There is a widespread belief that capitalism is responsible for the huge improvements in health that have occurred over the last century and a quarter. Capitalism is seen as the supreme engine of growth, and growth is seen as the crucial condition for health improvement. But it: is not. Poor countries can and sometimes do have better health than rich ones. The US is held up as a 'world leader' in medicine when it is really a world leader in healthcare market failure, spending almost a fifth of its huge national income to produce overall health outcomes little better, and in some respects worse, than those of neighbouring Cuba, with a per capita income barely a twentieth as large. 'Breakthroughs' in health science and technology — in nuclear medicine, genetic medicine, or nanotechnology — are treated as triumphs of capitalist investment in research. But most innovative medical research is actually done in state-funded medical schools and research laboratories.

The origins of the idea that capitalism is good for your health lie in the 'mortality revolution' that began in England in the late nineteenth century. Throughout all prior recorded history the physical health of most people, as measured by life expectancy, remained very poor. Infectious diseases were prevalent, many of them originally transmitted from domestic animals following the development of settled agriculture. People ate contaminated food and drank water from rivers that also served as sewers, as hundreds of millions in the global 'south' are still forced to do today. When industrialisation moved masses of people into towns from the countryside the effects became even worse. In Liverpool in 1840 the average life expectation of children born into working-class families was just 15 years, and in upper-class families, only 35. Moreover with very few exceptions (such as vaccination against smallpox, adopted widely from 1800 onwards) most treatments for infectious diseases were useless or, like the practice of bleeding, worse than useless: as late as the 1850s patients were still being bled to death when they might have recovered if left alone, and women were safer giving birth at home than in hospitals, where in some cases more than a quarter died of puerperal fever.

Then, starting effectively in England in the 1870s, population health began to improve dramatically. In 1850 average life expectancy in England and Wales as a whole was about 40 years. By 1950 it had risen to about 70, an increase unequalled at any previous time in human history. Since then the rate of improvement has slowed, but average life expectancy has continued to increase by about two and a half years every decade. This general pattern has been repeated, with variations, in western Europe and North America and, with a further delay, by often very different routes, and with big differences between social classes, throughout much of the rest of the world. The change involved is often also called the 'epidemiological transition', from the era when infectious diseases were the main causes of death to one in which non-infectious chronic diseases, mostly developing in older people, are the chief causes. And it did occur first in England, the epicentre of industrial capitalism. But to the extent that capitalist industrialisation aggravated the threat from infectious diseases, and that English capitalists often resisted the measures that eventually overcame them, it occurred in spite of capitalism, as much as because of it. Capitalist employers in western Europe also opposed the protection given to workers by the social insurance systems that began to be put in place from the 1880s onwards, to head off the growing political challenge from organised labour. At first social insurance was chiefly significant for providing financial support for workers while they were ill or recovering from accidents, but in the 1930s medical science finally advanced from understanding the causes of diseases, and so making it possible to prevent people getting them, to finding cures for them — the so-called therapeutic revolution that occurred just before, during and after the Second World War. Now a growing range of life-threatening illnesses could be successfully treated; health care suddenly became really valuable, and the labour movement was strong enough to ensure that workers — and their families
were the chief beneficiaries of it. Various forms of socially-provided health care for all were eventually established in most western and communist countries after 1945.

The fact that the therapeutic revolution coincided with the creation of social-democratic and communist welfare states throughout much of the world was thus of historic significance. But at the same time an increasingly powerful capitalist health industry also developed, especially in the US but also in some west European countries, focused not on what would bring the greatest benefit to the greatest number of people but on what was most profitable. The private health industry has successfully resisted all efforts to introduce a universal healthcare system in the US, and since the 1980s it has been engaged in a drive to convert the universal-access healthcare systems built up elsewhere after 1945 back into healthcare markets, in which equal access will disappear. It has also increasingly subordinated health research and training to its interests. And the era of neoliberalism has demonstrated once again how capitalism still fosters, or at least perpetuates, ill-health in today's new medical environment, above all by increasing inequality, both between and within nations. Even in some of the richest countries the life expectation of poor people can be ten or even twenty years less than that of the rich).

In spite of the abundant evidence on all these points, the myth that 'capitalism promotes health' is consciously or unconsciously accepted by, probably, most people in the world. Disposing of it is the necessary starting-point of any rational analysis.

**Capitalism and the Mortality Revolution**

What was the relation between capitalism and the dramatic decline in the death rate that occurred in England between 1850 and 1950? The decline could not have been due to the market-based health care available at the time, since it had hardly any effective treatments for diseases. Until recently the prevailing view was that improved nutrition, resulting from rising real incomes, was chiefly responsible, but further historical research has shown this to be at best a partial explanation. During the first two-thirds of the nineteenth century death rates in the cities, where incomes and nutrition levels were rising, did not fall; death rates were lower in rural areas, where incomes remained low. A significant fall in urban mortality began only when the effects of the 'sanitation movement' began to be felt from the 1870s onwards, providing sewers and clean water supplies, improved housing and uncontaminated food. The sanitation drive was often resisted by capitalists — for example by employers who did not want to pay higher taxes for sewage or spend money on replacing unfit workers' housing, and by private suppliers of water and purveyors of unclean food. But the sanitation movement gradually prevailed, thanks to the fear of epidemics, to which the middle and upper classes were not immune; to the determination of leaders in the local government reform movement of the period; and, towards the end of the nineteenth century, to the impact on educated public opinion of the advances that were beginning to be made in understanding the causes of illness.

The sanitation movement was initially based on mistaken ideas about what caused diseases (especially the idea that they were caused by foul air, or 'miasmas'). The discovery in the 1870s that infections were caused by germs showed that good sanitation was indeed a key part of the solution; but the new knowledge also led to an extension of the scope of public health activity and to health education for schools and households — in hygiene, baby and child care, and so on. The source of one infectious disease after another was identified, and new preventive measures were adopted, including immunisations. The overall result was dramatic. Between 1871 and 1940 the share of infectious diseases in total annual deaths in England and Wales fell from 31 per cent to 10 per cent. By 1951 infectious illnesses accounted for only 6 per cent of deaths, while the overall annual death rate had fallen from 22.4 to 6.1 per thousand people. It is important to stress, once again, that almost all this decline was due to prevention. For most of this time there were still no effective cures for most infectious diseases (sulphanilamide drugs only began to be available in 1935, penicillin in 1941, and broad-spectrum antibiotics from 1947 onwards).

