## **Executive Summary**

Our report published in 2010, On Borrowed Time, projected fiscal distress for the UK along Irish lines unless we transform public services. The biggest single burden on the public purse is the NHS, where the government's proposals for reform have given rise to the typical protests. In this paper, we ask whether it makes sense to refrain from reforming healthcare to avoid disrupting a regime that delivers distinguished results, as suggested by the King's Fund. To do so, we have analysed data from the World health statistics published by the World Health Organisation. We find that the evidence:

- 1 Fails to show that the NHS itself demonstrates either distinguished health outcomes or value for money. Ranked against similar countries, the UK is in the bottom half on all such scores.
- 2 Contradicts claims that sharing burdens across society helps healthcare results, which are at least three times more related to healthcare spend per capita than healthcare spend as a proportion of GDP. This reminds us that if we want healthcare, we need to aim for economic prosperity.
- 3 Shows that insurances are more present in outperforming than underperforming healthcare regimes. The proportion of expenditure sourced from insurances by outperformers is nearly 300 basis points above the figure for the underperformers. This means that insurances schemes are no bar to satisfactory healthcare results.
- 4 Implies that healthcare outcomes are far more consistent with private than with public expenditure. Health outcomes are at least one hundred times more related to private expenditure than to public expenditure; indeed public expenditure is virtually unrelated to outcome. In other words, the most salient feature of the NHS stands in the way of healthcare outcomes not just in the UK but throughout the developed world.

5 Reveals that the national affection for the NHS's defining features is supported only by data having nothing to do with the UK's current state: no such data can be found in the panel of comparable countries, occurring only in the global figures which bring in irrelevant data.

We conclude that nothing in the data implies that the NHS should not be reformed. To the contrary, the figures argue that transformation is urgently needed, with the risk of disruption outweighed by the potential for improved healthcare performance following transformation.

### Introduction

In the twenty-first century, the NHS is as close as secular Britain gets to a national religion. The object of our veneration is a healthcare regime once trumpeted as "the envy of the world", though such sentiments are less often heard these days. In any event, no one has copied its idiosyncrasies: the two countries that once came closest, Ireland and New Zealand, have now abandoned the model altogether. In the UK, however, the old-time religion still holds sway. In this paper, we evaluate whether the NHS should be protected from reform because of its performance. First, we discuss the contribution of the NHS' foundation to its distinct character.

#### What was in our minds when launching the NHS?

Britain's public healthcare regime is defined by its watchwords of "regardless of the ability to pay" and "free at the point of delivery". This has led to a leviathan, embracing a de facto unmanaged national risk pool, not merely absorbing the largest and fastest-growing share of public funding, but leading the state to preside over the direct employment of the world's sixth largest workforce, with a headcount of 1.2m.¹ Near-monopoly supply (and near-monopsonist purchasing power in the UK) is reinforced by extensive unionisation coupled with the customary professional cartels. Priorities

1 Wal-Mart, the Chinese Army, China National Petroleum, the State Grid of China and Indian Railways are larger.

are set and implemented from the top down by practitioners and civil servants (ie, producers), in conditions often undermining patients' dignity.

These idiosyncrasies are products of the history of modern, and in particular British, healthcare. Until the beginning of the twentieth century, medical intervention with individual patients was a hit-and-miss affair the world over. Indeed, before antibiotics, the risk of surgical complications commonly outweighed the risks of the underlying condition. Nonetheless, Britain made conspicuous healthcare advances in the nineteenth century. This stemmed from effective public health initiatives, in particular embracing municipal water and sanitation supply and improvements in food standards and working conditions. This continued into the first half of the twentieth century, racking up sufficient success to foster a climate of opinion at odds with the priority of individual patients.

The strength of the Britain's public health tradition paved the way for medical opinion-formers to tolerate, if not originally welcome, the public direction of healthcare as a whole in the 1940s. Britain's energetic public health tradition continues to this day, with programmes focusing upon children, once including the distribution of nutritional supplements and still embracing immunisation, postnatal observation and intervention. However important, this expenditure represents only 3.3% of total expenditure on healthcare – £4bn out of £120bn.² This public health expenditure figure will come up again, when we explore the rights and wrongs of the modern NHS.

Since the middle years of the last century, individual treatment has been transformed, first by the advent of third- and subsequent-generation antibiotics, and then by more narrowly targeted medicines, non-invasive diagnostic and low-invasive surgical techniques, active prostheses and organ transplants. These interventions are what we think of as modern medicine and give rise to the modern pattern of expenditure: 13% on the first five years of life at £1,170 per infant per year; 48% on injuries and disease over the next fifty-nine years of life at £348 per head per year; and 39% on the elderly at £1,373 per year on those sixty-five and over, rising to £2,639 per year on those eighty-five and over. (These are 2002 figures, so serve best to give a sense of the relationship between them.) $^3$ 

These interventions are what most think of as healthcare, but as we have observed, priorities and implementation are producer-led. This leads to the question: does such a model best meet the needs of the twenty-first century?

