REFORM OF THE NATONAL HEALTH SERVICE (NHS)

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ABSTRACT

The National Health Service (NHS) is neither sustainable nor effective in its current form. The advent of the ageing population and along with it, the prevalence of multiple, long-term, complex health conditions, has meant that the NHS no longer serves the same population it was originally designed for. The NHS must reconfigure itself to effectively serve this new demographic; but it must do so against the backdrop of the lingering effects of both the economic crash and weak, ineffective recent reform.

This paper looks to the healthcare successes and innovations of other countries' for answers. Structurally, there should be greater decentralisation of the NHS to allow local authorities to best tackle the health problems facing their particular populations, whilst avoiding the bureaucracy they currently face. Fiscally, this paper finds that the recent drive towards cuts in spending to the NHS in order to relieve the deficit will not allow resolution of service or sustainability issues in the NHS. Decentralisation, along with a change in policy emphasis from short-term deficit control to long-term planning of care methods, will allow the NHS to fund services in a sustainable and effective way.

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I. INTRODUCTION

I.I. Current Structure of the NHS

The vast majority of healthcare provision in the United Kingdom is supplied by the National Health Service (NHS) with the role of private healthcare often being that it used on an ad hoc basis. Roughly 11% of the population has private healthcare usually through a health insurance program such as BUPA, which are sometimes offered as employee benefits by employers. The main advantages of private healthcare include acquiring a second medical opinion and greater flexibility over the dates of an operation without the long waiting list that might be present on the NHS.

This current structure is in tune with the founding values and policies of the NHS. The NHS operates a "free at the point of use" policy. This means that British citizens and legal immigrants are able to access the entirety of the system without having to make any payments as a result of using the system. This is only true up to a point with certain services requiring a financial contribution. These services include dental care and prescriptions. However, the need for a financial contribution is waived for low income sections of society. The NHS is largely funded by general taxation in the same way as any other government department but also receives a small share of national insurance contributions and also garners some income from surcharges applied to migrants.

The amount of parliamentary funding the NHS receives is a matter voted upon by Parliament. The funding flowchart below shows that the figure for 2016/17 was £120.4 billion and succinctly depicts the structure of the NHS as of 2016.

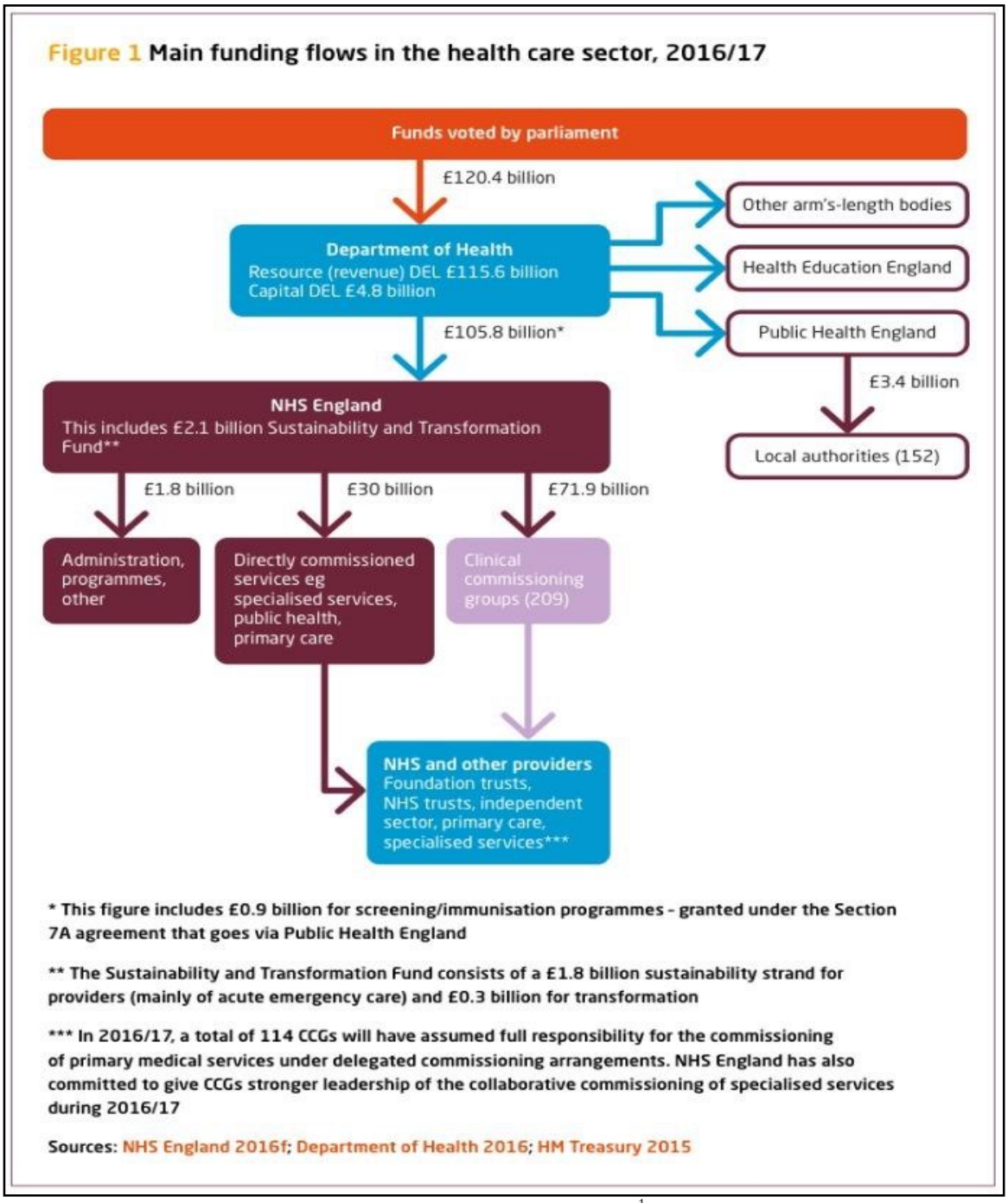

Figure 1: Structure and funding of the NHS as of 2016.[1]

From the top down, the Department of Health (DoH) is responsible for 'strategic' leadership overseeing both health and social care in England by setting national policy and providing funding. The DoH is a ministerial department supported by 23 agencies, and is headed by the Secretary of State for Health - currently Jeremy Hunt MP. NHS England is an independent body, funded by the Department of Health, which sets the direction of the NHS to improve the standard of health and social care across England. It is also responsible for delivering primary and secondary care. This is mainly done through clinical

[1] Department of Health. (2010). *Equity and Excellence: Liberating the NHS*.

commissioning groups (CCGs); these smaller bodies are responsible for planning and commissioning healthcare in their local area. Other bodies funded by the Department of Health include Health Education and Public Health England. These supplementary bodies work to make the healthcare system more comprehensive.

I.II. Goals of the NHS

The Health Secretary, Anuerin Bevan, established the NHS in 1948. Its foundation was a result of the Second World War and was born out of the desire to enter a new era after the horror of the war and the deprivation present in the previous decades. The embodiment of this sentiment was the Beveridge Report that was published during the war in 1942.

The Beveridge Report was hugely popular – selling 600,000 copies by 1944 – as it identified five "giants" (major problems) in British society whilst also proposing a set of solutions. These five giants were: squalor (a shortage of good houses); ignorance (a lack of good education); want (too many people below the poverty line); idleness (unemployment levels being far too high) and disease (a nation in poor health due to the inadequate healthcare system). The creation of the NHS addressed the last of these issues.

Prior to the NHS, healthcare was not free. Some workers had access to healthcare through national insurance but this did not extend to their spouses and families. These families as well as the millions of other workers not covered by national insurance, the unemployed and the sick, had to pay for healthcare. On the whole, these sections of society were unable to afford these costs. Conversely, the middle and upper classes of the population were able to pay these costs. As a consequence, the national coverage of healthcare was drastically uneven.

In order to alter this disparity, Bevan had to overcome stiff opposition, most notably from the British Medical Association. Doctors had developed successful practices over the years and were paid significantly above the national average. The conclusion of the subsequent negotiations was that doctors working in the NHS would also be given time to work in the private industry. Bevan had, in his own words, 'stuffed their mouths with gold.'

The NHS was an instant success with infant mortality rates notably dropping. However, the NHS's successes translated into higher than anticipated costs. Britain's health was worse than predicted as people had been hiding illnesses that they could not previously afford to treat. The result of these higher costs was that prescription charges were introduced in the 1951 budget, sparking the resignation of three high profile government officials.

The NHS was therefore founded to tackle the key problems caused by the prior healthcare system. The first key problem was access, as previously mentioned generally only the richer members of society could afford healthcare. A goal of the NHS was thus to offer, in the words of Bevan, 'a universal health service' that all members of society could access freely. The second key problem was the poor

health of the nation following a catastrophic war and poor economic climates. Hence, the goal was to offer 'the best health advice and treatment' and it was intended that 'there shall be no limitation on the kind of advice given.'

The NHS was therefore initially designed to offer high quality care to all regardless of social standing or ability to pay. Incidentally, the fundamental goals of the NHS remain the same. NHS England's stated goals are as follows: offer a comprehensive service to all with access based on clinical need rather than ability to pay whilst aspiring to highest standards of excellence and professionalism. However, in this time of austerity, several additional goals have been added pertaining to economic efficiency ideals such as value for money. Thus, the essential purpose of the NHS has not changed since its inception and as such any suggestion for change is likely to be opposed with large public opposition – with one recent poll concluding that 73% of the British population consider the NHS one of Britain's greatest achievements. Furthermore, it is imperative in the current economic climate that value for money is at the forefront of thinking when assessing the current system and when proposing alternatives. As such, this paper will propose no amendment to the current stated goals of the NHS.

I.III. Current Issues Facing the NHS

i. Aging population

The demographics of the UK population have changed drastically since the time of Bevan. The British has aged considerably and will continue to do so for the foreseeable future. The graph below shows the breakdown of the predictions for the age of the population in 2022 and in 2032 compared to its current state.

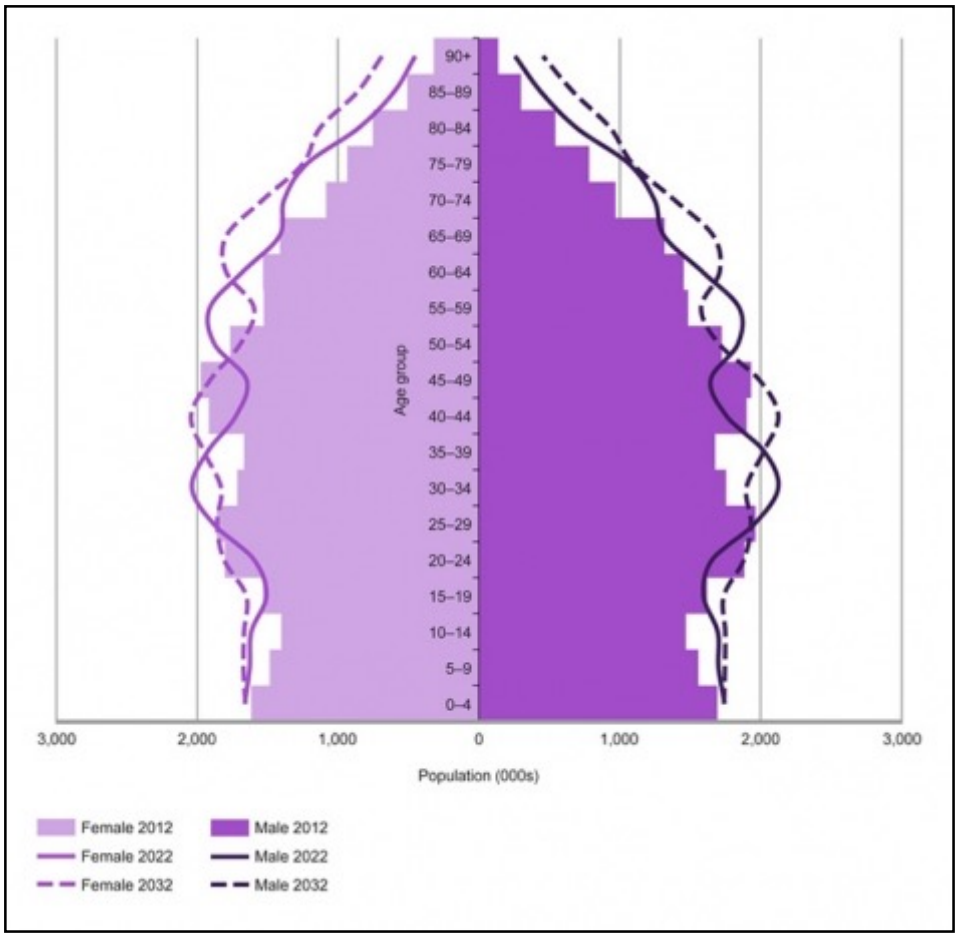

Figure 2: Age breakdown of the British population.[2]

This graph shows that the population will become increasingly top heavy in the years to come, with the proportion of the population aged 50 and above rising considerably. The most marked change will be with those aged 75 and above, with a significant growth in those aged 90 and older by 2032.