Richard Easterlin has summed up the historical verdict on the relation between the capitalist market and health as follows. First, life expectancy remained stagnant, or at best mildly improved,
throughout most of the nineteenth century in the areas of the world that were undergoing rapid
economic growth. Life expectancy (and physical stature) improved dramatically only when disease
prevention became effective; increased nutrition due to rising workers’ incomes did not on its own
produce this effect. Second, most of the preventive measures involved in bringing about the
mortality revolution - clean water supplies for all, sewage, etc — are public goods, requiring
collective action, and benefiting everyone whether or not they contribute to their cost. Capitalist
markets will not deliver such goods, and did not. The same applies to vaccination and
immunisation — they only work reliably if they are applied as universally as possible. Since a
majority will be unlikely to pay for it, the state must do it. Similarly with household hygiene:
'because the new knowledge was not proprietary, the market could not be relied on to disseminate
it'. Third, the cost of the dramatic improvements in health that were achieved by medical science
and preventive measures was modest. They did not depend on the major increases in national
income that capitalism produced, and indeed dramatic advances in longevity have been achieved
in recent times in even very poor countries, from China in the 1950s to Cuba in the 1960s and
Kerala in the 1970s.\(^8\) Finally, the cost of the research which led to these advances in health was
itself quite small, and did not depend on capitalist-driven growth. 'When one considers the
rudimentary laboratories of scientists like Pasteur, Koch and Fleming,' Easterlin comments, 'it is
hard to believe they involved requirements that much exceeded those of their predecessors two
centuries earlier.' As late as 1929 the total cost of research and development, public and private, in
all fields of science in the USA was just 0.2 per cent of GDP, and biomedical research was a small
fraction of that.\(^9\) Today the costs of medical research have hugely increased, but the social benefit
derived from it is another matter, as we will see.

The sanitation movement that sparked the mortality revolution in England was, then, hardly an
achievement, in the sense of an intended effect, of capitalism, any more than the Russian
revolution was an achievement of Czarist autocracy, or Indian independence an achievement of
the British Raj. The sanitation movement that produced the mortality revolution was a reaction
against the social costs of capitalism, not a benefit that the capitalist class sought to confer; while
on the other hand non-capitalist countries have matched and sometimes even surpassed the
achievement of many capitalist countries in raising life expectancy. Nonetheless the mortality
revolution was undoubtedly associated with the rise of industrial capitalism. There were eventually
more profits to be made from building water mains for the state than selling water to a limited
number of private customers. The driving forces of the revolution in the death rate were multiple,
and often contradictory.

What was certainly important was science itself. The physical sciences -especially physics and
chemistry - had prospered because they had amply proved their worth for capital accumulation.
Advances in the biological sciences came later, and showed their full profit potential later still. But
support among the capitalist class for science in general, resulting from the economic benefits
derived from the physical sciences, was an important factor in enabling the crucial advances in
both sanitation technology and medical science to be made, and this in turn was a consequence of
the intellectual freedoms secured by the preceding bourgeois revolution. So while the mortality
revolution was not a willed achievement of capitalists, the rise of the bourgeoisie did provide,
though often in indirect and complex ways, the context in which the scientific basis for it could be
developed.

It is worth noting, though, that at the height of the mortality revolution in the late 19\(^{th}\) century
medical research was still relatively disinterested and critical. It had not yet begun to lose its
integrity, as Marx pointed out was the case with mainstream economics: '[The class struggle] 
sounded the knell of scientific bourgeois economics. It was thenceforth no longer a question of
whether this or that theorem was true, but whether it was useful to capital or harmful... In place of
disinterested enquirers there stepped hired prizefighters; in place of genuine research, the bad
conscience and evil intent of apologetics'.\(^{10}\) A hundred years ago the age of hired prizefighters in
biomedical research — doctors being paid large sums to put their names to articles in medical
journals written by and for pharmaceutical companies, health policy researchers blatantly distorting
evidence in the interests of insurance companies — had not yet arrived.\(^11\)
After the Mortality Revolution

So much for capitalism’s contradictory role in the mortality revolution. What about its role once the mortality revolution was substantially completed? Since the middle of the 20th century life expectancy has continued to rise, especially in the advanced capitalist countries, where in 2000 it averaged about 80 years. Some of capitalism’s intellectual prizefighters have argued that this shows that economic growth does after all raise life expectancy, regardless of how the additional resources are used, and so should be a prime goal of health policy-makers (a thesis summarised by Larry Summers in 1996, when he was Deputy Secretary to the US Treasury in the Clinton administration, in a much-cited article entitled ‘Wealthier is Healthier’).

Given the much greater understanding of the causes of illness that now exists compared with 150 years ago, an improvement in the living standards of the poorest citizens even in very poor countries can in favourable circumstances lead to health improvements through changes in individual behaviour alone (via improved diet and personal hygiene, the use of mosquito nets, and so on). But in general the evidence does not support the ‘wealthier is healthier’ thesis. Most of the continuing gain in life expectancy in the advanced capitalist world has come from a continued deepening of the preventive practices that produced the initial revolution in mortality. Relatively little is due to improved nutrition or other elements of individual consumption, and only some 10-15 per cent is thought to be attributable to health care. Moreover the gain over time has been greatest where incomes are most equally distributed, not where they are highest. Among the richest countries it is not their ranking in terms of GDP but the degree of equality among their citizens that determines average life expectancy.

Yet the one thing capitalism tends to do without fail is to produce and reproduce inequality: first, through the normal operation of the market for labour power and the appropriation of the surplus by the owners of capital, in the form of dividends and rents; and second, through the influence of capital on public policy — on the tax system, social services (education, health, long-term care and social security), and social infrastructure (housing, transportation, public space, libraries, etc). The thrust of capitalism is consistently to widen inequality on all these dimensions, and the more unconstrained it is, the wider the inequality becomes. In the neoliberal era, beginning in the late 1970s, inequality widened almost everywhere, especially in countries like the US and the UK where neoliberal policies were pursued most consistently, but also between rich and poor countries. In many former Communist countries the effects of a sudden transition to capitalism were even worse, producing a shocking increase in mortality, particularly for men.

The ways in which inequality produces ill-health are complex, and much debated. Poor material conditions, to which poor people are more exposed, directly cause physical risks (infections, malnutrition, chronic disease, and injuries); developmental problems (delayed or impaired cognitive and social development); and social problems (socialisation, preparation for work and family life); and all of these can interact and have cumulative effects, leading to different kinds of illness at different ages. Evidence for Richard Wilkinson’s much-cited theory that low economic or social status in itself generates pathogenic physiological responses, seems weak, but there is little doubt that, as Wilkinson also argues, the positive influence and reciprocities of active and close human relations do support good health in various ways, and inequality does also tend to militate against these things. This is particularly relevant to mental illnesses, including depression, which now occur on an epidemic scale — affecting between a fifth and a quarter of all adults — in the most unequal countries.