#### How best to measure the NHS?

Data presented by one or another campaigning group tends to cherry-pick the data to help the argument. For example, the recent statement by the King's Fund (a defender of the NHS in the best traditions of British public medicine) that although the UK has relatively poor figures for survival from coronary events, it has the *fastest improving* figures.<sup>4</sup> This is to make a positive out of a negative. It is preferable to use comprehensive third-party data from disinterested parties.

However, this is easier said than done. We have found no published literature providing an authoritative and comprehensive comparison of the organisational character of all national healthcare systems. Instead, we use figures from the closest thing to a compendium of raw healthcare data, the appendices of the annual *World health statistics*, published by the World Health Organisation (WHO).<sup>5</sup>

These include such basic data as GDP and population, which we have used as sorting criteria for countries to compare with the UK. The publishers themselves use them to calculate measures of the level of aggregate healthcare input, in the form of total healthcare expenditure as a percentage of GDP and total healthcare expenditure *per capita*. The appendices also provide several measures of the composition of healthcare input, among them public healthcare expenditure as a percentage of total healthcare expenditure; out-of-pocket expenditure as a percentage of private healthcare expenditure; and prepaid plans or insurances as a percentage of private healthcare expenditure.

Finally, the appendices provide measures of an intermediate healthcare outcome by way of density (ie, number per 10,000 population) of healthcare workers by category, which we have summed to a composite figure for the density of all healthcare workers. They also provide several measures of final healthcare outcomes, among them healthy life expectancy at birth (HALE); and mortality per 1000 population for under fives and adults,

<sup>2</sup> Healthy Lives, Healthy People, Cm7985 Department of Health, 2010, p57; the £120bn is sourced as to general government spending plans - Public Expenditure Statistical Analysis 2010, tables in Chapter 9; as to local authority spending estimated outturn - Public Expenditure, statistical Analysis 2010, table 7.4. local authority current and capital expenditure on services in the United Kingdom by function, 2004/05 to 2009/10.

<sup>3</sup> Office of Healthcare Economics, http://www.ohe.org/page/knowledge/schools/appendix/nhs\_cost.cfm

<sup>4 &</sup>quot;Does poor health justify NHS reform?", John Appleby, Chief Economist, King's Fund, British Medical Journal, 27 January 2011. http://www.bmj.com/content/342/bmj.d566.full. See note 12 below for some background on The King's Fund.

<sup>5</sup> World health statistics 2010, ISBN 978 92 4 156398 7 (NLM classification: WA 900.1), World Health Organization, Geneva, 2010. Downloadable from http://www.who.int/whosis/whostat/EN\_WHS10\_Full.pdf

from which we have interpolated data for six to fifteen-year olds and calculated figures for those surviving to reach the age of sixty.6 We have then taken two of these datasets to calculate a measure of productivity or value for money: healthy life expectancy at birth (HALE) divided by total healthcare expenditure per capita.

Defenders of the NHS's current structure are quick to argue that any such metric is unsatisfactory, as it measures longevity over a lifetime against expenditure over a year. This conflates the measure's components, longevity and health. Longevity is undoubtedly a function of a lifetime's experiences, including public health expenditure. As discussed above, however, this spending only amounts to 3.3% of the annual total. On the other hand, health at the end of life stems from interventions leading to the 49% of current expenditure on healthcare for the over 16s that is consumed by the over 65s.7

In principle, these figures should enable us to draw reliable conclusions, but we must enter a caveat as to their quality. After private correspondence with WHO, we take it that the figures for overall spend, population and longevity are relatively solid and our analyses rely mostly on these.8

### What should we compare the NHS to?

WHO's global database covers all 193 member states, most of which are unsuitable to serve as equivalents to the UK. So we kick off by creating a panel of thirty comparable countries, defined as those with a GDP per capita of over \$17,000 per annum (around half the UK level) and a population of over three million.9

This panel serves to compare the performance of the NHS to the variety of other systems in similar countries, using an objectively determined group of thirty countries. This enables us to go beyond the style of debate customary in British discussions of the topic, where the NHS is pitted against a single comparison, be it a purported paradise (often hailing from Scandinavia) or a hellhole (generally the US), to make one or another polemical point. Instead we use basic statistical techniques to ask how much the evidence emerging from the data might satisfy a good-faith advocate of the NHS model.