The challenges posed by this change in demographic are twofold. Firstly, the nature of healthcare provision will need to adapt in order to meet the needs of a more elderly patient base. Secondly, and more importantly for this paper, these changes present a major funding issue.

A report by McKinsey & Co. took data from across various NHS services and was able to identify this data with individual patients using these services. Each patient was then categorised by how at risk they were of incurring an emergency admission. The report found that the top 20% of people (i.e. those in the top three healthcare risk categories of very high, high and moderate) accounted for 70.7% of healthcare spending. This coupled with another finding that 97% of those aged 75 and over were present in these top risk categories highlights the magnitude of this problem. If the top 20% are by far the most expensive and the elderly are predominantly found in this category, then it follows that it must be

[2] The King's Fund. (2015). *Is the NHS being privatised?* [online]. Available at http://www.kingsfund.org.uk/projects/verdict/nhsbeingprivatised

costly to treat the elderly. Furthermore, whilst the proportion of elderly healthcare users are rising, the old age dependency ratio is also increasing as shown below.

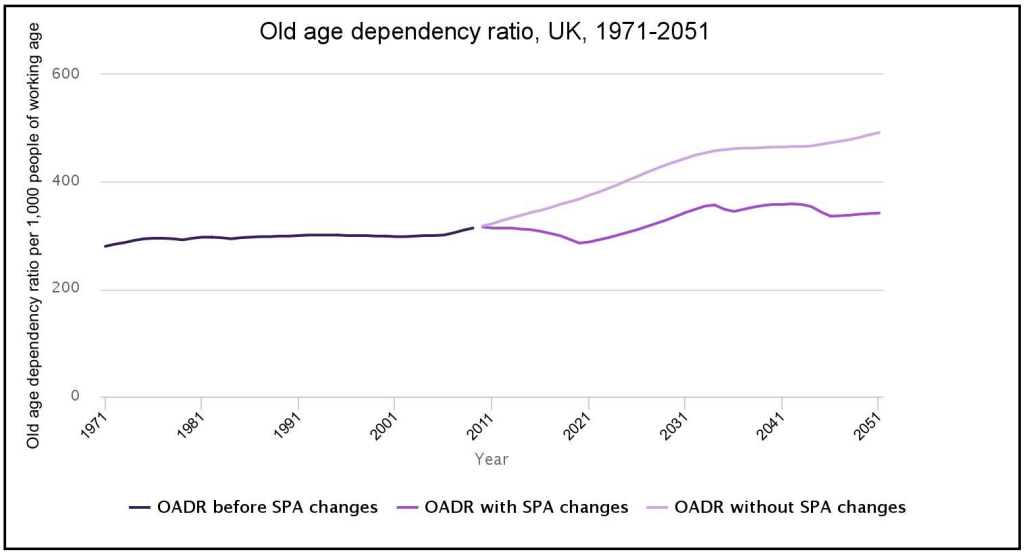

Figure 3: Graph depicting the old age dependency ratio in the United Kingdom.[2]

As a result, unless the system adapts either its methods of delivery or resolves the funding gap, the NHS is bound to struggle under this pressure. Thus, this paper will focus on suggesting ways in which the NHS can adapt in order to meet the challenges posed by the ageing demographic.

ii. Funding

In terms of GDP, a similar proportion is spent on healthcare in the UK as in Norway and slightly less than France, Germany and Japan. Data taken from the Organisation for Economic Co-operation and Development (OECD) in the graph below depicts this.

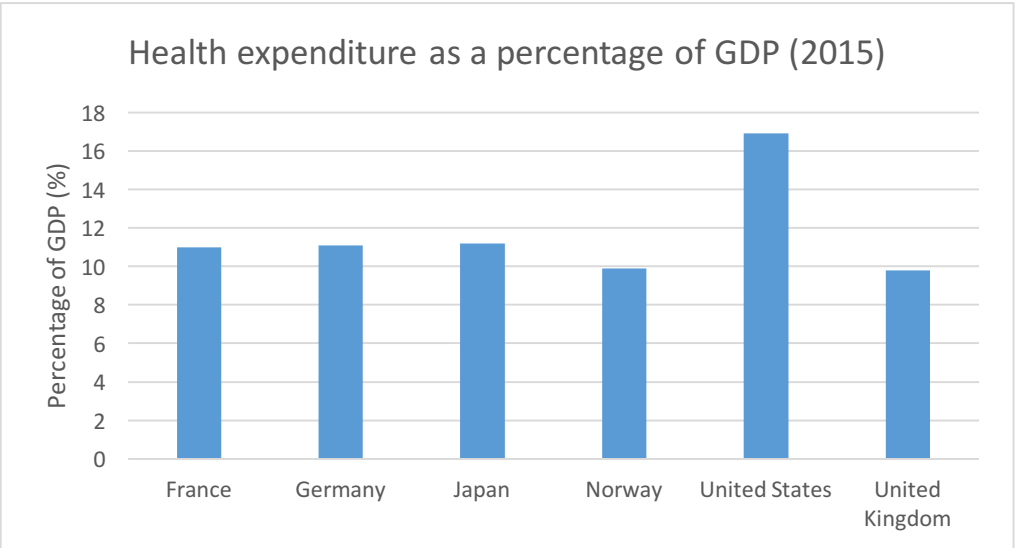

Figure 4: Health expenditure as a percentage of GDP in 2015.[3]

With the United States aside, at first glance funding levels seem broadly similar across the selected nations. However, it is important to note that a small difference in the percentage of a nation's GDP is a large value in real terms. For example, the United Kingdom is now ranked 13th out of the 15 original European Union (EU) states for health expenditure in terms of GDP. Furthermore, reports have concluded that if the UK were to spend the average amount that the original EU states spend on healthcare as a percentage of their GDP, then the NHS would receive an extra £43 billion annually. This would represent a 35.7% increase in funding. As such, it is submitted that the NHS is significantly underfunded when compared with other western nations. This economic deficit also manifests itself in the form of the relative understaffing of doctors within the NHS as depicted in the graph below.

Figure 5: Practising doctors per 1,000 of the population in 2013.[3]

The UK's number of practising doctor's per population is significantly below other western nations and considerably less than the OECD average. This is a symptom of the underfunded NHS shown above.

iii. Brexit

[3] OECD Health Statistics 2016.

The impact Brexit will have on the national economy and by association the NHS, is largely unknown due to the sheer number of variables. One area that may well be affected is cross-border cooperation. This may impact measures such as those taken to reduce the impact of anti-microbial resistance, since the UK will not be as integrated as before and will not be subject to EU directives and measures regarding these issues. Secondly, the size of the NHS staffing problem may increase. It is currently struggling to recruit and retain permanent staff – in 2014 there was a shortfall of 5.9%. Whilst the proportion of NHS staff from other EU states is relatively quite small (approximately 4.4% of the workforce as of 2016), it will assumingly make this staffing issue slightly worse.

I.IV. Previously Proposed Reforms

i. The Health and Social Care Act 2012

There is one reform which stands out among all others within both the recent and entire history of the NHS, simply on merit of the huge and sweeping structural scale it brought in its wake. Originally put forward in a Whitehall paper[4] by the then new Conservative Lib-Dem Coalition in July 2010; the proposed reform was immediately met with opposition by think tanks, politicians and the media.[5]

The anxiety around the Bill stemmed from concerns about the massive changes it proposed for NHS structure, the apparent gear towards creating a provider market in its emphasis upon increasing competition and in turn, fears of increased privatisation of the NHS.

The King's Fund characterised the reforms as designed to achieve two goals: to "devolve decision making" and to "extend the role of competition [and choice] within the NHS".[6] These general goals were to be achieved by, among other things, (i) major structural changes to the commissioning, authority and leadership frameworks of the NHS, and (ii) the establishment of an economic regulator (Monitor) to promote competition within the NHS.

Some of the particular measures the Whitehall paper put forward included that patients would be given autonomy of "choice of any provider, choice of consultant-led team, choice of GP practice and choice of treatment". This would entail the NHS having to outsource services to non-NHS (including some private) organisations to accommodate patient choice and competition.

In terms of structural reform, in the past the NHS had a funding and authority structure whereby the Department of Health descended to 10 Strategic Health Authorities (SHAs) covering responsibility across all regions of England. Below this, 151 Primary Care Trusts (PCTs) were administrative bodies responsible for commission of primary, secondary and community health services in yet smaller

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[4] Department of Health. (2010). *Equity and Excellence: Liberating the NHS*.
[5] Patrick *and Social Care Bill was a deep failure of Conservative politics*. The Guardian
[6] Ham, Baird, Gregory, Jabbal, Alderwick. (2015). *The NHS under the coalition government: Part One: NHS Reform*. The King's Fund.

areas. The Whitehall paper demanded abolishment of both SHAs and PCTs, with their responsibilities and commissioning commitments given to other smaller bodies, some created just for this task.
The controversy and opposition surrounding the Bill continued throughout its passage through parliament, so much so that in April 2011 the government had to pause passage of the Bill to open a 'listening exercise' where an 'NHS future forum' heard the views of medical professionals and staff, as well as the general public on the proposed reform. This future forum compiled its findings in a report which provided many criticisms of the Bill[7] which had impact on the final set of reforms. As a result of the report, the drive towards competition and creating a provider market was significantly toned down in the final Bill. The attempt to dilute some of the larger structural and organisational reforms of the Bill in response to the report apparently resulted in an increase in the complexity and nuance of the new NHS structure.

The report also highlighted the importance of tackling issues arising due to "the increasing numbers of frail older people"; many of whom now live with long-term, life affecting conditions such as, "arthritis, chronic heart and lung disease and dementia". This major issue was notably absent from the text of the original Whitehall reform paper.

Eventually, after taking into account the recommendations of the future forum report, and after another tumultuous period in parliament, the Health and Social Care Act was finally passed in 2012 and came into effect on 1 April 2013.

Pinning down the effects or measuring the impact of such far-reaching, recent reform, is hard. However, the King's Fund REF drew a number of conclusions regarding the effects of the reform:

- There has been a slightly greater outsourcing of services to non-NHS organisations, but as of 2015, this has not exceeded 10% of total NHS service spend[8]. In general, the effects of increasing choice and competition within the NHS has not been as beneficial as the government hoped.

- Increased structural complexity: Contrary to the original aims of the Whitehall paper, the structure of the NHS became more complex after the reform. The abolishment of SHAs and PCTs meant their responsibilities were spread across a number of smaller organisations (including some new bodies such as CCGs (Clinical Commissioning Groups)). The King's Fund writes that "A set of policies designed to streamline and simplify the organisation of the NHS ended up having the opposite effect".

- An undermining and fracturing of leadership: The structural changes which produced this complexity resulted in a weakening of the leadership structures of the NHS. In particular, the King's Fund highlighted the abolishment of SHAs as contributing to this. This has made it now much harder to make

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[7] NHS Future Forum. (2012). *Summary report on proposed changes to the NHS*.
[8] The King's Fund. (2015). *Is the NHS being privatised?* [online]. Available at http://www.kingsfund.org.uk/projects/verdict/nhsbeingprivatised

providers and commissioners in the same area coordinate and work together to make improvements.