This complexity has to be tackled by studying the various determinants of ill-health over the life-course of individuals in different historical cohorts and in specific social settings. For example, some later-life diseases like stomach cancer, TB, and strokes have causes linked to events in early childhood that are more often experienced in poor families. Others are caused by events or behaviour in young adulthood, such as accidents and workplace injuries, which also occur more often in unskilled manual jobs; and still others by factors that only arise in old age. The effects of inequality at earlier stages can combine to cumulatively increase the likelihood of being exposed to further causes of ill-health at subsequent stages.
The causes of ill-health can also include, at any stage, getting insufficient medical attention, which tends to be least accessible to those who are least well off, or are disadvantaged by gender, ethnicity, disability, and so on. Even in the UK, with a health service almost entirely paid for out of tax revenue and effectively free to everyone, Julian Tudor Hart's famous 'inverse care law' tends to hold — the amount of health care given is inversely related to the need for it. The rule applies to whole geographic communities, and to individuals and groups within communities: for instance the poorest patients with schizophrenia get treatment on average eight years later than the most affluent; and across the population the poorest get much less treatment for serious heart disease than the affluent. In many if not most developing countries the publicly-funded and provided healthcare systems set up after 1945 have atrophied, giving way to private, unregulated and dangerous services, so that in some areas the health gains of earlier years have been reversed. The WHO reported in 2008 that 'originally limited to an urban phenomenon, small-scale unregulated fee-for-service health care offered by a multitude of different independent providers now dominates the healthcare landscape from sub-Saharan Africa to the transitional economies in Asia or Europe'. A somewhat similar regression took place in the countries of the former Soviet Union, especially those which were subjected to rapid mass privatisation after 1990. In the five most affected countries unemployment jumped to 23 per cent and led to an appalling 42.3 per cent rise in adult male mortality.

The determinants of average longevity for any given society are thus historically determined and complex. In rich countries (where almost all such detailed research on the links between social conditions and health has been conducted) we find a combination of contrary tendencies: declining average mortality rates, but also a widening spread of life expectancies related to social and economic inequality. George Davey Smith sums it up perceptively:

"it is... possible to identify social processes which lead to unfavourable exposures being concentrated on those in less privileged social circumstances, from birth to death... The socially patterned nutritional, health and environmental experiences of the parents and of the individuals concerned influence birthweight, height, weight and lung function, for example, which are in turn important indicators of future health prospects. These biological aspects of bodies (and the histories of bodies) should be viewed as frozen social relations..."

Public Health

Social relations are, then, key determinants of the health of populations, yet since the 1980s changing the social relations of contemporary capitalism has not been on the political agenda of any major state; depressingly little of the evidence we now have on the social causes of ill-health is reflected in public policy anywhere today. Government policy in relation to the social determinants of health has been essentially to ignore them. Even such modest measures as making taxation less acutely regressive, reducing class sizes in schools, or reducing the precariousness of work — all such state-dependent measures which could improve the health of the least healthy sectors of the population have had low priority, whatever the political rhetoric, while inequality has inexorably grown. Health policy has instead been focused, first of all, on individuals and their supposedly voluntary behaviour — on 'taking responsibility for one's own health'; and second, on the provision of 'high-tech' medicine to deal with individual cases of disease, a significant proportion of which need never have arisen had social conditions been different.

This represents a dramatic retreat from the ambitions of the profession of public health as it emerged from the successes of the mortality revolution, with its focus on the health of the population rather than individuals, and on prevention rather than cure. As social issues came to the fore, with the rise of the labour movement in the first half of the twentieth century,
modern society had more to do with physiological and psychological abnormalities, broad and perhaps congenital tendencies to sickness surfacing among populations rendered dysfunctional and unproductive by poverty, ignorance, inequality, poor diet and housing, unemployment or overwork. To combat all this waste, hardship and suffering, medicine had to become a positive and systematic enterprise, undertaking planned surveillance of apparently healthy, normal people as 'well as the sick, tracing groups from infancy to old age, logging the incidence of chronic, inherited and constitutional conditions, correlating ill health against variables like income, education, class, diet and housing.27

By the end of the 1980s, however, such ideals (with their inherently statist character and, perhaps, faintly authoritarian undertones) had been decisively rejected, and not just in the leading neoliberal countries. Public health doctors pointed out that the need for social and economic policy to be based on the lessons of public health was greater than ever. All areas of public policy, they insisted, ought to be seen as elements of health policy, and both the physical environment (pollution, global warming, energy, soil degradation, etc) and the social environment (unemployment, housing, transport, food production) should be tackled as public health issues. Public health and healthcare services should be complementary. But in practice the opposite was often the case, as a British doctor noted at the time:

The failure to comprehend this complementarity is starkly demonstrated each time a minister ignores greatly increased poverty, involuntary unemployment, homelessness and other health hazards over the last decade and brags that the National Health Service is 'treating more patients than ever', clearly believing that this is some kind of health achievement!28

When even the social-democratic parties in Europe had abandoned the original ideals of public health, the once prestigious practitioners of public health lost much of their influence. Their former advocacy role in linking social and economic policy (full employment, for example) to health policy, typically through their close links with social-democratic policy-makers, and their central role in planning health care provision based on the study of population needs, were both replaced by the new reliance on 'market signals'.29 The role of public health was reduced to planning responses to threatened global pandemics and seeking to influence the ‘lifestyle choices’ of individuals through public education. Money is spent on media campaigns to reduce smoking and alcohol abuse, and to induce people to take more exercise and eat better food, while the basic conditions, linked to inequality, that lead people to smoke, drink excessively, and eat poor food (because good food costs more, and costs even more in poor areas than in affluent ones), cannot be talked about, let alone changed. Writing in 1997 two leading public health doctors in Britain concluded:

Inequalities in health in the UK are substantial and of increasing magnitude. The main way to address such health differentials is clearly through broader social and political changes leading to a more equitable society. Public health practitioners are failing in achieving their major objective — an improvement in population health status - if they do not become advocates for such changes.30

But it is one thing to advocate such changes in professional journals, and another to do it vigorously in public debate when all the main parties have decided that they can't or don't even wish to make them. Public advocacy of that kind risks foregoing research funding and promotion and even government-inspired attacks on your professional reputation.31 Matters have not been significantly different in any country where neoliberalism secured hegemony.