# How does the NHS compare?

In this section we explore how the UK measures up to other similar countries. A good-faith advocate of the NHS model would wish to see UK occupying a high rank on measures of healthcare outcome and generally the higher ranks for

Table 1: Rank order of UK within panel of 30 countries, by selected healthcare measures

Insurances as % of private health spend	6 (20)
Public as % of total health spend	7
GDP per capital (PPP, \$)	11
Total health spend per cap	14
HALE at birth/\$000 of spend per cap	17
Total health spend as % of GDP	18
Survival to age 60 per 1000	18
HALE at birth	20
Out-of-pocket as % of private health spend	23
Total healthcare workforce density	27 (30)

Sources: WHO, World Health Statistics 2010; author's estimates. Note: Uncorrected rankings in parentheses

- 6 Healthy life expectancy (HALE) is a statistic developed by WHO, "using information from health interview surveys and from the Global Burden of Disease Study. The latter estimates loss of health by cause, age and sex for populations." For more details, see http://www.pophealthmetrics.com/content/4/1/4.
- As a further complication, we take it that WHO's metric may be offered as a projection but is better seen as historical, that is an adjustment of the conventional calculation of life-expectancy, as current population divided by the current death-rate. Timing mismatches of this kind bedevil healthcare economics, so all such measures should be used mindful of their limitations.
- 8 WHO annotates its statistical appendices as follows. "These summary tables represent the best estimates of WHO based on evidence available in 2009 – rather than the official estimates of Member States. These estimates have been computed using standard categories and methods to enhance cross-national comparability. Therefore, they are not always the same as official national estimates, nor necessarily endorsed by specific Member States." This is quite vague.
  - When we looked at the UK figures we know best, oddities leapt off the screen. Thus, WHO's figures for the UK's healthcare workforce are so much below the panel of equivalent countries we have compiled as to sound the alarm; (see "What should we compare the NHS to?" below for the criteria for our panel). Looking more closely, we found that WHO's figures for nurses are an order of magnitude below those published by the UK Department of Health; in addition WHO fails to include figures for other UK healthcare workers.
  - Similarly, WHO's figures for the composition of UK healthcare expenditure are awry. That for prepaid plans or insurances is stated as 7% of private healthcare expenditure, as are those from the other countries to which the UK is compared. But this figure should be stated as 7% of all healthcare expenditure, equating to c37% of private healthcare spend. We have no way of knowing if these figures stem from judgement calls by WHO's statisticians, or simply "fat-finger" problems, that is errors in data-entry. We have corrected the figures for UK nurses and prepaid plans or insurances, but are in no position to identify errors and make corrections throughout.
- This is more or less the OECD group of countries, excluding Iceland and Luxemburg for size and Mexico and Turkey for income per capita; and adding Croatia, Israel, Lithuania, Poland, Korea, Singapore and Slovakia.

outcome than for inputs, which would tell us that the model was effective by international standards.<sup>10</sup>

This table presents no straightforward conclusion. The figures enable a good-faith advocate of the NHS model to point to the cluster of rankings between numbers 17 and 20, embracing our measure of productivity or value for money, spend as a proportion of GDP and the two final outcomes of survival to age 60 and healthy life expectancy at birth (HALE). The notion would be that the NHS is performing not necessarily with distinction, but approximately as one would expect from the resources to hand.

On the other hand, a critic can point to the range of ranks occupied by the UK, extending from no 7 for healthcare expenditure from public sources, through no 14 for healthcare expenditure *per capita*, no 17 for healthcare productivity or value for money, no 18 for survival till age 60, to no 20 for healthy life expectancy at birth (HALE). The notion would be that the NHS fails fully to punch its weight, with the suggestion of an explanation in the preponderance of public funding.

Finally, both advocate and critic would be bemused that the UK's corrected rank for reliance upon insurances is no 6, one above the rank for reliance on public sources. On the other hand, the pre-correction rank places the UK at no 20, suggesting that on balance we have to disregard this measure as unreliable. In order to seek more decisive readings, we turn to the analyses following.

## How is the NHS doing where it matters?

In this section we look at the fundamental measures for any organisation: performance and productivity or value for money. A good-faith advocate of the NHS model would wish to see the UK in a high rank on these measures.

First we rank countries by our measure of performance, that is healthy life expectancy at birth (HALE). The minimum HALE in our panel is 63 years, the maximum is 76 years. The UK is one of six countries which rank from no 16 to no 21 out of thirty with a HALE of 72 years. Next we rank countries by our measure of productivity or value for money, that is HALE divided by total healthcare expenditure *per capita*. The UK is no 17 out of thirty by this measure. Our last step is to combine the two measures, by ranking first by outcome, that is HALE; then, where countries return the same figure on this score, to rank them by our gauge of productivity or value for money. By these measures, the UK is third out of the six countries showing a HALE of 72 years and no 18 out of thirty overall.

From this we may conclude that the UK system fails to demonstrate the distinguished performance that an advocate of the NHS model might hope for, with a ranking slightly below half for both healthy life expectancy at birth and productivity or value for money. We turn for confirmation of this finding to an examination of regimes categorised by performance.