Overall, the King's Fund concluded that "it seems likely that the massive organisational changes that resulted from the reforms contributed to widespread financial distress and failure to hit key targets for patient care", and described the reforms effects as "both damaging and distracting".

In general, the reform was not receptive to the actual upcoming problems facing the NHS from 2010 onwards. After the financial crash, money was already tight, yet the cost of embarking on such huge organisational reform was only ever going to exasperate this situation. Furthermore, the NHS was already facing service pressures in 2010 (for example, A&E and GPs appointments). The reform was directed towards general restructuring of the NHS, rather than tackling the issues had by particular services.

As highlighted by the future forum, the reform was not directed towards tackling growing health problems putting more and more strain on NHS services (problems for the most part caused by the ageing population and more people living with multiple complex long-term conditions). Structural reform was aimed at improving choice, competition and accountability of NHS authorities. Even *if* the reform had achieved any of these aims, it seems likely that the above problems would still remain.

Other political and logistical factors affecting the passage of the Bill and its implementation also contributed to its failure. The original 2010 Whitehall paper detailing the reform had clear and strong goals of increasing provider choice, competition and improving the accountability and commissioning links within the NHS. By the time the Bill passed in 2012, media pressure, political compromise and the scrutiny of the future forum had diluted many of the measures intended to achieve these goals.

The final Bill was a weak set of reforms, with many of the proposals either making too much change to important areas of the NHS, or too little to have a meaningful effect. (For example, local commissioning is now decided by "a range of people from different backgrounds, with GPs in a minority". This is in contrast to the original Whitehall paper aiming for all local commissioning being carried out by GPs and their practice teams).

ii. The Five Year Forward View 2014

This was an important document[9] outlining the goals and plan for development of the NHS over the following five years. As this plan is still relatively recent and currently being put into action, any assessment of it is inevitably going to be tentative. However (in contrast to the Health and Social Care Act), this reform is much more focused on the actual service and funding pressures facing the NHS,

[9] NHS England. (2014) *Five Year Forward View*.

rather than pushing more general aims such as increasing patient choice or creating a competitive market for providers.

For example, the document highlights the changing health demographics of the population the NHS now serves, noting that long-term health conditions (such as heart disease, diabetes or dementia) now take up "70% of the health service budget". Furthermore, the reform recognises that the effects of the global recession will be lingering for years to come, and the NHS must reconfigure itself to cope with the decrease in its spending growth over the following years.

As to the detail of this reform, there is uncertainty since the document itself is very brief (it reads in at just under 40 pages). Whilst there has already been a lot of follow up thinking on the document, there is still much room for ideas and innovation; the policy recommendations of this paper will contribute to this.

I.V. The issues addressed in this paper

i. Current issues of the NHS and their future impact

The NHS no longer serves the same population it was designed for. Rapidly changing health demographics over the last few decades has meant that the health needs, expectations and issues bearing down upon the NHS are now much different than they were in 1948. There are more older people than ever before, many now living with the multiple, complex long term conditions which are placing the most strain on the NHS. Additionally, the changing political and economic landscape of the UK in the wake of the 'Brexit' vote may have massively negative (or potentially beneficial) effects on future NHS development.

The Office for National Statistics has stated (going on figures from 2014) that "The number of people aged 75 and over is projected to rise by 89.3%, to 9.9 million, by mid-2039". Furthermore, they predict that more than 1 in 12 of the population will be aged 85 or over by this time[10]. It is widely agreed that the older population places a heavy burden on the NHS. Furthermore, rigorous analysis of patient-level data within the NHS has shown that the older population are responsible for a disproportionate fraction of health and social care spending. The same analysis has shown that older people are at significantly more risk of emergency admission than the younger population[11].

Long-term health conditions now take up as much as 70% of the health service budget (see above)**.** For the majority of such conditions, there is no sign of a near-future decrease in their prevalence. Even on a narrow definition of cardiovascular disease (as having had angina, heart or a stroke in the past), in

[10] Office for National Statistics. (2015). *National Population Projections: 2014-based Statistical Bulletin.*

[11] Bestsennyy, Kibasi, Richardson. (2013). *Understanding patients' needs and risk: A key to a better NHS*. McKinsey & Company

2010, there were 2,800,000 living with the condition in England. By 2020, it is estimated that this figure will increase to 3,376,996[12].

Diabetes is currently a massive strain on NHS resources, with Diabetes UK estimating that there are currently 4 million people living with the condition in the UK. By 2025, this figure is expected to rise to 5 million[13]. It is estimated that in 2013, there were over 800,000 people living with dementia in the UK. On a 'worst case' projection (assuming dementia prevalence growth increases at its current rate and there no major health interventions) it is forecasted that by 2025, 140,000 people will be living with dementia in the UK[14].

Brexit is another point of uncertainty for the future of the NHS. *Prima facie*, there are two reasons why, both related to how the referendum result will impact upon immigration. The case has been made that incoming immigrants to the UK place undue strain upon the NHS by using otherwise available resources. If immigration decreases in the future, it has been speculated that significant pressure might be taken off NHS resources and services by ceasing the influx of foreign users. The second, opposing thought, centres around the fact that the NHS is currently heavily reliant upon immigration to make up its workforce. If immigration decreases in the future, essential workers and skills may become scarce at a time when they are most needed.

The statistics paint a relatively clear picture of which argument rests on better foundations. Whilst the relevant data about who uses the NHS is simply not recorded to make a robust assessment of the cost of immigration[15], the Nuffield Trust estimated that in 2014, immigration placed £160 million in extra costs upon the NHS. However, even this estimate (according to the Nuffield Trust) is relatively small in contrast to the £1.4 billion of extra costs from other changes to the population in 2014 (mostly from the ageing population)[16].

In contrast, it is well known that immigrants to the UK contribute significantly to the NHS workforce. Whilst EU immigrants make up about 5% of both the NHS workforce and the English population; they account for about 10% of registered doctors in the NHS and 4% of registered nurses and midwifes. Whilst it is true that non-EU immigrants make up a larger proportion of the total NHS workforce, these statistics are still significant[17].

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[12] ERPHO. (2010). *Modelled estimates and projections of CVD for PCTs in England.* [online]. Available at http://www.apho.org.uk/resource/item.aspx?RID=37285

[13] Diabetes UK. (2015). *Diabetes UK Facts and Stats.* [online]. Available at https://www.diabetes.org.uk/Documents/Position%20statements/Diabetes%20UK%20Facts%20and%20Stats_Dec%202015.pdf

[14] Prince et al. (2014). *Dementia UK Update.* King's College London, LSE.

[15] The King's Fund. (2015). *What do we know about the impact of immigration on the NHS?.* [online]. Available at http://www.kingsfund.org.uk/projects/verdict/whatdoweknow-aboutimpactimmigrationnhs

[16] The Nuffield Trust. (2016). *The facts. EU immigration and pressure on the NHS*. [online]. Available at http://www.nuffieldtrust.org.uk/node/4685

[17] Full Fact. (2016). *EU immigration and NHS staff.* [online]. Available at https://fullfact.org/immigration/immigrationandnhsstaff/

The outcome of Brexit for immigration law is uncertain, as no definite plan has yet been put forward. Furthermore, the fact that the UK will be the first ever country to leave membership of the EU means no precedent is set for future lawmaking. However, the statistics above illustrate that currently the NHS is reliant upon EU immigration in order to run. Tightening of EU immigration law, or even the uncertainty surrounding what this may involve, could very well lead to staff shortages. Brexit may very likely present another major service and resource pressure that the NHS must face up to.

ii. The structure of the NHS and its importance

The NHS has already undergone significant structural change in recent years, due to the Health and Social Care Act of 2012 (see above). However, as previously discussed, this structural change did not have a smooth or efficient implementation, and it did not target the still abundant and present issues currently facing the NHS. The NHS still suffers from major structural defects in attempting to tackle these problems.

For example, research has already highlighted that the NHS must change the way it intra-communicates in providing services to patients. In particular, integrated care across many services is is seen as one change key to tackling the needs of the ageing population. Further and more innovative restructuring will be required than that of the Health and Social Care in order for the NHS to cope with and retain sustainability in face of the growing issues outlined above.

iii. The funding of the NHS and its importance

Historically, NHS funding has increased greatly with time[18], however; since the financial crisis this has changed significantly. Under the last labour government, public spending increased by an average real growth rate of 6.4% between 1996/97 and 2009/10[19]. Yet from 2009/10 to 2020/21, there will likely only be an average real annual increase in spending of 0.9%[20].

Lack of funding means it more important than ever that money is channelled through and sent to the right parts of the NHS. This decrease in real funding growth comes not just at a time of financial strain, but when there are increasing calls for more funding to combat particular health problems. For example, it is

[18] Harker, R. (2012). *NHS funding and expenditure.* [online] Available at http://www.nhshistory.net/parlymoney.pdf .
[19] Crawford, R and Emmerson, C. (2012). *NHS and social care funding: the outlook to 2021/22.* [online] Available at http://www.nuffieldtrust.org.uk/sites/files/nuffield/publication/120704nhssocialcare-fundingoutlook202122update2.pdf .
[20] King's Fund. (2016). Blog. *The NHS budget and how it has changed.* [online] Available at http://www.kingsfund.org.uk/projects/nhsinanutshell/nhsbudget .

increasingly being recognised that both the needs of the ageing population[21] and measures to tackle mental health[22] require greater financial support.

I.VI. Determining and evaluating a good healthcare system

i. Utilising the founding NHS principles as a standard

For assessment of the current NHS, and the effects our recommendations may have upon it, this paper will make use of Bevan's founding values as a base standard which must be satisfied. These principles are constraints upon how the NHS functions; that it meets the needs of everyone, that it be free at the point of delivery and that it be based on clinical need and not ability to pay.

Using these values makes sense for at least two reasons. Firstly, the NHS has adhered to these principles thus far and it is widely seen as one of the most successful healthcare organisations in the world. Secondly, proposed changes to the NHS that contradict or go against these values are usually met with wide scale opposition from politicians, doctors and the general public. This opposition was at least part of the reason for the troubled and elongated passage of the Health and Social Care Act 2012 through parliament.

ii. The NHS Constitution: an extension of these principles

Using just these founding principles is not enough to make a helpful assessment of the NHS however. Bevan's values are categorical; they stipulate the ends of the NHS but not the means. Pragmatic considerations are also necessary when assessing any healthcare system. A neat way of extending these founding values to include instrumental considerations is to look to the NHS Constitution published in 2014[23].

This constitution lists 7 principles of the NHS (see below), including pragmatic aims such as (6), "providing best value for taxpayer' money and the most effective, fair and sustainable use of finite resources". Additionally, these NHS Constitution principles are inclusive of the founding values outlined above.

The NHS Constitution Principles:

1. The NHS provides a comprehensive service, available to all.

2. Access to NHS services is based on clinical need, not on an individual's ability to pay.

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[21] Oliver, D et al. (2014). *Making our health and care systems fit for an ageing population*. The King's Fund.
[22] Campbell, D. (2016). *NHS mental health funding is still lagging behind, says report.* The Guardian
[23] Department of Health (2014) *The NHS Constitution for England.*

3. The NHS aspires to the highest standards of excellence and professionalism.

4. The patient will be at the heart of everything the NHS does.

5. The NHS works across organisational boundaries and in partnership with other organisations in the interest of patients, local communities and the wider population.

6. The NHS is committed to providing best value for taxpayer' money and the most effective, fair and sustainable use of finite resources.