Health Care Since the Therapeutic Revolution

The twentieth-century revolution in medical science and technology made it possible for the first time to cure many lethal illnesses and to prolong life, alleviate pain, and enhance the quality of life. Once this was understood, access to health care became the focus of people's most intense
fears and hopes. Health care was even defined as a human right in article 25 of the 1948 Universal Declaration of Human Rights. Aneurin Bevan, the architect of Britain’s National Health Service, introduced in 1948, appropriately described it as offering ‘freedom from fear’, and by the end of the 1950s the government of almost every country with a strong labour movement had found the demand for universal access irresistible. More or less comprehensive public systems, funded through social insurance or general taxation, and covering women and children as well as workers, replaced private healthcare markets and second-rate, class-ridden services, and opened up a huge new field of skilled public-service employment. In 1965 even the US introduced free public provision (at the point of use) for the very poor (Medicaid), and for everyone over 65 (Medicare). In the Communist countries state-provided health care for all became standard. In the ‘third world’ state provision struggled with a lack of resources and huge demands, but the principle of universal access, secured by state action, was widely accepted.

As with the measures that brought about the mortality revolution, capitalist interests - and all too often doctors too - initially resisted the introduction of comprehensive health care. Its huge popularity, however, overcame resistance by the medical profession, which sought and generally got excellent terms of employment in return for agreeing to make the new systems work. In some west European countries a large private sector was allowed to remain alongside social insurance-based public systems. In most of the new public healthcare systems doctors were allowed to continue to be paid on a fee-for-service basis, with its inherent incentive to over-treat and drive costs up. The resulting weaknesses would be exploited by the enemies of public and universal healthcare systems when the post-war compromise came to an end in the 1970s. But the basic principle of free health care for all became deeply embedded in most OECD countries.

The therapeutic revolution, however, also gave rise to the dramatic growth of a science-based pharmaceutical industry, to be joined later by the closely related biotechnology industry. These forms of capital exercise massive economic and political power, and are closely linked politically with the also powerful private health insurance and healthcare provider industries, especially in the US.

In 2008 world sales of pharmaceuticals were estimated at more than $600 billion, two-thirds of which came from the twenty largest companies, most of them American or west European. Biotechnology companies had estimated revenues of $51 billion in 2005, but were expected eventually to overtake pharmaceuticals in value; and there were in addition fast-expanding medical technology industries at the centre of advances in drug delivery, imaging and computerised surgery, with annual sales of the order of $200 billion. The pharmaceutical industry now accounts for up to 10 per cent of health spending in OECD countries.

Before 1900 the limited number of effective drugs then in use, such as aspirin, were increasingly provided by Bayer and other spin-offs of the German chemical industry. The research that initiated the therapeutic revolution was mainly done in state-funded university laboratories or charity-funded research institutes. But as the potential of the powerful new drugs became clear in the 1930s many of the household names of today’s pharmaceutical industry — Hoffman La Roche, Merck, Eh Lilly, the component companies combined into GlaxoSmithKline, and so on — expanded dramatically, taking on research staff and investing in drug testing and marketing.

By the 1980s, however, the era of discovery of new drugs offering major improvements for patients with important medical conditions, let alone cures for them, seemed to be over, and the rate of innovation has declined further since: the number of new drugs being registered has dwindled from fifty a year in the 1990s to about twenty today. In spite of constant promises of breakthroughs to come, the sombre judgment of Oxford’s Regius Professor of Medicine in the 1990s still seems broadly correct: ‘We seem to have reached an impasse in our understanding of the major killers of Western society…although we have learned more and more about the minutiae of how these diseases make people sick, we have made little headway in determining why they arise in the first place’.

One response of the drug companies has been to patent ‘me too’ drugs — near-copies of existing drugs that have the potential to add at best very small improvements over the benefits given by a drug belonging to another company, but just different enough to be patented. Up to half
of all new drugs are now of this kind. They have also used their enormous advertising resources to promote the idea of other conditions which they claim their existing drugs are able to relieve. Sometimes these are comic inventions, like 'restless leg syndrome', but more often they are common, essentially normal conditions that are given new names, like 'erectile dysfunction' (impotence) and 'social anxiety disorder' (shyness). Huge fortunes are made in this way. Marcia Angell, a former editor of the New England Journal of Medicine, says: 'The strategy of the drug marketers - and it has been remarkably successful - is to convince Americans that there are only two kinds of people: those with medical conditions that require drug treatment, and those who don't know it yet'. Angell cites Pfizer's drug Neurontin, originally approved for the treatment of epilepsy when other drugs failed:

By paying academic experts to put their names on articles extolling Neurontin for other uses — bipolar disease, post-traumatic stress disorder, insomnia, restless leg syndrome, hot flushes, migraines, tension headaches, and more — and by funding conferences at which these uses were promoted, the manufacturer was able to parlay the drug into a blockbuster, with sales of $2.7 billion in 2003.

The complicity of some doctors — again, chiefly in the US — in this process has already been mentioned, but paying doctors very large sums of money (half a million dollars is not uncommon) to sign articles written by drug company staff is only part of the story of the pharmaceutical industry's corruption of medical science. Equally contemptible is its record of suppressing trial evidence, thanks to lax regulation (for which it always lobbies hard), leading to the approval of drugs that later prove dangerous or even lethal (for instance the US Federal Drug Agency's ignoring of evidence that Merck's analgesic drug Vioxx increased the risk of strokes and heart attacks in some people). The industry's attitude to scientific evidence is sometimes not so different from that of the $40 billion 'alternative' medicine industry, whose hallmark is to ignore scientific evidence as irrelevant.

In countries with universal public healthcare systems the drug industry applies enormous pressure on governments to buy drugs that offer at best a small prolongation of life for people suffering from what are mainly late-life diseases. They also press for the highest possible prices, arguing that the costs of research and development must be recouped from the sales of the relatively few drugs that prove effective, even though their spending on promotion far exceeds their spending on research and development (estimates vary from twice to three times as much, or even more). And where they can they don't hesitate to threaten to relocate their operations abroad if their demands are not met. So far, there is no indication that any state where the main drug companies are located is willing to act effectively to rein in their abuses. At the same time the pharmaceutical industry does not like to invest shareholders' funds in research on treatments for the diseases of people in poor countries, who have no money to pay for them. The Global Forum for Health Research estimates that 90 per cent of the $70 billion spent annually on medical research worldwide is devoted to diseases that are responsible for only 10 per cent of the global burden of disease.

The therapeutic revolution, then, has under capitalism produced contradictory results for global health. Fundamental medical research, mainly conducted in tax-funded university and other non-profit laboratories, has produced cures for infectious diseases that used to be killers and continues...
to produce marvellous benefits for individuals rich enough to pay for them, or fortunate enough to live in countries that still have adequately funded equal-access healthcare systems. The achievements of immunology and of advanced medical technology and surgery are undeniably brilliant. Yet while there have been significant trickle-down benefits for poor countries from these advances, most of it is directed at problems that are not a priority in most of the world. There is also a growing anxiety that even university-based medical research is increasingly driven by the interests of pharmaceutical and medical technology companies: how far are the problems researched chosen because corporate funding is available for them? The story of how commercial interests have been able to thwart, suppress, or denigrate and dismiss research into the environmental causes of cancer, and confine progress to individual treatments while their products continue to produce the disease, does not encourage confidence in the beneficence of medical science in practice. And capitalism sometimes even destroys what medical science has achieved, for example by promoting the excessive and often unregulated use of antibiotics, leading to the emergence of new drug-resistant strains of bacteria.