Table 2: Panel of thirty selected countries, ranked by (1) healthy life expectancy at birth (HALE) and (2) by HALE/healthcare spend per capita

1	Japan	16	Greece
2	Switzerland	17	Finland
3	Spain	18	UK (corrected by author)
4	Italy	19	Belgium
5	Sweden	20	Denmark
6	Australia	21	Austria
7	Singapore	22	Republic of Korea
8	Israel	23	Portugal
9	New Zealand	24	Czech Republic
10	Ireland	25	USA
11	Netherlands	26	Croatia
12	Germany	27	Poland
13	France	28	Slovakia
14	Canada	29	Hungary
15	Norway	30	Lithuania
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Sources: WHO, World Health Statistics 2010; author's estimates. The author's corrections do not affect the ranking.

10 The full table is set out in the appendix.

# What do we learn from performance elsewhere?

In this section we compare healthcare regimes that perform well to those which perform poorly. A good-faith advocate of the NHS model would expect to see that the outperforming group has characteristics akin to the NHS, in particular sharing the UK's defining characteristic of a preponderant reliance upon public funding.

Our analysis makes use of the circumstance that the UK is ranked eighteenth out of the thirty countries in our panel - more or less in the middle. We compare the group of seventeen countries ranked above the UK, that is "the outperforming group" or "outperformers", to the group of twelve countries ranked below the UK, that is "the underperforming group" or "underperformers". Our measures are the composition of funding sources. This is intended to give a further rough measure of the merits of high levels of public involvement and to examine the effects of prepaid plans or insurances about which we could get no useful data from earlier calculations.

The column for public expenditure delivers an equivocal message. On its face, it shows that the populous and recently off-balance US system takes the composition of public funding in the underperformers 1.1 percentage points below the outperformers; if we stripped out the US, underperformers would show levels of public expenditure a couple of points above outperformers.<sup>11</sup> We are reluctant to draw conclusions from such small differences in either direction. The columns on the composition of private expenditure are more straightforward. They show that insurances are associated with superior performance and the corollary that out-of-pocket expenditure is not.

An examination of under- and outperforming groups of countries offers scant evidence on the rights and wrongs of public expenditure but unambiguous evidence for superior outcomes from healthcare regimes with higher levels of insurance by comparison with out-of-pocket expenditures. This does not, however, give us a sense of the merits of insurances versus public expenditures. In order to strengthen our findings, we turn to a statistical measure comparing healthcare inputs and output, the correlation coefficient.

#### What really makes a difference?

Here we look at how healthcare inputs affect outcomes or results, to see whether this helps or hinders our conjectural good-faith advocate of the NHS model. At first sight we are hampered, to the extent that the distinguishing features of the NHS are either not readily quantified or for other reasons are not collected by WHO's statisticians. We are, however, able to capture them indirectly by using our panel to test the hypotheses that levels or compositions of expenditure are correlated with intermediate or final healthcare outcomes. This enables us to gauge how much the character of systems akin to the NHS deliver measurable benefits.

Correlation coefficients run from zero to one, where zero denotes no correlation and one complete correlation. Statisticians remind us that correlation is not causation, but no search for explanation in the human sciences starts without a preliminary calculation of correlation. Even low indices are significant if the population under review is large enough. In this case, our panel of thirty countries constitutes a small sample. This means that no search for causation will make sense without highish indices of correlation - 0.70 or better. A goodfaith advocate of the NHS model would wish to see correlations at such levels between the defining feature of the UK regime, public expenditure, and health outcomes, or at least higher correlations than with private expenditures.

Table 3: Selected groups from panel of thirty countries, ranked by weighted averages of healthcare outcome and analysed by composition of healthcare funding

	Public as % of total health spend	Out-of-pocket as % of private health spend	Insurances as % of private health spend
Better than UK	71.2	70.5	20.7
Worse than UK	70.1	78.0	17.8

Sources: WHO, World Health Statistics 2010; author's estimates.

 $<sup>11 \</sup>quad See \ http://www.dh.gov.uk/en/Healthcare/Medicinespharmacyandindustry/Pharmaceutical price regulations cheme/DH\_4071841$ 

We test this, first by calculating correlations between different inputs by way of levels and compositions of expenditure and the intermediate outcome of healthcare workforce density (that is proportion of the overall population). We then calculate correlations between all of these and the final healthcare outcomes of healthy life expectancy at birth (HALE) and survival to age sixty. We also calculate the correlation between the proportion of publically funded healthcare expenditure and healthcare productivity or value for money, as measured by HALE divided by total healthcare expenditure per capita.

The figures in Table 4 fail to show any correlations that might qualify as significant from a sample of this size. The highest index is the unsurprising correlation between expenditure per capita and workforce density (in other words, in the crudest sense you get what you pay for), though we have already noted that figures for the latter are unreliable. The next highest correlation is between healthcare spend per capita and healthy life expectancy at birth (HALE). We would not make too much of this as the correlation with survival to age sixty is appreciably weaker, though still the third strongest index.

As these correlations are too low to be significant, we must try a closer reading. Specifically we compare the indices one with another by row (inputs from left to right); and by column (outcomes from top to bottom).