7. The NHS is accountable to the public, communities and patients that it serves.

Another reason for using these principles is the NHS Constitution is also already applied in assessment of services through the Care Quality Commissions (CQC) definition of quality of care. Quality is a generic term used in various contexts to assess healthcare services; definitions of what quality is can vary considerably across different healthcare systems in different countries[24]. The CQCs definition of quality heavily reflects the NHS Constitution with certain measures directly linked to the principles above. According the the King's Fund, the CQC values safety, outcomes of care, patient-centred/experience (4), access (1), (2), value for money (6) and healthy, independent living.

iii. Privatisation

The right way of respecting and implementing the non-instrumental values of the NHS is a controversial and politicised issue, with much debate in recent years over whether the government has gone too far (especially with respect to Health and Social Care Act of 2012)[25]. In particular, increased reliance of the NHS on private organisations has been met with controversy[26].

Complete privatisation of the NHS as a service only available to those who can pay would completely contradict all three of Bevan's founding principles. However, it is not as clear cut whether less extreme measures which have been labelled 'privatisation' (such as outsourcing services to for-profit organisations) go directly against these principles. In general, where to draw the line is not as obvious as people think. For example, the King's Fund notes that "most GPs are

[24] Raleigh, V, Foot, C. (2010). *Getting the measure of quality: Opportunities and Challenges*. The King's Fund.
[25] Triggle, N. (2015). *NHS privatisation: Why the fuss?*. [online]. Available at http://www.bbc.co.uk/news/health31435842 .
[26] Richards, S. (2013). *The government is trying to privatise the NHS through back door regulations*. The Guardian.

not public employees but rather independent contractors to the NHS"[27]; though few people would claim that GPs contravene Bevan's founding values.

The political aversion to talk of privatisation may be rooted more in a 'slippery slope' argument that such small outsourcing could lead to wider privatisation contradicting the values of the NHS in future. Furthermore, since the Health and Social Care Act of 2012 (which many saw as such a 'slippery slope'), NHS spend on private organisations has increased "in some areas of care" [28]. However, as of 2015, only 10% of NHS health service spend is given to non-NHS services with the King's Fund taking the conclusion that, "there has been no wholesale privatisation of the NHS".

Since the Health and Social Care Act was both unsuccessful in achieving its aims and unpopular due to its measures which led to this increased outsourcing of services, it seems unlikely that more extreme legislation moving towards wider privatisation will come to pass. Fears of small measures leading to outright privatisation of the NHS in the future appear unjustified.

As a result, we take the view that if small private organisations can be utilised by the NHS to better achieve the aims and standards set out above, then the fact that such organisations are private is no objection to their use.

iv. Other general measures for assessing healthcare system

Due to the comparative nature of this paper, it is obviously not appropriate to use the above assessment framework to measure healthcare systems generally. Historically, healthcare systems around the world have developed for different reasons, and as a result do not share the same values upon which the NHS was founded. In assessing the healthcare systems of other countries', it is necessary to use more general and globally applicable indicators of effectiveness and efficiency.

Many of the countries whose healthcare systems we assess are members of the OECD. The OECD already compiles statistics on general healthcare indicators, such as infant mortality, life expectancy and potential years of life lost for each country. Hence, it is natural to make use of such figures to make direct comparisons of individual healthcare systems, as well as assess the effect of measures taken in different countries which may be applicable in the UK.

In later sections of this paper, such statistics will be explained and put to use in our analysis. However, we have always kept in mind the values and principles outlined above which underpin the current NHS. We have avoided recommendations which either directly contradict these values, or whose adoption would evoke public outcry due to widespread support of them.

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[27] The King's Fund. (2010). *Myth two: the reforms will lead to privatisation of the health service.* [online]. Available at http://www.kingsfund.org.uk/topics/nhs-reform/mythbusters/healthprivatisation

[28] The King's Fund. (2015). *Is the NHS being privatised?* [online]. Available at http://www.kingsfund.org.uk/projects/verdict/nhsbeingprivatised

II. STRUCTURE OF THE NHS

II.I. Overview

Following the enactment of the Health and Social Care Act 2012, the way in which the NHS in England was organised was changed radically. This paper will take the organisation of the NHS following these reforms as a starting point. The Department of Health (DoH) is the governmental department which sits at the top of the organisational structure and provides strategic leadership for public health, the NHS and social care in England. The DoH receives money from the Treasury, which it allocates to NHS England and funds other bodies such as Public Health England.

NHS England is the body which commissions primary health care (including GP services) and specialised services. One of the major changes following the 2012 Act was the introduction of clinical commissioning groups (CCGs). CCGs control around one third of the total NHS budget in England and are responsible for commissioning secondary and community care services for their local communities.

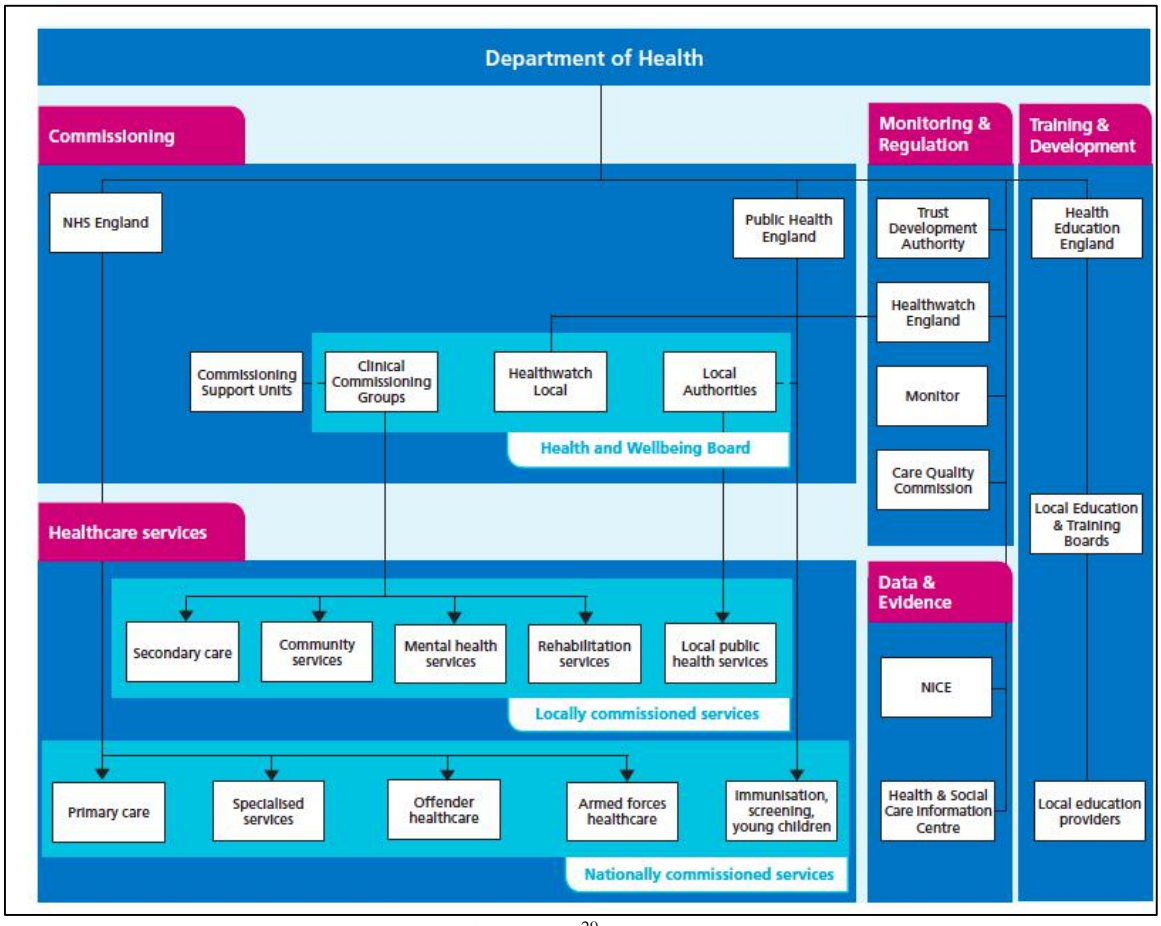

Figure 6: Overview structure of the NHS.[29]

[29] The NHS Confederation (2013). Challenging bureaucracy.

i. Complications with top-down managerial structure

The NHS has over one million workers, making it one of the largest workforces in the world. Despite the various reforms it has undergone over the years, the idea that the NHS should be a single national service has persisted. An alternative to this approach would be to recognise that the NHS is too large and complicated to be managed by the State as a single organisation. In England alone, there are 209 clinical commissioning groups, 154 acute trusts, 56 mental health thrusts, 37 community providers, 10 ambulance trusts, 7,875 GP practices, not to mention the bewildering array of arms length bodies that are responsible for regulation and training. The NHS Confederation in 2013 examined the burden put on the NHS by unnecessary bureaucracy coming from different national bodies[1]. The Confederation found that this burden is increased by national bodies having overlapping responsibilities for providers' performance, resulting in duplication of data requests. It is possible that the top down management structure of the NHS is inappropriate for the effective provision of health care. Aneurin Bevan once stated that "if a hospital bedpan is dropped…, the reverberations should be heard in Whitehall". The time has come for that view to be challenged and for the healthcare system to be moved away from politics and towards the local communities it is supposed to serve.

II.II. Decentralisation Model

Once it is acknowledged that the traditional "command and control" management[30] is one of the causes of the high levels of burdensome bureaucracy stifling the efficiency of the NHS, alternative organisational structures must be explored. The logic of decentralisation is based on the premise that smaller organisations, if properly structured, are inherently more agile and accountable than large organisations[3]. There is disagreement over how decentralisation should be defined and understood. In the context of this paper it will be used to mean some form of transfer of authority and power from a national to a more local level. It is preferable that decentralisation is not defined too explicitly in the context of this paper because part of the concept's appeal is its malleability.

i. CASE STUDY: Decentralisation in Spain

In many ways the Spanish healthcare system is similar to the NHS. The statutory Sistema Nacional de Salud (SNS) has universal coverage and is funded almost entirely by general taxation, which provides 94.07% of public healthcare resources.[31] The system is free at the point of delivery with the exception of prescriptions, which require a 40% co-payment from patients aged under 65. Although funded in a similar way to the NHS, the SNS has an entirely different structure. In 2002 health competences were devolved entirely to the regional level. The 17 resulting regional departments of health have primary

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30 Anderson D and Ackerman Anderson L (2016) http://changeleadersnetwork.com/free-resources/howcommand-and-control-as-a-change-leadership-style-causes transformational-change-efforts-to-fail

31 Saltman R, Bankauskaite V and Vrangbæk K (2007). Decentralization in health care. Maidenhead, Berkshire, England: McGraw Hill.

responsibility over health expenditure in their region. The national Ministry of Health and Social Policy retained only limited powers, but it is in charge of coordinating the SNS across the autonomous regions to guarantee the equitable functioning of the system across the country. The devolved healthcare systems are only accountable to regional parliaments, so there is a council comprised of the regional health ministers and the national health minister which strives to maintain a consensus on the policies and direction of the SNS as a whole.

Funding given to regional governments is not earmarked, so each regional government decides the health budget for the region (although the budget cannot fall below a set minimum). The funding is allocated on a per capita criterion and also takes into account factors such as population dispersion and the insularity of the territory. In 2003 the SNS Cohesion and Quality Act was enacted to balance the trade off between devolution and national coordination.

There is a worry that decentralisation can lead to variance in performance across a country. However, there is no evidence that inequalities in access to healthcare have increased in Spain due to decentralisation[32]. This is largely avoided by ensuring that the fiscal capacities of regions are equalised to provide a given minimum level of public services. If a decentralised system were introduced in the UK, it would have to be ensured that a minimum level of service was guaranteed at a national level.

When compared with other OECD countries, the SNS performs well across a number of global health indicators. In 2015, Spain spent 9.0% of its GDP on healthcare, while the UK spent 9.8% GDP. Out of the 34 countries analysed by the OECD, Spain ranks fifth in life expectancy at birth, fourth in female potential years of life lost (in the average for males) and under the average in infant mortality rates. Figure 7 shows that between 1993 and 2013 Spain experienced a significant 49.3% reduction in potential years of life lost. In the same period, the UK only experienced a 33.5% reduction. These figures show that decentralisation in Spain has not had a negative effect on the rate of reduction of potential years of life lost, which is an important indicator of amenable mortality. Both Spain and the UK are facing the difficulty of coping with the increased demands on healthcare due to an ageing population.[33] It is suggested that decentralisation could be one means of coping with the increasing demand on the NHS. A report from the National Office of Statistics found that the concentration of older people varies across the UK. For example, people aged over 50 make up 39% of the population of South West England but only 26% of the population of London.[34] Therefore, different regions of the UK are facing different demands on their services. Decentralisation would allow regional services greater autonomy to adapt to the unique needs of their local communities.

