell S, Graham H. Will cardiovascular disease prevention widen health inequalities? *PLoS Med* 2010;7. doi:10.1371/journal.pmed.1000320
- 35 von Wagner C, Baio G, Raine R, et al. Inequalities in participation in an organized national colorectal cancer screening programme: Results from the first 2.6 million invitations in England. *Int J Epidemiol* 2011;40:712–8. doi:10.1093/ije/dyr008

- 36 Holmes J, Meng Y, Meier PS, *et al.* Effects of minimum unit pricing for alcohol on different income and socioeconomic groups: a modelling study. *Lancet* 2014;383:1655–64. doi:10.1016/S0140-6736(13)62417-4
- 37 Stockwell T, Auld MC, Zhao J, *et al.* Does minimum pricing reduce alcohol consumption? The experience of a Canadian province. *Addiction* 2012;107:912–20. doi:10.1111/j.1360-0443.2011.03763.x
- 38 Royal College of Paediatrics and Child Health. *Tackling England's Childhood Obesity Crisis*. London: 2015. [http://www.rcpch.ac.uk/system/files/protected/news/Obesity Summit report FINAL.pdf](http://www.rcpch.ac.uk/system/files/protected/news/Obesity%20Summit%20report%20FINAL.pdf)
- 39 Department of Health. *The Public Health Responsibility Deal*. London: 2011. <https://responsibilitydeal.dh.gov.uk/wp-content/uploads/2012/03/The-Public-Health-Responsibility-Deal-March-20111.pdf>
- 40 Department of Health. *Childhood Obesity: A Plan for Action*. London: 2016. [https://www.gov.uk/government/uploads/system/uploads/attachment\\_data/file/546588/Childhood\\_obesity\\_2016\\_\\_2\\_\\_acc.pdf](https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/546588/Childhood_obesity_2016__2__acc.pdf)
- 41 Bonell C, McKee M, Fletcher A, *et al.* Nudge smudge: UK Government misrepresents 'nudge'. *Lancet* 2011;377:2158–9. doi:10.1016/S0140-6736(11)60063-9