First we compare the effect of inputs across rows. All the input measures have stronger correlations with the intermediate outcome of healthcare workforce density than with the final healthcare outcomes of HALE, which are in turn stronger than survival to age sixty. This combines with the trivial correlation between public expenditure and our measure of productivity or value for money to remind us that "you get what you pay for" may mean employment without performance.

Now we look at the results by column. The correlations between healthcare expenditure per capita and healthcare workforce density and healthy life expectancy at birth (HALE) exceed those between these outcomes and total healthcare spend as a proportion of GDP. This argues against claims along the lines of The Spirit Level of the merit of sharing healthcare burdens across society, reminding us that what matters is often simply hard cash. If economies don't grow, healthcare outcomes suffer.

Table 4: Panel of thirty selected countries: correlation coefficients of selected healthcare inputs and outcomes, by country

		Intermediate outcome	Final o	utcome	Productivity
		Total healthcare workforce density (per 10,000)	Healthy life expectancy at birth (HALE)	Survival to age sixty per 1000	HALE divided by \$000 of spend per cap
Aggregate inputs	Total health spend as % of GDP	0.102	0.066	0.038	
Aggre	Total health spend per cap	0.257	0.221	0.170	
puts	Public health spend as % of total health spend	0.142	0.001	0.001	0.011
Composition of inputs	Out-of-pocket spend as % of private health spend	0.086	0.072	0.045	
Сотро	Insurances as % of private health spend	0.109	0.083	0.048	
Intermediate outcome	Total healthcare workforce density (per 10,000)		0.083	0.037	

Sources: WHO, World Health Statistics 2010; author's estimates.

The correlation between public expenditure and final health outcomes barely registers, so the latter are vastly more correlated with private than public expenditure: the correlation is over 150x higher as to HALE and over 100x higher as to survival to age 60. Although the underlying indices are too small to be significant on their own account, the conspicuous and consistent disparity argues for caution about models preponderantly reliant upon public funding. In summary, a close reading of the correlations adds to our sense from the rankings that healthcare outcomes across our panel give scant comfort to a good-faith advocate of the NHS model. Specifically, the figures provide reason for scepticism about the benefits of sharing healthcare burdens across society and argue for the greater utility of private than public expenditure; indeed there is no evidence whatever consistent with the merit of public expenditure.

## What are the objections to reform?

In this section, we explore the three central objections to reforming the NHS: philosophical, self-serving and sentimental.

The philosophical objections stem from the difference between two intellectual approaches to uncertainty, those of the disciplines of medicine and economics. The medical approach is that best practice emerges from the principle of primum non nocere - "first, do no harm" and the objective tests of double-blind testing. The economists' approach is that best practice emerges from price discovery, transparency and voluntary transactions between many suppliers and consumers. In terms of the NHS, we may make the following distinction between where the two approaches are most useful. The medical approach is best applied to matters with slow or deferred outcomes, such as the 3.3% of healthcare expenditure represented by public health policies, the 8% or so spent on branded drugs (in particular the smaller fraction spent on newly developed pharmaceuticals), as well as – in principle - surgical procedures and medical protocols.<sup>12</sup> In fact, the latter are subject to individual modifications that are

prized by every practitioner. By contrast, the economists' approach is best applied to matters with early or immediate results, such as logistics, organisation, diagnosis, the use of familiar, that is off-patent drugs (or new drugs where patients are willing to accept the risks), as well as most surgical and medical protocols, recognising the prevalence of practitioner tweaks.

Self-serving arguments come from special interest groups, extending from the Royal Colleges through the BMA, the public service unions and the penumbra of think-tanks and foundations such as the King's Fund. These are essentially committed to the *status quo* in healthcare provision, since they owe their status and funding to the current arrangement and may lose out if it changes. Their affiliation is concealed by the full apparatus of persuasion extending from learned studies, through media work by nurses groups, to the fluency to be expected from those whose career progression depends on mastery of the bedside manner. This is best countered by resort to the facts set out above about the UK's mediocre international performance.

Sentiment holds with the public, apparently deeply committed to the NHS. But the record tells us that this attachment has been cultivated by sixty years of self-serving propaganda from interest-groups, as well as such devices as the last government's expenditure on a multi-million pound campaign to impose a universal NHS logo. 14 Even so, the outcry at recent revelations of the defects of NHS nursing for the elderly illustrates how fickle public opinion can be. 15

#### Why hasn't opinion caught up with the figures?

In this section we provide an explanation for the vehemence of support for the NHS from such professional opinion-formers as the King's Fund in spite of the lack of statistical support for the NHS model. A good-faith advocate of the NHS model would wish to see that public expenditure, high levels of which are a defining feature of British healthcare, displays a higher correlation with healthcare outcomes

 $<sup>12 \</sup>quad \text{See http://www.dh.gov.uk/en/Healthcare/Medicinespharmacyandindustry/Pharmaceutical price regulations cheme/DH\_4071841}$ 

<sup>13</sup> For example, see the material published by King's Fund itself, which presents itself as the UK's leading healthcare think-tank: "The establishment in 1948 of the NHS – a national, tax-funded service open to all on the basis of need – inevitably led to a reappraisal of The King's Fund's charitable role...[which] began to focus...on developing good practice in the NHS, for example through training courses...In the later part of the 20th century, The King's Fund developed....a health policy research and analysis unit."

http://www.kingsfund.org.uk/about\_us/our\_history.html.