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[32] Vinuela J (2000) Fiscal decentralisation in Spain. Washington, DC, International Monetary
Fund.

[33] Global Agewatch Index 2015.

[34] Bayliss J and Sly F (2010). Ageing Across the UK, Office for National Statistics.

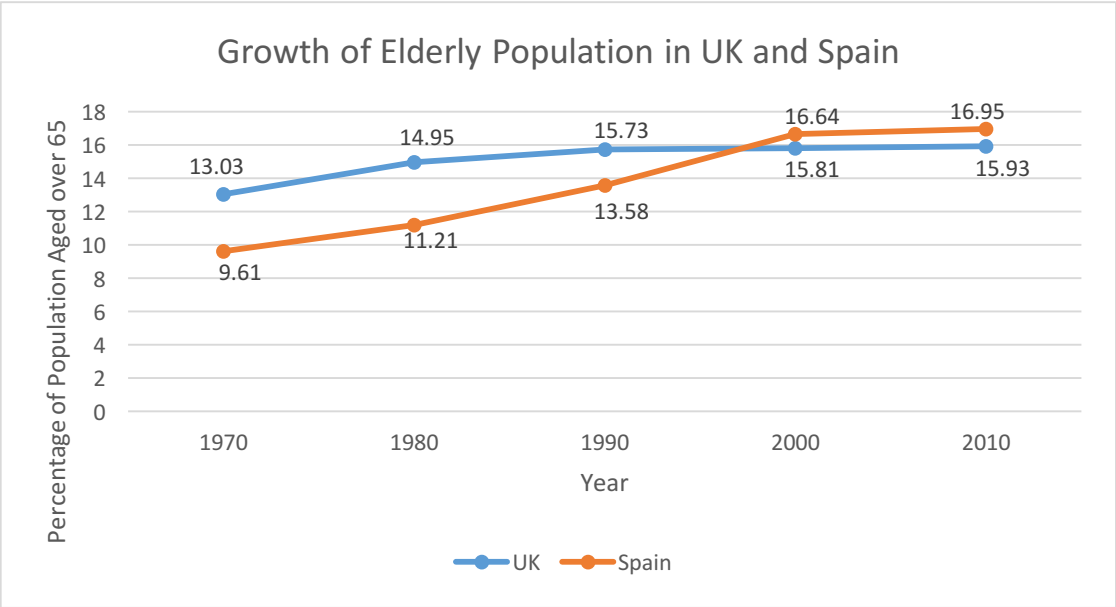

Figure 7: Growth of the elderly population in the UK and Spain.[33]

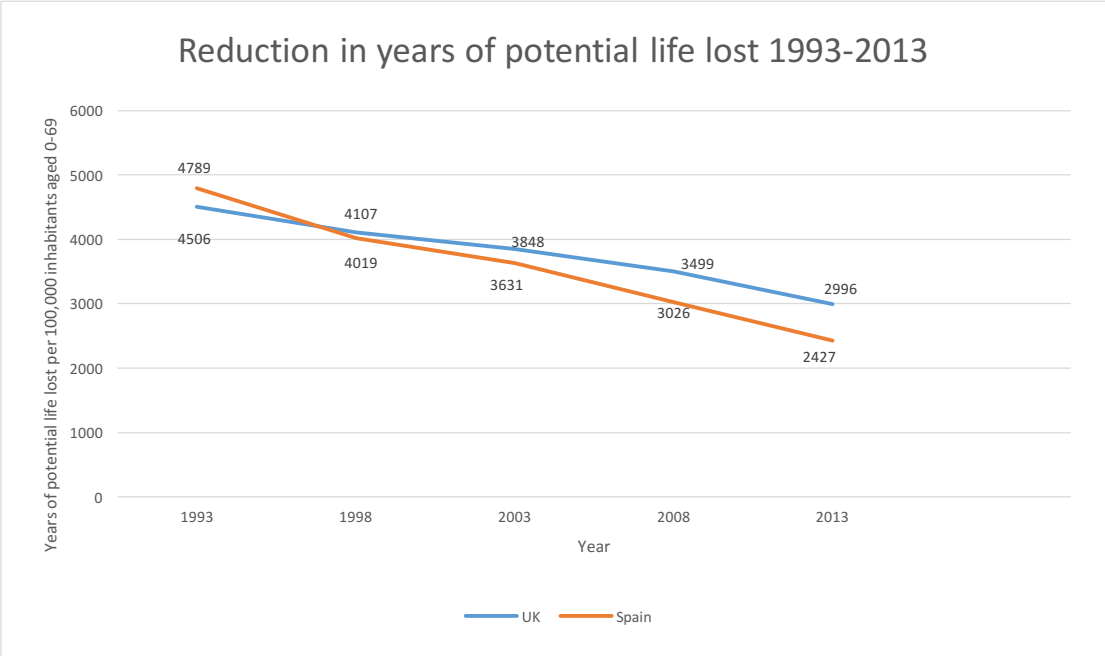

Figure 8: Reduction in years of potential life lost between 1993-2013 in the UK and Spain.[33]

Although the result of decentralisation in Spain has been largely positive, the same organisational model of the SNS would be unlikely to work as well in the context of the UK. One of the main reasons for autonomy being decentralised in the way that it was in Spain was political and historical. Spain is not, and never has been, a homogenous country. There are differences in language and culture across the regions. Following General Franco's attempts to repress this diverse range of national identities and centralise the state, it was imperative that after his death, the new government addressed the demands for autonomy coming

from the different regions. From 1979 to 1983, a new constitution was drafted, which created 17 autonomous communities.[35] When health competences were fully devolved in 2002, there was already an existing framework of autonomous local government which was equipped to assume responsibility.

ii. History of decentralisation in the NHS

When NHS Trusts were first set up in 1990, it was clear from the legislation that created them that they were intended to be self-governing independent bodies. This independence was short lived, as a huge number of agencies monitoring, regulating and setting policy for Trusts were also created. A report from the Institute of Directors estimated that a typical NHS Trust could be answerable to as many as 40 different agencies[36] in 2002.

Another attempt to devolve some power to a more local level was made in 2002 with the introduction of Foundation NHS Trusts[37] by the Labour Health Secretary Alan Milburn. The Foundation Trusts had a greater degree of financial and managerial autonomy from a standard NHS Trust. The intention behind their creation was to free NHS Trusts from central governmental control and decide how best to spend the Trust's income, taking into account the needs of the local community – this was supposed to achieve the government's promise of a "patient-led" NHS. The Foundation Trusts were not subject to direction from the Secretary of State for Health and were regulated by an independent organisation called Monitor. However, Gordon Brown blocked plans for the Foundation Trusts to be financially autonomous so the desired degree of independence was never achieved. By 2016 the distinction between Foundation Trusts and other NHS Trusts was widely regarded as eroded. Both types of Trust are now monitored by a combined body called NHS Improvement.

iii. Devo Manc: Decentralisation in the United Kingdom

In 2014 George Osborne gave his "northern powerhouse" speech, in which he announced he was willing to consider "serious devolution of powers and budgets" for any city willing to move to a new model of city government and an elected mayor. Following from this, a deal was announced in November 2014 between the government and the Greater Manchester Combined Authority (GMCA). In February 2015 a memorandum of understanding was signed by the GMCA (10 local authorities), the government, NHS England and 12 CCGs. Greater Manchester was given greater control over a range of powers, including transport, planning and housing as well as health and social care. The GMCA covers around 2.8 million residents. The crux of the deal was that, from April 2016, the GMCA would be given control of an integrated £6.2 billion budget for health and social care.

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[35] Vinuela J (2000) Fiscal decentralisation in Spain. Washington, DC, International Monetary Fund.
[36] Lea R and Mayo E (2002). The Mutual Health Service: How to Decentralise the NHS, Institute of Directors and New Economics Foundation.
[37] For an overview of Foundation NHS Trusts, see Department of Health (2005). A Short Guide to NHS Foundation Trusts.

It is too early to tell what the impact of this radical devolution of healthcare competences to the authority will be, but it is in principle desirable that healthcare decisions should be taken closer to the local populations that they affect. Following Osborne's speech, regions wanting to agree a devolution deal were invited to submit a formal proposal to the Treasury. By September 2015, 38 submissions had been received and are under consideration. It is therefore possible that the Greater Manchester deal ("Devo Manc") is just the first of many devolutions of competence over heath and social care.

II.III. Bismarck Model

i. CASE STUDY: Bismarck model in Germany

An alternative to the decentralisation model is the Bismarck model. In Germany, healthcare is universal (as it is in the UK). Health insurance is mandatory and is provided by competing, not for profit, nongovernmental health insurance funds called "sickness funds". There are statutory health insurance (SHI) schemes and also substitutive private health insurance (PHI) schemes, which can be purchased and may cover a more extensive range of services. Government plays little role in providing health care at a federal or state level. Healthcare is not entirely free at the point of delivery – there are co-payments for prescriptions, dental and ambulatory care.

Since 2011, there has been a fixed contribution rate to the insurance schemes set by the government. Employees or pensioners contribute 8.2% of their gross wages and employers or the pension fund add 7.3%. There is also federal spending funded by tax on benefits provided by SHI schemes like coverage for children.[38] In 2015, Germany spent 11.1% of its GDP on healthcare. An OECD report in 2011 found the German system to be efficient but expensive.[39] Although many providers of healthcare are private, there is a Federal Joint Committee which aims to ensure quality of care across the system. Hospitals have to publish results on a large number of indicators which can be used to compare the standard of care in hospitals across the country. The German healthcare system cannot truly be described as being decentralised in the same way as the Spanish system. It would be more accurate to describe it as the delegation of government power to corporatist institutions. The heavy privatisation of the system is not seen as negative, as it undoubtedly would be in the UK.

The German system ranks well across a number of indicators. Infant mortality was only 3.2 deaths per 1,000 live births in 2015, compared to 3.9 in the UK and the OECD average of 4.0 deaths. Germans had a life expectancy of 81.2 years in 2015, compared to the OECD average of 80.6. As Figure 9 shows, between 1993 and 2013 Germany experienced a reduction in years of potential life lost of 40.2%, whereas the UK only experienced a reduction of 33.5%. However, in 2013 Germany had 2,989 years of potential life lost per 100,000 inhabitants aged 0-69 and the UK had 2,996, thus the difference is a negligible 7 years.

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[38] The Commonwealth Fund (2014). International Profiles of Health Care Systems.
[39] OECD (2011). OECD Healthcare at a Glance 2011: OECD Indicators.

Although the German system ranks favourably in the global sphere, it is unlikely that the UK could practically adopt a similar system due to the high level of privatisation that would be required. Any attempts to privatise the NHS are incredibly unpopular with the public. Privatisation along the lines of the German model does not necessarily breach the founding principles of the NHS: (i) meets the needs of everyone; (ii) free at the point of delivery; (iii) based on clinical need, not ability to pay. Despite this, privatisation would be a radical reform that would not actually address the current problems facing the NHS, namely the increased demands created by an ageing population. A Bismarck model would also not necessarily free the NHS from burdensome bureaucracy, as no doubt a large number of government and arms length bodies would be set up to monitor and regulate any private service providers.