Health Care and Legitimation: Ideology

Critical analysts have always recognised the legitimising role of health care, while also emphasising that a sophisticated modern economy needs workers to be fit for the work they are hired to do. But how many need to be fit, and how fit they need to be, is a different matter. The fact that inequality and the resulting health costs have been allowed to grow, and the fact that work has been steadily relocated from rich countries to countries whose workforces have much poorer health and lower life expectancies, suggest that this is not a strong constraint. It may have become widely accepted in the twentieth century, as Porter says, 'that the smooth and efficient functioning of intricate producer and consumer economies required a population no less healthy than literate, skilled and law-abiding', but state policy in the era of neoliberalism suggests that only the last of these is a strongly-felt requirement.

This became clear after 1990, when neoliberal policy-makers embarked on the recommodification of publicly-funded health care - opening it up as a field of private capital accumulation. What this revealed was how far health care is an ideological construct, almost as much as a material reality. It is not the quality of health care, or even its accessibility, but the way it is articulated with other elements in the dominant ideology, that is crucial to legitimation. In public discourse publicly-provided health care is not articulated with 'poverty', 'housing', 'industrial pollution', or 'inner-city deprivation', but with 'cost', 'taxation', 'bureaucracy', 'welfare', 'self-reliance', and with 'state' itself (with negative prefixes like 'nanny' state, 'centralised' or 'Stalinoid' state, etc.). Successfully embedded in neoliberal ideology - i.e. articulated with 'productivity', 'efficiency', and 'choice' - health care can be represented as a commodity like any other. The US private healthcare industry has spent massively to oppose the introduction of publicly-financed health care for all, but by itself this would not have been sufficient: the wider ideological context has been crucial. The belief that private enterprise delivers health care more efficiently, that providing it out of tax revenues would weaken the self-reliance for which Americans are famous, and the charge that it is 'socialist', have so far regularly trumped the desire for more equal access.

As for Europe, two themes in particular run through the rhetoric of the drive to re-commodify universal-access health care: cost-containment, and efficiency. Cost-containment is presented as an unquestionable necessity because costs are said to be rising inexorably; and this, it is insisted, is because the demand for health care is infinite, driven by constantly increasing public expectations, ageing populations, and the constant development of expensive new treatments - whereas public spending is not only finite, but already, it is alleged, at the limits of 'affordability'. This makes efficiency — the second key trope in the privatisation rhetoric — all-important; and efficiency, it is claimed, can only be achieved by private provision, driven by competition. Neither of these arguments withstands critical scrutiny.

In a 1998 paper that should be required reading for every health policy-maker and health journalist, Penelope Mullen demonstrates conclusively that demand is not infinite — people are
finite and have finite needs, and in most cases finite wishes, for medical attention. The abstract argument from economic theory, that there is an infinite demand for anything with a zero price to the 'consumer', may commend itself to neoliberal think-tank staffers, but not to common sense, least of all when it comes to health care. Moreover such empirical evidence as exists shows that the need for specific kinds of treatment could be met with quite reasonable outlays on provision. It is also false to assert that new medical technologies always imply rising costs. Much so-called keyhole surgery, for example, has reduced costs through shortening or even eliminating stays in hospital, as have many drugs; and the cost of new technologies, which often contains a large element of monopoly rent, tends to fall rapidly once they become widely adopted. The rise in costs due to ageing populations is also frequently exaggerated, since people also stay healthy longer. About half of all healthcare expenditure is still concentrated in the last few months of life, however old we are when we die.

Mullen also points out that while spending on health care is indeed also finite, its actual level is a political question - what is 'affordable' is a matter of collective choice: the argument that when spending on health care reaches 8 or 10 or 15 per cent of GDP the time has come to make what are always called 'hard choices' about rationing is nothing but a (typically right-wing) political opinion. What is really at issue is not the percentage of national income spent on health care, but the amount of it paid for out of taxes; people with money prefer to spend it on themselves. The US currently spends 18 per cent of its GDP on health care, much the highest proportion in the world, rising by nearly a percentage point a year in recent years; in 2007 the Congressional Budget Office forecast that by 2082 the share would have risen to 49 per cent of GDP. This extrapolation from recent trends was intended to highlight the high costs of healthcare in the US, but was taken by many readers as indicating the 'infinite' nature of the demand for care and the need for cuts in the half of total US healthcare spending that is funded out of taxation (nine per cent of GDP in 2007). The real problem, namely that the costs of US health care are high because of its market character, was not pointed out in the report.

There is in any case no necessary limit to the share of GDP that might be spent on health care so long as GDP is rising. As William Baumol pointed out long ago, in that context a rising proportion of GDP can be spent on health care (or any other irreducibly labour-intensive service) while still leaving more to be spent on the products of sectors in which labour costs steadily decline. And a country that spent half of its national income on making people healthy by all possible means (including a rationally-organised system of universal health care) would in fact not be a bad place to live. The progressive potential of the German medical scientist Rudolf Virchow's much-quoted remark, that 'politics is nothing else but medicine on a large scale', would be realised there.

As for the argument that for-profit health care is more efficient than public or non-profit provision, its common acceptance owes nothing to evidence. The best empirical evidence comes from the US itself, where large enough samples permit comparisons to be made between Health Maintenance Organisations (HMOs) that are run on a non-profit basis and those run for profit (so-called 'investor-owned' facilities). The conclusions of the leading US researchers on this subject, in a 1999 study covering 56 per cent of total HMO enrolment in the US, were categorical on one central point: 'Compared with not-for-profit HMOs, investor-owned plans had lower rates for all 14 quality-of-care indicators. ... investor ownership was consistently associated with lower quality...'. This finding should not have been surprising: in a service sector that depends to such an extent on skilled labour, the main way profits can be extracted is to shift to an industrial model of provision — fewer staff, lower skill-mix, shorter consultation times, and so on — at the expense of the quality of care. Unless, that is, competition leads to greater efficiency in the use of resources. But such evidence as we have on this aspect also indicates the opposite. A review of 132 studies comparing for-profit and non-profit hospitals, nursing homes, HMOs, home care organisations and dialysis centres in the US between 1980 and 2000 showed that non-profits were more often found to be superior to for-profits in terms of cost-efficiency, as well as in terms of quality.