<sup>14</sup> In 2006, this was reported as running at £330,000 a year. http://www.dailymail.co.uk/news/article-422459/Cash-strapped-NHS-spends-330-000-improving-blue-logo.html.

<sup>15</sup> On 15 February 2011, the health service ombudsman, Ann Abraham, issued a report containing ten specific instances of "neglect of even the most basic human needs". http://www.google.com/hostednews/ukpress/article/ALeqM5jsxZKQDNmE20370BUB\_XTZ7ZEu7g?docld=A424129 651297762314A0

than does private expenditure. The preceding section tells us that the reverse is the case in the panel of comparable countries. Our conjectural good-faith advocate would, however, be supported by an analysis of WHO's global database. <sup>16</sup>

The global figures represent a far larger body of material, tempting the incautious to give it concomitant weight. But its size can't take away from its fundamental problem: these days the UK has different healthcare problems and objectives from the world as a whole. Remember that WHO's global database contains 193 states; in other words it brings in 163 countries, almost all of which have annual incomes *per capita* below \$17,000. It simply doesn't make sense to look for comparisons from countries still trying to sort out basic nutrition, sturdy construction, clean drinking-water, satisfactory sanitation or endemic disease. In short, the global figures are irrelevant to the UK – only the subset of countries we have identified are comparable.

To this day, however, it seems that the legacy of the Britain's public health achievements continues to influence leaders of medical opinion in this country. As we have seen, this approach has played its part in the profession's long-standing engagement with public direction. To the extent that opinion-formers have hung onto to a soft spot for overseas healthcare regimes grappling with problems no longer facing the UK, it would explain why good-faith advocates for the NHS model might find themselves invoking irrelevant global data. But even with the best of hammers, not every problem is a nail. Remember that public health is just 3.3% of the UK's total expenditure on healthcare. In summary, WHO's global figures suggest that one reason for the persistence of the UK's veneration for the NHS may be that professional opinion is caught in something of a time-warp.

### What would a reformed system look like?

In this section we sketch out the elements of a free market health system.<sup>17</sup> This would comprise independence for all surgeries, hospitals, clinics and laboratories, which would vie with each other and existing private operators for patients, and compete on price. Some would be standalone companies, some local branches of corporate

chains, some cooperatives or mutual societies, and some charitable foundations. There would be diversity and with it choice, competition and consumer sovereignty. Patients would be in a position to engage with many new possibilities, ranging from private insurers and health maintenance organizations, to old-fashioned friendly societies and mutual benefit organizations.

For the vast majority of medical interactions (visits to the GP, for example) patients would simply pay out of pocket, or otherwise join some kind of basic medical plan. Chains could be expected to offer low-cost appointments to all comers, or may offer package deals (say, three diagnostic examinations, an annual health check, and discounts on specialist referrals, elective procedures and medicines). Within that market setting, we may expect pharmacists to take on a much bigger role, which would drive costs even lower. Indeed, we may expect to see doctors, dentists, pharmacists and opticians to club together and form all-in-one 'healthcare supermarkets', perhaps combined with gyms and health-food stores.

For most people, in most years, that would be the extent of their healthcare experience. At most, it would set them back a few hundred pounds. Big-ticket healthcare expenses, like complex operations or cancer treatments, would be catered for by insurance, though not the kind of arrangements that we see driving inflation in the US. Instead, we would expect something like the Western Provident Association's XS Health plan. Even now, in a relatively underdeveloped market, this allows a 40 year nonsmoker to claim for "hospital and out-patient treatment, scans, tests, physiotherapy and cancer cover" and be treated "by a specialist of [his] choice, at a hospital of [his] choice, anywhere in the UK" in return for a premium of £200 per year. The policy is kept cheap by a £1,500 rolling excess. Essentially, the insured party's medical costs are capped at £1,500 in any 12-month period. Should more be spent, the insurer is liable.

In a free market (and therefore low-tax) system where people are in a position to take responsibility for themselves, £1,500 is a reasonable amount to expect individuals to keep tucked away for emergencies. And, of course, people would be free to choose an insurance package with a lower excess, or a co-payment instead of an excess, or one that

<sup>16</sup> Taking WHO's global database of 193 countries, the correlation with healthy life expectancy at birth (HALE) is 0.180 for public versus 0.077 for private expenditure; the correlation with survival to age 60 is 0.135 for public versus 0.045 for private expenditure.

<sup>17</sup> This section is based on What a free market in healthcare would look like, Tom Clougherty, Adam Smith institute, January 2011.

covered every medical expense. These would be more expensive, but provide for patient choices. The essence of a free market is a multiplicity of options to suit a multiplicity of preferences.