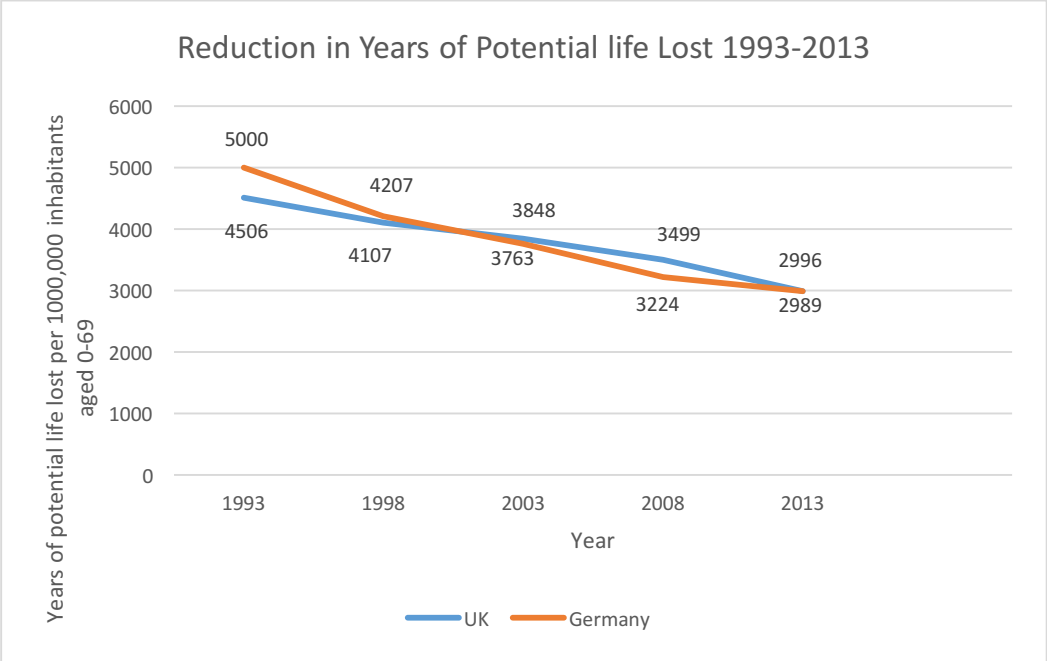

Figure 9: Reduction in years of potential life lost between 1993-2013 in the UK and Germany.[39]

II.IV. Specialisation Model

The specialisation model refers to specialised medical services being relocated to central hospitals for patients to utilise.

i. CASE STUDY: Specialisation model in Norway

One of the striking features of Norway's healthcare system is that it has a single national health insurer. All hospitals are publicly funded and are run by four Regional Health Authorities (RHA). These RHA's are overseen by the Ministry of Health and Care Services. Local authorities make decisions with regard to primary care; there are 428 municipalities which do so. A similar model can be

seen in Sweden where 21 county councils are responsible for primary care.[40] There are also some privately owned health clinics.

Medical treatment is free for those under the age of 16, pregnant and nursing women. Other residents of Norway are eligible for an exemption card which entitles them to free healthcare once they have paid approximately 2165 Norwegian krone. This is approximately £200.

This is the cap individuals must pay before they can receive a card although the cap is higher for those who require specialist services. One problem is that medical equipment is usually paid for by the patient which could mean that some lower income patients put off treatment due to pricing barriers. This system of capping is different to the NHS where healthcare is free at the point of consumption and there is no cap. It would not be suitable to implement a capping system similar to Norway's in the UK as this would contravene the principles of the NHS set out by health minister Aneurin Bevan in 1948. These principles were that the NHS meets the needs of everyone, is free at the pint of delivery and is based on clinical need, not ability to pay.

Most residents also have to pay full price for prescriptions because Norway imports the majority of medicines used for such prescriptions. Insurance coverage for medicine imported from outside the country is managed through the Norwegian Health Economics Administration (HELFO). In the UK there is a fixed charge of £8.40 for prescriptions which would make this system preferable for patients who would otherwise have to spend large amounts on prescriptions.

Out-of-pocket payments and provider's charges are set by the government, in contrast to countries such as Australia where only charges for prescription pharmaceuticals are set by the government. The government is also responsible for standards of care, approving drugs and negotiating with providers such as pharmaceutical firms. The additional level of control maintained by the government has resulted in fairer and easier access to healthcare as such charges remain the same regardless of the area.

There have been problems due to long waiting lists to see GP's and specialists. This is similar to the UK and Norway also has a system where a referral letter needs to be obtained from a GP before a specialist can be seen.

Comparing Norway's healthcare system to the UK's is viable because Norway is also under pressure due to the challenges created by an ageing population. In England, the population of 65-84 year olds has been forecast to increase by 39 percent from 2012 to 2032. Norway's Health Minister , Bent Høie has said that there would need to be an additional 44,000 health professionals over the next 25 years if these challenges are to be dealt with effectively without a reconfiguration of the current system. This is despite the fact that Norway had more than four physicians per 1,000 residents in 2012, versus just over three per 1,000 residents in the OECD based on data released by the Organization for Economic Co-operation and Development (OECD). The UK is also facing a shortage of staff,

[40] McAuley I (2014). Creating a better health system: lessons from Norway and Sweden.

which could be exacerbated depending on the terms of agreements related to working rights negotiated with the European Union. 5% of NHS trust staff hold EU nationality: 10% of doctors and 4% of nurses are EU nationals.[41] The number of nurses and midwives from the EU has been increasing while UK numbers have been decreasing, so uncertainty due to 'Brexit' could cause a staffing crisis in the future.

Since Norway and the UK have significant similarities, it seems viable to implement a policy of specialization. Specialization has resulted in patients seeing benefits in terms of higher quality service and fewer deaths. This is illustrated by the fact that the Norwegian system ranks well across several indicators. Life expectancy was 82.2 years compared to the OECD average of 80.6. The corresponding UK figure is 81.4.

The graph directly below shows the potential years of life lost per 100 000 in Norway in 2013 to be 2512.2. This is favourable when compared to 2995.8 years in the UK.

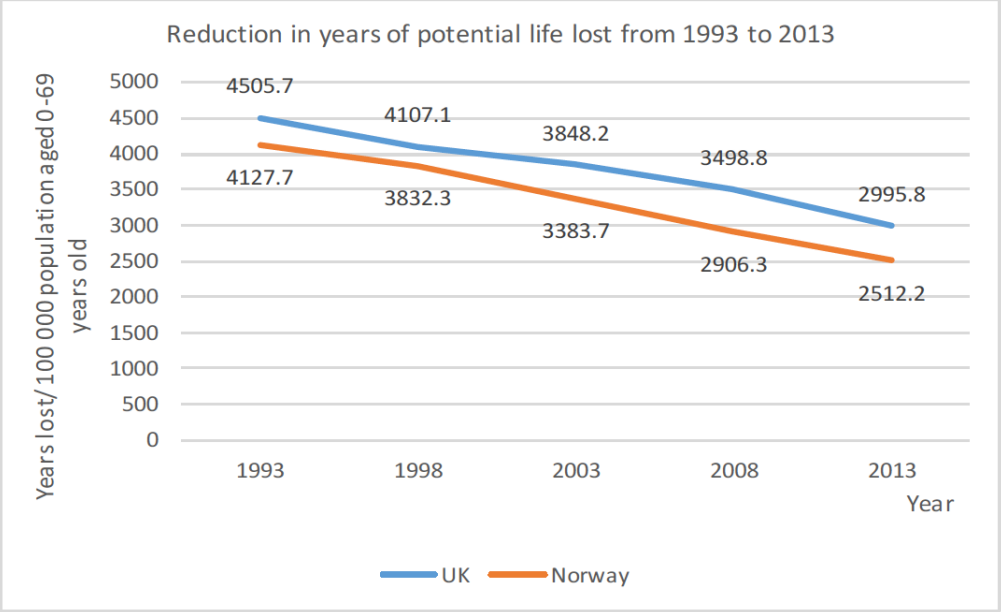

Figure 10: Reduction in years of potential life lost from 1993 to 2013 in Norway and the United Kingdom.[41]

[41] Dayan M (2016). Fact check: Migration and NHS staff. Nuffield Trust.

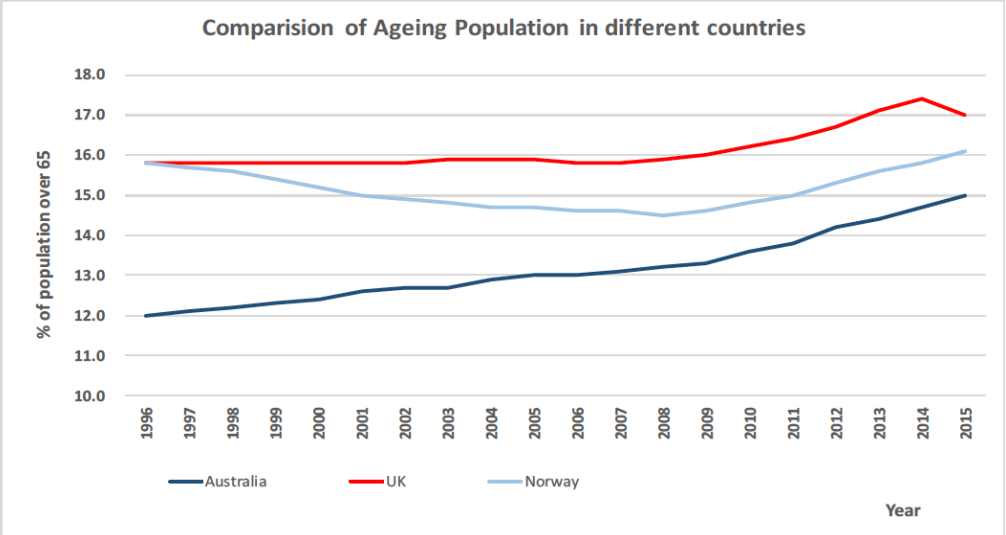

Figure 11: Comparison of ageing population rates in Australia, UK and Norway.[41]

II.V. Centralisation Model

i. CASE STUDY: Centralisation model in the United States

There is no centralized healthcare system. As a result, there is no central price setting mechanism. Since prices are set according to the market, healthcare is expensive because the system of private insurance has resulted in a high market price for health services. Despite competition, the high prices have resulted in low access to healthcare and quality is not as high as it should be. Such pricing barriers would go against the founding principles of the NHS. The massive variations in costs for the same services, depending on the region and who is paying has resulted in the accessibility of healthcare being compromised. These are significant problems and should be carefully considered when considering how best to reform the NHS.

According to the Commonwealth Fund International Health Policy Survey, in 2013 37% of people experienced cost related difficulties in accessing healthcare. In Australia it was 16%, 10% in Norway and 4% in the UK. Thus, it is clear that despite the flaws in the NHS, it is successful in making healthcare accessible to the public. Norway is also successful as it, as is the case in many European countries, has set limits on prices through a centralized healthcare system. Implementing the mechanism followed in the USA would be problematic because economic and geographic disparities in the UK would mean that regions such as Wales, London and the Midlands would see significant price variations. Therefore, this model does not appear to be suitable for the UK.

Due to these pricing barriers, an increasing number of Americans have health cover funded by the federal government through two programmes: Medicare (health insurance for those who are over 65) and Medicaid (this is jointly funded with the states and is for the poor).[42] One of the reasons for the US being an outlier on the chart of GDP per capita (Figure 2) spent on health can be

[42] Russell L (2014). Creating a better health system: lessons from the United States.

explained by the relationship between expenditure on insurance and healthcare costs as a proportion of GDP. The two have a positive correlation. Since the USA has a large expenditure on private insurance, its healthcare costs as a proportion of GDP is also large. Private health insurance as a percentage of total health funding is over 35%.

This emphasis on insurance has also led to a difference in public spending on healthcare during recessions. Since insurance is linked to employment, during a recession public spending in the USA will increase as those who lose jobs and health insurance must rely on it. This is in contrast to European countries where austerity measures mean that public spending will often fall during a recession.