And these comparisons only tell half the story, since in the US all providers operate in a market. The costs of operating a market — the costs of promoting and advertising insurance plans...
and providers' facilities, of making contracts between insurers and providers, of accounting and invoicing for every individual treatment, of recording payments and chasing non-payments, of auditing and litigation - are huge. It is often reckoned as a rule of thumb that a third of every dollar spent on health care in the US is spent on administration. In contrast, the administrative costs of the British National Health Service in the mid-1970s, before it began to be converted into a market, were estimated at between 5 and 6 per cent of the total.

The claim (or more often the assumption) that healthcare provision by for-profit companies is more efficient or cost-effective than public provision even contradicts the economic theory on which the advocates of markets always pretend to rely. In an interesting episode, when the British Treasury attempted in 2003 to set out a rationale for judging the productivity of public services it found itself concluding, on basic public-choice theory grounds, that for the provision of universal-access health care, markets were not efficient. 'Information asymmetry' between patients and doctors, inherent local monopoly power on the part of providers, the difficulty and cost of making and monitoring enforceable contracts, the impossibility of transferring risk to private providers ('it is difficult to let failing hospitals go bust', as the paper candidly put it), the perverse incentives involved in private medical insurance - all the factors which make private provision of universal care less efficient and cost-effective than public provision were faithfully set out (evidently by a civil servant of the old school, not yet ready to supply the kind of 'policy-based evidence' ministers want to receive, as opposed to the 'evidence-based policy' they always say they are committed to). But the government completely ignored the paper's conclusions. By 2009 the NHS in England (Scotland and Wales used their devolved powers to resist) was well on the way to being fragmented into a healthcare market in which private companies were playing a steadily expanding role.

The Re-commodification of Health Care

As early as 1976 Vicente Navarro presciently described what would prove to be the dominant theme of health under capitalism for the next three decades:

... it is the tendency of contemporary capitalism to convert public services into commodities to be bought and sold on the private market. Reflecting that tendency is the push by both conservatives in the UK and conservatives and large numbers of liberals in the US to shift the delivery of health services back to the private sector (supposedly to enable them to be run more efficiently and more profitably) and to keep them there. And in this scheme, the payment for services is public, while the appropriation of profit is private.

This was a key component of the neoliberal counter-revolution of the 1970s. Previously capital had been content to build hospitals and sell equipment and other supplies to publicly-provided health services. Now it moved to take over the services themselves. Given the importance of health care in people's lives, and the popularity of the public systems established in so much of the world after 1945, the speed with which the capitalist assault has so often succeeded needs explaining. In the case of countries in the global 'south', with most of their revenues mortgaged to servicing their debt, and obliged by IMF-imposed structural adjustment policies to abandon much of their state-provided services, there is no mystery. The same is true of the former Soviet bloc countries, bankrupted by the 'shock doctrine', their populations briefly infatuated with the rhetoric of Reagan and Thatcher, and with American health companies advising governments and selling private insurance policies to everybody who could afford one.

But in western Europe and other industrialised countries, where public health services were deeply entrenched and popular, the fact that so many governments have been able to push ahead with the conversion of public systems of health care back into fields of capital accumulation is at first sight more puzzling. Differences between national healthcare systems and many other historical, cultural and political factors ensured that the explanations would vary from place to place. What led to the privatisation of significant parts of the German hospital sector is a different story from what led to the privatisation of primary care in Sweden, or the adoption of 'public-private
partnerships' for the building and servicing of hospitals in Australia and Canada. In each case, however, some common elements recur.

First, the public healthcare systems have always had various weaknesses, which the capitalist media have relentlessly exploited. Subject to state budgetary restraints, they have often been forced to ration access through delays. Large bureaucracies, with their normal shortcomings, are required to operate and administer them. Politicians were apt to interfere on behalf of special interests. Initial compromises with vested interests (such as parts of the medical profession, or private hospital owners) gave rise to organisational irrationalities, such as the perpetuation of fee-for-service systems of payment which have high transaction costs and reward over-treatment, or a lack of integration between primary and secondary care, and so on. The fact that for-profit provision suffers from the same problems as well as many others goes unmentioned in the media, as does the desire of middle-class patients to be treated separately from working-class patients (a significant undercurrent of much private health-industry advertising). Above all what is hardly ever discussed is how to develop a democratic approach to making public healthcare bureaucracies accountable and responsive to the public.

Second, a private healthcare sector is nearly always active alongside the public system, providing parallel provision for those who can pay, cherry-picking profitable services, offering 'hotel' style hospital accommodation, short waiting times for treatment - i.e. in general offering a model of a commodified service that looks attractive precisely because it is expensive. In England the existence of a small, high-cost, private health sector providing secondary care has served as such a model. Catering to the well-paid business and professional classes (and wealthy patients from abroad), it functioned until recently entirely on the basis of treatments provided by National Health Service (NHS) doctors, working in their spare time, and for extremely high fees. When the private healthcare companies were given an opportunity to take over a growing share of normal NHS work, at closer to NHS costs, they developed a completely different business model for NHS-paid patients, based on high turnover and no frills. A telling contrary example to the power of the private healthcare sector is Canada, where the Canada Health Act in effect prevents the development of a parallel private healthcare sector. Everywhere else the private healthcare sector has functioned as a base from which new inroads into the public sector can be made.

Third, exploiting this base, capital has worked hard to penetrate the relevant elements in the state and its adjacent structures, including the medical profession. The most extreme example is probably England, where the private health sector achieved a text-book case of 'state capture'. In mid-2006 the 32-strong leadership team in the Department of Health contained only one career civil servant. Six came from the private sector, and eighteen from clinical or management jobs in the NHS. Only five had been in post more than five years — in other words, their collective memory of the original structure and philosophy of the NHS was heavily outweighed by their collective involvement in marketising it. In 2007 the Commercial Directorate of the Department, which was the dominant driver of the marketisation process, had a staff of 190, of whom 182 were recruited on short-term contracts from the private sector.