The free market sketched out would allow people to tailor their healthcare more closely to their individual requirements, while also costing less than the current nationalized system. This is to compare annual costs of a couple of a hundred pounds on primary care and a couple of hundred pounds on big-ticket insurance, plus very occasional larger outlays, with an annual government spend of well over £2,000 per person.

# How best to initiate and regulate reform?

In this section, we set out the principal elements of regulation to initiate and maintain a reformed system embracing welfare, funding, competition and other issues. Even in a free market setting, most would value a safetynet for healthcare provision, but this is no barrier to reform. Just as private optical services are currently subsidized for people in certain socioeconomic categories, so could routine visits to the doctor or dentist. As for the insurance element, safety-net arrangements are called for. For example, if a no-frills insurance package cost more than a stated percentage of income, then the government could pay the balance of the premium. As this would reduce savings to the taxpayer and risk distorted incentives, a balance would have to be struck. We would act as follows:18

• Disaggregate the national risk-pool, to distinguish between the vast majority, who are qualified to assume insurable risks, and those who are de facto uninsurable by reason of their inability to pay premiums. Insurers may also disaggregate the risk-pool to take account of other individual circumstances. This can be problematic with innate personal features such as age, gender, DNA profile or pre-existing medical conditions, where regulation prohibiting such disaggregation may be desirable. By contrast, most would see less reason to discourage disaggregation for personal behaviour, such as engaging in high-risk sports, drug use, excessive alcohol intake or dysfunctional eating habits. In any event, we would address the problem of free-riders

by obliging individuals to purchase a minimum, 'barebones' package of health insurance for themselves and their dependents. This requirement would be accompanied by a supportive tax and regulatory regime.

- Disaggregate risk conditions between minor and major, uncertain and certain, and acute and chronic. This paves the way for the differentiated allocation of the risks arising. Minor risks, like colds, minor injuries and optical and dental care are often already directly paid for by patients or reimbursed from private insurance. Childcare risks and elective treatments are more problematic, posing essentially political decisions. Purists might argue that parents should pay the medical costs stemming from choosing to have children (as with adoption) and similarly for those choosing non-essential elective procedures, but this is likely to be unreasonable to many. Acute life and livelihood-threatening risks introduce the scope for a portfolio of approaches embracing private health, loss of earnings and in-capacity insurance together with lastresort coverage by the state. Risks that are chronic or certain (e.g., the last two years of life) may require lastresort coverage for those unable to save or insure for them.
- Disaggregate indemnities, for example with excesses, deductibles or co-payment (that is, with sums to be paid by directly by the insured); or alternative treatment protocols (as in Denmark, where patients choose between full reimbursement of care provided by a physician chosen for a year and by his selected specialists; or complete freedom of choice of any physician or specialist at any time, with reimbursement of two-thirds of the cost); or variable cover for treatments of equivalent clinical quality, but lesser convenience (for example, diagnostic or pharmaceutical protocols). This provides for a variety of sources of income for hospitals, paving the way for the next proposal.
- Break up and privatise hospitals and other state service providers. No single proposal has greater scope to horrify defenders of the status quo, but no single proposal offers greater promise of rebalancing the supply of services, following disaggregation of the risk-pool, risk conditions and indemnities. Privatisation embraces recapitalising PPP financing where necessary and operating hospitals

<sup>18</sup> The following section is based on material in On Borrowed Time, Miles Saltiel, Adam Smith Institute, December 2010.

at arms-length from multiple funders. It introduces a market for control and gives the public and practitioners an economic interest in reform by way of ownership of the new entities.

• Foster competition among non-state providers of services, e.g., offshore facilities, local or specialist hospitals, clinics, surgeries, laboratories, diagnostic centres, convalescent and recuperative services, abolishing barriers to entry; review licensing to open up professional recruitment.

### Conclusion

The figures published by the World Health Organisation show that there is no reason for supporters of the NHS to resist reform. Indeed, they tell us that the risk of disruption is outweighed by the harm caused by doing nothing. A good-faith advocate of the NHS would be disappointed by the statistical evidence, which:

- 1 Fails to show that the NHS itself demonstrates either distinguished health outcomes or value for money.
- 2 Argues against claims that sharing burdens across society helps healthcare outcomes.
- 3 Shows that insurances are more characteristic of outperforming than underperforming regimes.
- 4 Shows that healthcare outcomes are greatly more related to private than to public expenditure; indeed that public expenditure is virtually unrelated to outcome; and

5 Tells us that the UK's affection for the NHS' defining features can only be supported by data inapplicable to the country's current state.

There is thus no evidence to suggest that the NHS is performing well, compared to other regimes around the world. Indeed, we have found only evidence to the contrary. Neither intellectual objection, nor the protestations of interest-groups, nor the fickle commitment of the public are any reason to flinch from the sort of reform we have outlined.