Although the standard and speed of service in the UK can depend on the geographical location of the patient, the patient does not need to consider the cost of treatment when using medical services. In the USA, the system of insurance means that a plan has to be picked depending on how the person and the plan share the costs of care. A co-payment is the amount paid at the time of a medical service or when receiving medication and can deter treatment as several medical appointments can result in a high total co-pay amount. Patients can be turned away if they do not have the right type of insurance. This system has resulted in high costs and wastage of time. Since some people are not able to afford insurance their right to healthcare is compromised. These issues disproportionately affect those from minority backgrounds, people living in poverty and people of colour.[43]

Insurance has caused two problems in terms of treatment. "Massive liability insurance premiums means defensive medicine is practised," said Colquhoun[28] , but others say that some doctors err on the side of over-treating. The problems with the healthcare system means that although the US spends large amounts on healthcare, the benefit in terms of life
expectancy is significantly less than other countries. It is 78.8 in the USA compared to 81.4 in the UK.[44]

These problems are also clear when considering the indicator of years of potential life lost.

[43] National Economic and Social Rights Initiative. Healthcare in the United States.
[44] Organisation for Economic Cooperation and Development (OECD) Health Statistics 2016 and Global Agewatch Index 2015.

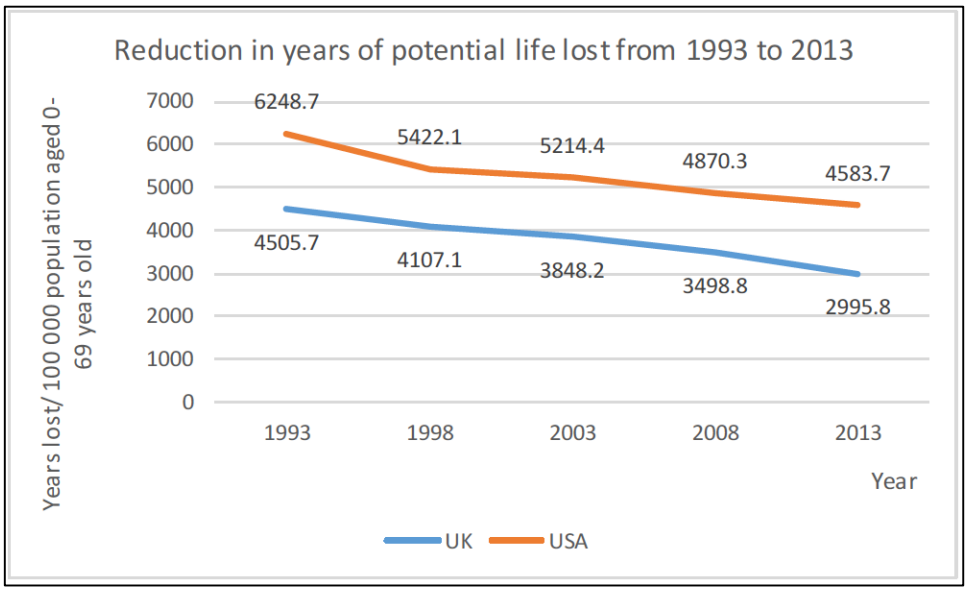

Figure 12: Reduction in years of potential life lost from 1993 to 2013 in the United Kingdom and the United States.[43]

Although the Patient Protection and Affordable Care Act (commonly called Obamacare) has helped to reduce these issues, there are still lingering problems and therefore this model would not be suitable for the NHS.

II.VI. Semi-privatisation Model

i. CASE STUDY: Semi-privatisation model in Australia

The Australian healthcare system comprises of both public and private providers. Public sector health services are provided by multiple levels of government: local, state, territory and the Australian government. Public hospitals are managed by state and territory governments. The Australian government's funding contribution includes a universal health insurance system, Medicare. The purpose of this system is to provide free or subsidized medical treatment. Although there is a public health insurer the government has encouraged private insurance as well. This is done by charging individuals with an income above a certain level 1% to 1.5% of income if they do not take out private insurance. This is to encourage individuals who are perceived as being able to afford private insurance to not resort to the public health system. Many make use of Medicare while also having some form of private insurance.[45] According to the Private Health Insurance Administration Council, at June 2013, 10.8 million Australians (47% of the population) had some form of private hospital cover and 12.7 million (55%) had some form of general treatment cover. Costs which are not covered by Medicare are paid by the patient or through private insurance. The Medicare system is based mostly on private practice and paying doctors for the service provided. (This is different to the UK where a doctor is paid a fixed amount to treat a group of patients. The level of care provided is not considered.)

[45] Australian Institute of Health and Welfare, 2014.

In Australia there are concerns that this has led to unnecessary visits to the doctor, for example, to receive test results when it would be more efficient in terms of cost and time to do this over the phone or through meeting a nurse. The UK has seen complaints in the opposite direction where there is an under-provision of care. It seems that a balance between the two systems is necessary.

One measure of comparing the success of the healthcare system is comparing life expectancy. With an average life expectancy of 82.4 years, Australia fares better than the OECD average of 81.3 years.[46] Years of potential life lost is also good compared to other countries.

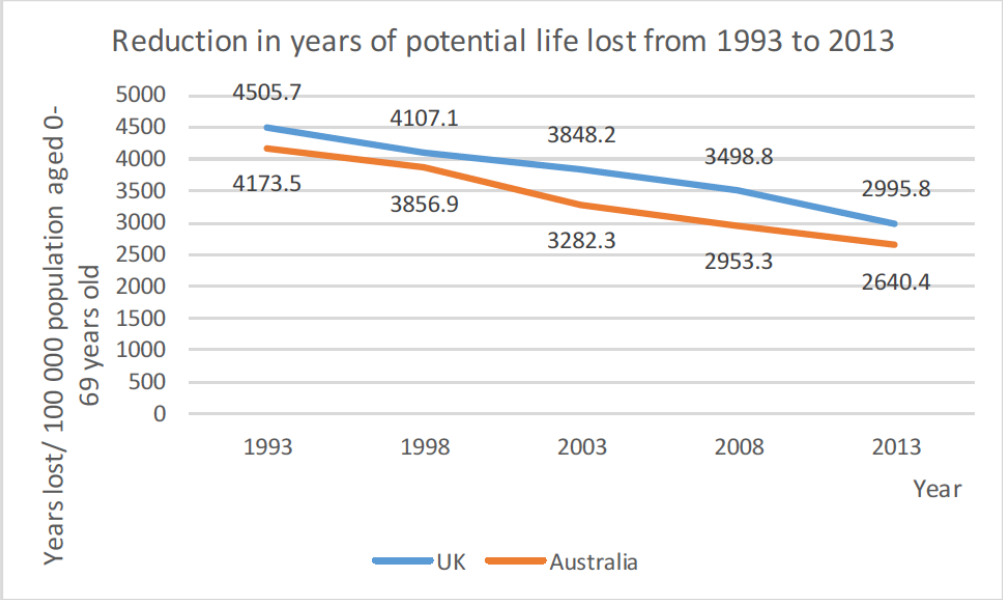

Figure 13: Reduction in years of potential life lost from 1993 to 2013 in the United Kingdom and Australia.[45]

Given that the NHS provides free treatment and focuses on accessibility of healthcare, a semi-private system does not seem to be suitable, although there are positive aspects. High out-of-pocket costs mean that some patients delay or defer treatment. In countries such as Norway and Sweden out-of-pocket costs and provider's charges are set by the government which means that charges can be limited. Another problem with the Australian healthcare system is that rural areas have less access to affordable healthcare; if such a system were to be implemented in the UK, this would be a problem since the rural population as a proportion of the total population is 17%.

II.VII. Conclusions and Policy Recommendations

- The healthcare needs of the UK are too varied and complicated to be served by a single health service.
- Some form of decentralisation could free the NHS from unnecessary burdensome bureaucracy. Decentralisation would also allow decisions to be taken by clinicians closer to the local populations they serve, meaning that

[46] Duckett S (2014). Australian healthcare: where do we stand internationally?

healthcare services could be tailored to tackle the varied problems facing different regions of the UK.

- Decentralisation along the lines of the Devo Manc deal is promising and should be encouraged. Alternatively, NHS Foundation Trusts should be reinvented and given the financial autonomy that was originally planned for them, with less direct involvement from central government.
- Specialization along the line of the Norwegian system would work well alongside decentralization and would help to provide high quality service and care.
- A Bismarck model healthcare system along the line of the German system would be inappropriate in the UK as privatisation is heavily stigmatised and unlikely to be a practical way to reform the NHS.
- Similarly, due to the varying degrees of privatization involved in the US and Australian healthcare systems, and due to other problems outlined above, these systems do not seem to be appropriate means of reforming the NHS.

III. FUNDING OF THE NHS

III.I. Overview

This part of our paper will discuss the financial challenges currently facing the NHS in England, and propose a number of policies that would, if implemented, allow the healthcare service to better deal with both its short-term and long-term challenges.

In the following subsection, we will discuss the progress that the NHS has made towards meeting the ambitious efficiency targets set by the *Five Year Forward View*[47]. We will argue that, in the absence of substantial increases in funding, it is unreasonable to believe that the NHS will be able to meet these targets while maintaining a high quality of service and investing in the infrastructural reforms needed in order for the it to meet rising demand in the long run. In the subsequent subsection, we will discuss long-term solutions to the NHS' efficiency problem. Looking for best practices developed by other industrialized countries also expected to experience substantial increases in demand for healthcare due to demographic changes, we will argue that the NHS should i) create a new set of tools to control the costs of prescription drugs, ii) implement Disease Management Programs (DMPs) designed to improve the care of patients with multiple chronic conditions, and iii) develop new models of community-based care.

III.II. Closing the Gap: NHS Finances to 2020

The NHS in England currently faces unprecedented financial challenges resulting from increasing demand for services, rising costs of healthcare, and years of funding constraints. The provider sector ended the year of 2015/16 with a deficit of £2.45 billion - the largest deficit in its history[48]. Research suggests, however, that this figure is not representative of the real state of the sector's finances; once one-off moves are taken into account, NHS providers are estimated to face an underlying deficit between £3 and £3.7 billion[49]. Figure 14 shows the percentage of NHS providers, trusts and foundation trusts, that ended the year in deficit for the past seven years. Although the commissioner sector has managed to avoid incurring deficit by accessing a number of non-recurrent funds and repeatedly

[47] NHS England (2014) *NHS Five Year Forward View*.
[48] Dunn, McKenna, and Murray (2016) *Deficits in the NHS 2016*. The King's Fund.
[49] Estimates come from Dunn, McKenna, and Murray (2016) and NHS England (2014), respectively.

reducing the NHS tariff, it is also expected to come under increasing financial pressure in the coming years.