But the most important common factor in the success of capital's drive to convert state-funded health care into a profit-making commodity has undoubtedly been the wider hegemony of neoliberalism, both as a system of social practices and as a system of ideas. Britain, again, is a leading case, but one that is symptomatic of what has happened in many other western countries. Hegemony resulted from the neutering of the trade union movement and the conversion of the Labour Party into an organ of professional politicians, reliant on rich donors rather than a mass membership. By the beginning of the new century the great majority of voters no longer felt connected to or responsible for public policy, which allowed the marketisation of the NHS to be carried out with minimal public debate. Moreover since the main opposition parties and most of the press were in favour of marketisation, informed critics had nowhere to turn for support. In some countries resistance has been stronger, due to historic differences in political alignments and culture, while in others — such as the Netherlands - the drive to a full healthcare market has gone further than in England.
The success of the privatisers also reflects the extent to which the notion that everything should be, and ultimately is, a commodity, had become 'common sense'. People's everyday experience as patients leads them to value universal, equal-access health care, and many have protested when local facilities have been closed as 'uneconomic', or handed over to private companies. But in the abstract people also see health care as something consumed, and themselves as ultimately paying the bill for it, even though treatment remains free to the patient receiving it. The idea that demand is infinite and resources are limited, and that rationing is needed to contain costs, is largely accepted as true. Even the industrial model of health care, with factory-style processing of patients in 'walk-in centres' and 'super-surgeries' (large-scale clinics), currently being promoted in England, has been favourably received, insofar as it is presented as offering the same convenience as a supermarket.

In England this combination of factors allowed the marketisation of NHS clinical care to proceed in a series of more or less well-calculated steps, beginning with the introduction of private companies to provide some routine NHS surgery, and ending with a large number of private hospitals and clinics doing increasing volumes of NHS-paid work, while plans have also been announced to transfer up to 64 per cent of all NHS hospital outpatient work to new health centres built and operated by private firms, or by joint ventures between the NHS and private firms. Finally, primary care services (family medicine and other community health services) have begun to be handed over to private health providers. This process could eventually lead to a large, consolidated private-provider sector living off the NHS budget, alongside an increasingly residual sector of publicly-owned providers, and the re-emergence of charges for better quality treatment. Or the sheer weight and scale of the public system could prove to offer too few pickings for the private sector. It is too early to say.

What is already clear, however, is that in all the countries where the marketisation process has been pushed ahead, it is steadily reorienting publicly-provided health care itself on commercial lines. Profitability becomes a declared objective, and staffing levels and terms of service are driven down, with a corresponding decline in the quality of care. An industrial concept of efficiency, corresponding to the concept of health care as a commodity, is substituted for the goal of meeting health needs — to be followed, inexorably, by the introduction of charges ('co-payments') for a growing range of treatments.

Conclusion

How might the global economic crisis precipitated by financial capital affect the ongoing erosion of equal-access comprehensive health care, and the abandonment of redistributive social and economic policies? The situation has all the makings of Gramsci's definition of an 'organic' crisis, a 'real crisis of the ruling class's hegemony'. The ruling class has indisputably failed in a 'great political undertaking for which it... requested, or forcibly extracted, the consent of the broad masses' — the dream of creating a global economy on neoliberal principles (not to mention the imperialist dream of a 'new American century'). The ruling class has responded in precisely the way Gramsci described, working hard to restore order with a bare minimum of change: modestly increased financial regulation, modestly reduced scope for tax avoidance by the super-rich, slightly smaller bonuses for billionaire financiers, plus the — temporary, of course — reintroduction of fiscal deficits.

Whether this will work in the longer run remains to be seen. The effects of the global economic crisis will not be short-lived, and will converge with the impact of the accelerating ecological crisis. Millions of people will remain unemployed for years (many older workers will never work again), while governments cut social services in order to repay the enormous debts they have incurred to rescue the banking system and reflate their economies. In this context, the anti-egalitarian character of neoliberal health policy seems likely to become more and more apparent. The rhetoric of consumer 'choice' will have a much narrower appeal. It will no longer be possible to ignore or gloss over the gross inequality of incomes and taxation inherited from the neoliberal era, with their critical impact on the health of the least well-off; the declining quality of publicly-provided health
care; the flow of tax revenues to corporate healthcare providers; above all, perhaps, the contraction of free health services to a ‘basic’ package, and the increasing reservation of other treatments for those able to afford fees. All this could in due course lead to the emergence of a new common sense in which the link between health and equality is once again seen to be fundamental.

ENDNOTES

I am very grateful to Nancy Leys Stepan for invaluable help with sources, and to her and David Rowland for trenchant criticisms and suggestions.


3 Japan, for example, raised its average life expectancy from around 37 years in the late nineteenth century to the highest in the world today, even though as late as the 1930s very few Japanese houses had running water or water-borne sewage. See James C. Riley, Rising Life Expectations: A Global History, Cambridge: Cambridge University Press 2001, pp. 19ff.

4 In the US the gap can be over 20 years when factors such as ethnicity and gender are taken into account. See Christopher Murray et al., 'Eight Americas: investigating mortality disparities across races, counties, and race-counties in the United States', Public Library of Science Medicine (PLoS Medicine), 3(9), 2006, available from http://www.plosmedicine.org.

5 The view that it was improved nutrition that was responsible for rising longevity rested on detailed statistical research by Thomas McKeown. For the critique of it see especially Simon Szreter, Health and Wealth: Studies in History and Policy, Rochester: University of Rochester Press, 2005.


7 Ibid., chapter 7, ‘How Beneficent Is the Market? A Look at the Modern History of Mortality’.

8 The low cost of life expectancy improvement is illustrated dramatically by the experience of China, which raised life expectancy from, around 40 years in the early 1950s to 60 years by the late 1960s. At the end of this period, China’s income level was about three-fourths of the 1820 level in Western Europe, where life expectancy averaged under 40 years... China was allocating an estimated 2 percent of GDP to health spending during this period’ (ibid., p. 132). See also J.C. Caldwell, ‘Routes to low mortality in poor countries’, Population and Development Review, 12(2), 1986, 170-220.


13 Lant Pritchett and Lawrence H. Summers, ‘Wealthier is healthier’, Journal of Human Resources, 31(4), 1996, pp. 841-68. The authors argue that since not all the recorded increase in longevity can be explained by public policy, it makes sense for governments to make income growth per se a health policy goal.

14 See Richard Wilkinson, The Impact of Inequality: How To Make Sick Societies Healthier, New York: The New Press, 2005, p. 59. The fundamental reason is quantitative: the life-prolonging effects of new medical treatments are ‘dwarfed’ by the scale of the medical conditions for which the treatments are given.


In Sub-Saharan Africa average life expectancy fell from 50 in 1990 to 46 in 2002. In other areas the health costs of structural adjustment are liable to be revealed in the statistics later.

*World Health Report 2008*, Geneva: WHO, 2008, pp. 13-14. The report points out the dangerous nature of unregulated health care: 'In the Democratic Republic of the Congo, for example, "la chirurgie safari" (safari surgery) refers to a common practice of health workers moonlighting by performing appendectomies or other surgical interventions at the patients’ homes, often for crippling fees'.


Definitions of 'public health' vary considerably, but most refer at their core to activities focused on improving the health of the whole population, with a strong emphasis on prevention, and the public institutions that undertake them.