A free market system would be preferable to the current top-down regime. In this system, patient choice would be sovereign, providers would compete to offer higher quality at a lower price, the vast majority would take responsibility for themselves and those unable to do so would be empowered by government to enter the market. It might not suit the public sector unions, which is not the same thing as saying it would not suit their members. It might not suit politicians, though in the long run we expect they would be as relieved to no longer have to manage the NHS and they were to be rid of British Leyland. For the general public, moreover, it would be a huge improvement, fear of change notwithstanding. This reinforces the financial arguments set out in On Borrowed Time for transforming the NHS - resistance to reform can no longer be justified on the grounds of the accomplishments of our current healthcare regime. International comparisons show that the NHS is failing us and radical; market-based reform is urgently needed.

Appendix: Panel of thirty selected countries: healthcare and other data

			Inputs			Immediate outcome	Final or	Final outcomes	Productivity	Basic data	data
Member State	Total health spend as % of GDP	Public as % of total health spend	Out-of- pocket as % of private health spend	Insurances as % of private health spend	Total health spend per cap	Total healthcare workforce density	HALE at birth	Survival to age 60 per 1000	HALE at birth/\$000 of spend per cap	Total population (000s)	GDP per capita (PPP, \$)
			All 2007			2001-8	Both sexes, 2007	Both sexes, 2008	Both sexes, 2007-8	2008	2008
Australia	6	89	56	24	3,357	142	74	927	22	21,074	34,040
Austria	10	76	65	19	3,763	115	72	917	19	8,337	37,680
Belgium	6	74	76	23	3,323	29	72	904	22	10,590	34,760
Canada	10	70	50	43	3,900	139	73	918	19	33,259	36,220
Croatia	∞	87	92	∞	1,398	92	89	875	49	4,423	18,420
Czech Republic	7	85	89	2	1,626	139	70	887	43	10,319	22,790
Denmark	10	85	88	11	3,513	145	72	902	20	5,458	37,280
Finland	8	75	74	8	2,840	147	72	900	25	5,304	35,660
France	11	79	33	64	3,709	137	73	905	20	62,036	34,400
Germany	10	77	22	40	3,588	129	73	914	20	82,264	35,940
Greece	10	09	92	9	2,727	110	72	919	26	11,137	28,470
Hungary	7	71	85	4	1,388	129	99	819	48	10,012	17,790
Ireland	8	81	51	42	3,424	205	73	917	21	4,437	37,350
Israel	8	99	74	15	2,181	116	73	924	33	7,051	27,450
Italy	6	77	98	4	2,686	120	74	931	28	59,604	30,250
Japan	8	81	81	14	2,696	142	9/	929	28	127,293	35,220
Lithuania	9	73	86	2	1,109	131	63	771	57	3,321	18,210
Netherlands	6	82	34	35	3,509	197	73	922	21	16,528	41,670
New Zealand	6	79	72	24	2,497	136	73	916	29	4,230	25,090
Norway	6	84	92	0	4,763	218	73	927	15	4,767	58,500
Poland	9	71	83	2	1,035	81	29	844	65	38,104	17,310
Portugal	10	71	78	14	2,284	86	71	902	31	10,677	22,080
Republic of Korea	9	55	79	6	1,688	98	71	914	42	48,152	28,120
Singapore	3	33	94	3	1,643	65	23	930	44	4,615	47,940
Slovakia	8	29	79	0	1,555	107	29	851	43	5,400	21,300
Spain	6	72	75	21	2,671	127	74	920	28	44,486	31,130
Sweden	6	82	87	1	3,323	167	74	932	22	9,205	38,180
Switzerland	11	29	75	23	4,417	161	75	930	17	7,541	46,460
UK	8	82	63	37	2,992	82	72	910	24	61,231	36,130
USA	16	46	23	64	7,285	150	70	877	10	311,666	46,970

Sources: WHO, World Health Statistics 2010.

### About the Author

Miles Saltiel is a Senior Fellow of the Adam Smith Institute, where his recent publications include: On Borrowed Time - Avoiding fiscal catastrophe transforming the state's intergenerational responsibilities; Cameron Skewered - The Lesson of a Levy on Banks; Regulatory Corporatism – Lord Turner and the Tobin Tax; G20 – Less Than Meets the Eye; and What Went Wrong? An Agenda for the G20. Miles read PPE at Oxford and wrote his MA dissertation on Japanese business and government at Sussex. In 1979, he joined GEC-Marconi, working in corporate finance and recoveries, to become no. 2 in Marconi Projects. In 1986 he went into investment banking, joining the WestLB Group in 1996 as Head of Equity Research, Emerging Markets. In 1998, he assumed responsibility for London-based Tech Research, and in 2000 was voted one of the UK's top 50 in the New Economy. In 2002 he left the WestLB group, where he had become the senior tech banker, to found the Fourth Phoenix Company to provide research and associated services to banks, industry and others.