George Davey Smith and Yoav Ben-Shlomo, *Inequalities in health: what is happening and what can be done?*, in Davey Smith, *Health Inequalities*, p. 496.

For an example of the abuse of government power to try to discredit an active public health critic see Pollock, *NHS pic*, pp. 219-23.


For a sobering account of the way general practice in England was riddled by class distinctions see Porter, *The Greatest Benefit*, p. 644.


Ibid. The article contains a useful list of references to the fast-growing literature on the industry's abuse of science.

See Simon Singh and Edzard Ernst, *Trick or Treatment? Alternative Medicine on Trial*, London: Bantam Press, 2008; and Goldacre, *Bad Science*. Singh and Ernst estimate the UK spending on alternative medicine at £5 billion, of which £500 million is spent - on acupuncture, homeopathy, etc. — by the National Health Service, under relentless pressure from the media, the Prince of Wales, gullible patients and some doctors (p. 240). In a notable example of the use of market power to protect health industry interests, in May 2009 the British Chiropractic Association successfully sued Simon Singh for libel, over a newspaper article in which he 'criticised the BCA for claiming that its members could use spinal manipulation to treat children with colic, ear infections, asthma, sleeping and feeding conditions, and prolonged crying. Singh described the treatments as "bogus" and based on insufficient evidence, and criticised the BCA for "happily promoting" them'. Chris French, "'Witch hunt' forces chiropractors to take down their websites", *Guardian*, 20 June 2009. A group of eminent scientists issued a statement condemning the judgment.
The UK pharmaceutical giant GlaxoSmithKline has twice threatened to move its UK operations abroad: once in 1999 when its anti-flu drug Relenza was judged not cost-effective enough for the NHS to buy, and again in 2008 over a tax dispute with the UK government. By spreading its legal locations around the world, GSK paid only £450 m. tax in the UK, though its worldwide profits were £7.4 bn. AstraZeneca has also threatened to move its UK operations to Ireland, to escape the constraints of UK tax law. In 2004 its tax avoidance arrangements enabled it to pay only £103 m. tax on profits of £2.6 bn. UK corporation tax is 30 per cent of profits.


Sarah Boseley, 'Medical marvels', Guardian, 20 January 2009, citing among others Dr Thomas B. Okarma, the CEO of a NASDAQ-listed biotech company, Geron.

Luke Mitchell, 'Sick in the head', Harper's Magazine, February 2009, p. 39, reporting the predictions of John Hammergren, the chairman, president and CEO of McKesson, the largest healthcare corporation in the US.

See George Monbiot, Captive Slate: The corporate takeover of Britain, London: Macmillan, 2000, chapter 9, 'The Corporate Takeover of the Universities'. Confidence in the beneficence of hospital-based collaborators of the pharmaceutical industry.


Examples include the indiscriminate sale of drugs to the public in countries like India and Brazil, and the excessive use of antibiotics in the intensive livestock industries of Europe and North America. The risk that this will happen to the latest — and in some places only — effective anti-malaria drug, Artemisinin, is a serious concern among doctors.


Vicente Navarro, Medicine Under Capitalism, New York: Prodist, 1976, pp.160-61. Furthermore, if a healthy workforce was the only or chief function served by universal health care it would not make sense to extend it to the retired, who are its main users.

Penelope M. Mullen, 'Is it Necessary to Ration Health Care?', Public Money and Management, 18(1), January-March 1998, pp. 53-58. See also George Davey Smith, Stephen Frankel and Shah Ebrahim, 'Rationing for health equity: is it necessary?', in Davey Smith, Health Inequalities, pp. 513-21. The authors point out that calculating the apparent cost of anything needs to be done critically. Drug costs, for example, are often treated as given, yet a particular statin which cost £500 for a year's treatment in the UK could be bought for only £67 per year in India.


'CBO's projections assume that to avoid a reduction in real consumption of items besides health care, employers, households, and insurance firms will change their behavior in a variety of ways (potentially including higher cost sharing, increased utilization management, reduced insurance coverage by employers, and greater scrutiny of new technologies based on evidence of their comparative effectiveness) to slow the rate of growth of spending in the nonfederal part of the health system. The projections also assume that, even in the absence of changes in federal law, some of the measures adopted to slow growth in the rest of the health care system will moderate spending growth in Medicare and Medicaid and that regulatory changes at the federal level and policy changes at the state level will help to slow cost growth in those programs' (ibid., pp. 1-2).


Cited in Porter, The Greatest Benefit, p. 643. Virchow supported the 1848 revolution and was banished from Berlin for eight years following its failure, but eventually became a dominant figure in German public health as well as in scientific research.


P. Vaillancourt Roseneau and Stephen H. Linder, 'Two decades of research comparing for-profit and nonprofit health provider performance in the United States', Social Science Quarterly, 84(2), 2003, pp. 219-

57 In 1994 the administrative costs of US public hospitals accounted for 22.9 per cent of total costs; in private non-profit hospitals they accounted for 24.5 per cent; in for-profit hospitals they accounted for 34 per cent. Steffie Woolhandler and David Himmelstein, ‘Costs of care and administration at for-profit and other hospitals in the United States’, *New England Journal of Medicine*, 336(11), 1997, pp. 769-74.

58 Charles Webster, *The NHS: A Political History*, Second Edition, Oxford: Oxford University Press, 2002, p. 203. ‘After [the introduction of the so-called internal market in the NHS] administrative costs soared; in 1997 they stand at about 12 per cent; managers talk of 17 per cent as an eventual target’. That was before the establishment of a full market in hospital care, including ‘payment by results’ (i.e. billing for every individual hospital treatment). By 2009 NHS administrative costs must have been not far behind those of US non-profit hospitals.

59 The perverse incentives included refusing to insure high-risk patients, ‘cream-skimming’ profitable treatments, over-treatment thanks to fee-for-service payments, and many others.

60 HM Treasury, *Public services: meeting the productivity challenge. A discussion document*, London: HMT, 2003. When a newspaper reported that the newly-appointed government adviser on drugs policy had earlier written an article in a medical journal arguing that taking Ecstasy was less dangerous than horse riding, the Home Secretary (the cabinet minister responsible) told him this was not the kind of scientific advice she wanted — it ‘went beyond the scientific advice that I expect of him’. Press Association, ‘Jacqui Smith slaps down drugs adviser for comparing ecstasy to horse riding’, *Guardian*, 9 February 2009.


63 The CEO of BMI, the largest for-profit healthcare company in Britain, said that for private patients the aim was to ‘raise clinical quality and offer unparalleled excellence in care and service’; for NHS patients there would be ‘a tailored service based on a low-cost operating model’. Nigel Hawkes, ‘The giant of private care will bid for NHS work’, *The Times*, 10 January 2005.