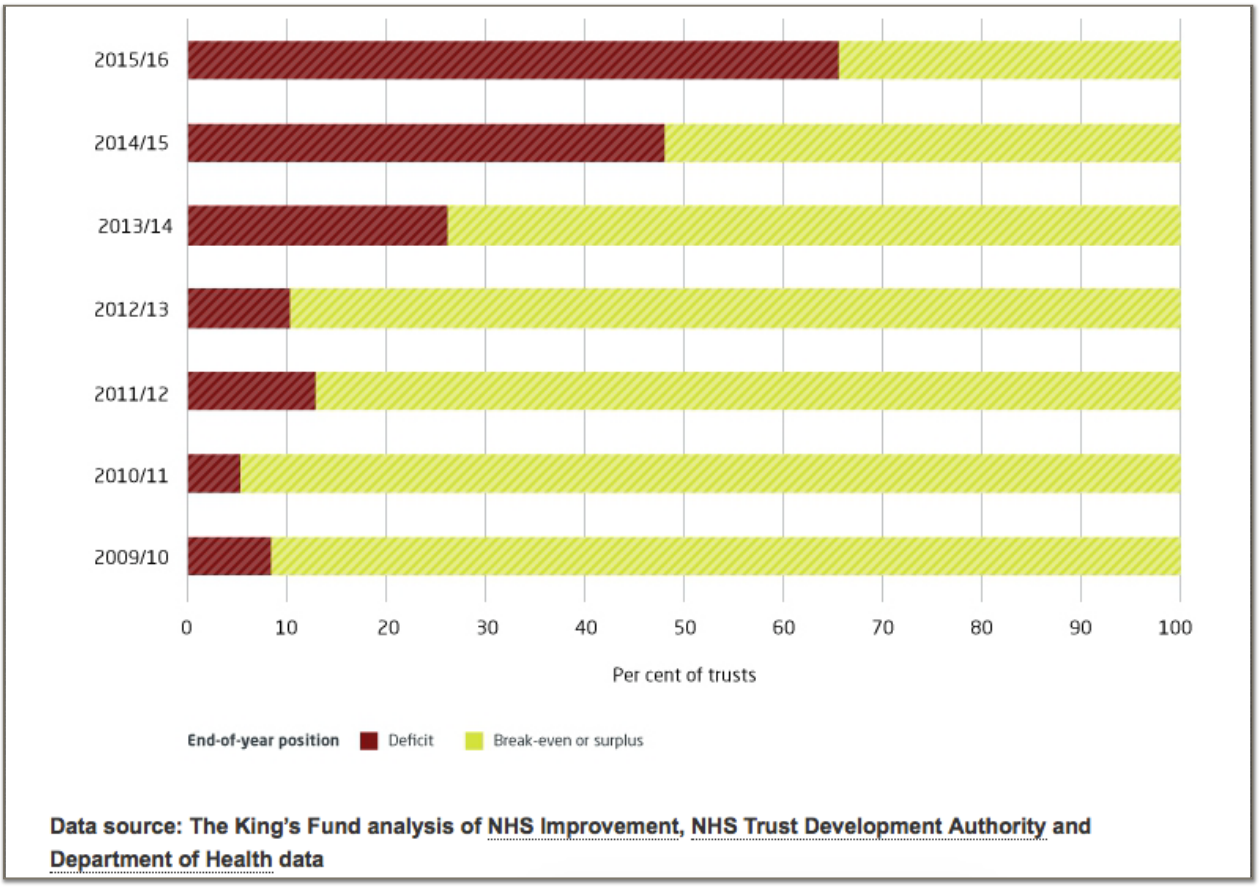

Figure 14: Percentage of Trusts and Foundation Trusts in deficit, from 2009/10 to 2015/16.[47]

It is against this background that we must evaluate the efficiency targets set by the *Five Year Forward View* (*FYFV*). One of the central aims of this set of policies was to determine how NHS England would respond to the fact that growing demand for increasingly costly health services would, other things being equal, create a £30 billion funding gap by 2020/21. The proposed solution was to save £22 billion by 2020/21, which would be complemented by an £8 billion funding increase in real terms. These ambitious savings were to be mostly accomplished through efficiency gains, constituting what has come to be known as the "£22 billion efficiency challenge".

The most important policy tool used to drive efficiency gains in the provider sector is a regime of progressive reduction of the NHS tariff, which determines the prices paid to hospitals and other service providers for thousands of treatments offered by the healthcare system. Reducing the tariff creates strong incentives for providers to cut costs and increase productivity so as to stay within budget despite a falling income-per-treatment. This policy is not a creation of the *FYFV*; it has been one of the defining features of the NHS financial history of this decade, implemented so as to compensate for increasingly constrained funding. From 2010/11, tariff cuts effectively reduced providers' incomes by an average of 1.6% a year - once NHS-specific is taken into account, this figure

represents a real terms cut of 3.8% a year[50]. Figure 15, shows how tariff unit prices and provider unit costs have change since 2009/10, and how they are expected to change until the 2020 deadline set by the FYFV.

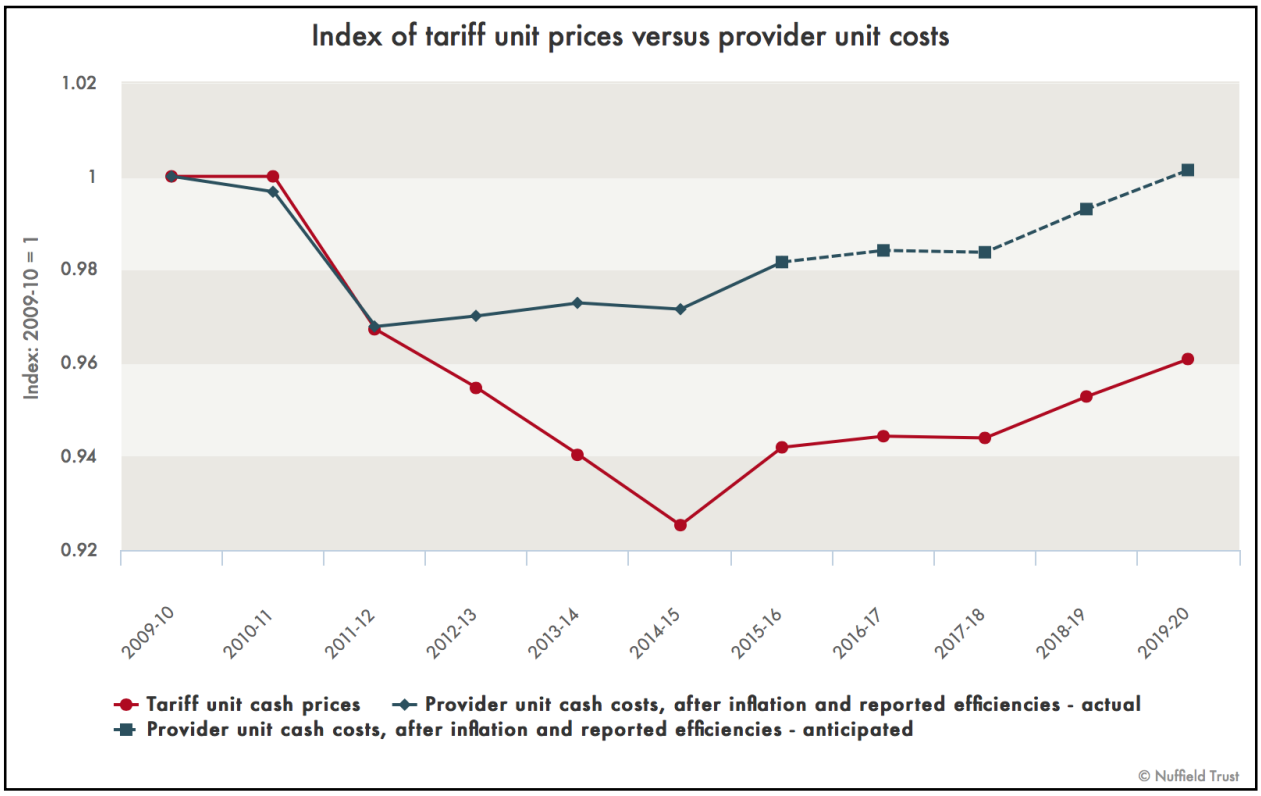

Figure 15: Graph depicting index of tariff unit prices verses provider costs, actual and expected, fro the 2009/10 to 2019/20 period.

The policy enjoyed some success until 2013/14, when the rate at which providers cut costs started to fall behind that of tariff reductions. It is estimated that, by 2011/12, providers needed to reduce operating costs by an average of 4% every year in order to keep up with tariff cuts. The actual rate at which providers have been able to make efficiency gains, however, has been closer to 2% in recent years. The difference between the rate at which providers have managed to cut costs and that at which their income-per-treatment has been reduced resulted in a deficit which emerged in 2013/14, and which is estimated to have more than doubled every year since, leading up to last year's unprecedented £2.45 billion deficit. It was at the beginning of the 2014/15 fiscal year, however, that the *FYFV* set the ambitious £22 billion savings target for 2020/21, most of which are expected to come efficiency savings going above and beyond what NHS providers have been able to produce in the past few years.

As the graph above shows, growing deficits across the provider sector forced policy makers to reduce the rate of reduction of the tariff. In 2015/16, providers saw the first increase in the NHS tariff in the decade - a modest increase of 1%, which is not sufficient to compensate for inflation in provider costs, but which is

[50] Gainsbury S (2016) *Feeling the crunch: NHS finances to 2020*. Nuffield Trust.

enough to substantially reduce the efficiency gains necessary for the provider deficit to stop growing increasingly large. This may seem like good news for the provider sector, and it did reduce the pressure on providers to make efficiency gains at any costs, but it does not represent a substantial improvement in the health of NHS finances. That is because of the nature of the commissioner-provider dynamics: any increases in the tariff represent a reduction of the purchasing power of commissioners, NHS England and CCGs, who pay treatments provided by hospitals and other service providers. While progressive tariff reductions have increased the purchasing power of the commissioner sector by an average of 4.5% during the period between 2009/10 and 2015/16, the new tariff policy is expected to reduce this growth to a rate of 2.4% annual growth from 2016/17 to 2020/21. The financial burden has, thus, been shifted towards commissioners, who have only avoided incurring deficit in recent years due to one-off moves that do not represent a sustainable solution to the financial challenges ahead.

We can now better appreciate the scale of the financial challenge faced by the NHS. The healthcare system is expected to close the 2020 funding gap by producing £22 billion in savings, which are supposed to be produced by a healthcare system that appears to have hit the ceiling of annual efficiency gains, faces demands which are expected to continuously grow during the period, and lacks the funds necessary for investing in infrastructural reforms aimed at reducing demand for expensive, acute health services.

We believe that the idea that the NHS will be able to meet this challenge while meeting demand for high quality health services is more than optimistic; it is simply unrealistic. Using financial tools such as tariff reductions to force providers to cut costs faster than they've been able to do so far would force the sector to fail to meet demand for service, a consequence that would be felt more acutely in some parts of England than others. Attempts to produce the drastic reductions in demand that would be necessary for the current rate of savings to catch up with the funding gap in such a short time frame would not amount to more than a series of ad-hoc service shut downs which would compromise the ability of part of the population to access quality healthcare. It is evident, therefore, that we must recognize that the NHS is very unlikely to meet the £22 billion efficiency challenge. We find that the healthcare system will have to choose between two broad options: the NHS will either have to abandon its core ideal, that of providing high quality healthcare to all that is free at the point of use, or it will have to secure access to greater government funding. Given that the British public is highly committed to the former, it seems that the NHS will inevitably have to resort to the latter, and seek a compromise with a Tory government that has shown itself to be unwilling to increase investment in healthcare.

III.III. Increasing NHS Efficiency Past 2020

While we believe that the NHS will require a substantial increase in investment in order to overcome its current financial challenges, it will only be able to cope with increases in demand and cost of healthcare if it implements a series of long-term strategies for increasing efficiency and productivity. Fortunately, the UK is not the first country to come across these strategic challenges; a number of industrialized nations are also developing healthcare policies aimed at better serving populations that live longer and have more varied and complex healthcare needs than ever before. This section of the paper looks at i) the German copayment model for prescription drugs, ii) the German and American implementation of Disease Management Programs, and iii) options for alternative care inspired by the health reforms taking place in Japan.

III.IV. Cost-control for prescription drugs

Most prescriptions in the UK are NHS prescriptions. While patients do not pay for prescriptions in Wales, Scotland and Northern Ireland, they are subject to a fee of £8.40[51] per item in England (exemptions are granted on grounds of age, chronic illness, pregnancy or employment status[52]). As a result, the NHS is liable to bear all costs of medicines administered in hospitals and most of those prescribed in the community.

Total NHS England drug spending stood at £15.5 billion in 2015[53], a figure 7.8% higher than in 2014 and 19.4% more than in 2010[54]. £9.27 billion of these correspond to the cost of prescriptions dispensed in the community. Moreover, according to *The Health Survey for England 2013*[55], almost half of all adults in the UK take prescription drugs, most commonly cholesterol medication, drugs to lower blood pressure and painkillers[56]. Since demand for medication is expected to increase as the elderly population grows and new treatments are developed, controlling the costs of prescription drugs is a major source of efficiency gains in the healthcare system.

The experience the UK has had with controlling the costs of prescription drugs is limited to two key measures, implemented from 2005/6 onwards. One of these was a gradual move away from proprietary drugs to cheaper, generic equivalents once their patents expired. Another was the creation of the Pharmaceutical Price Regulation Scheme, which regulates the price of generic drugs. At the same time, however, the amount the NHS pays for some common drugs has nearly doubled

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[51] As of 1 April 2016

[52] Main exemptions from the fee is: medicines administered in hospitals or by GPs; prescribed contraceptives; treatments administered for sexually transmitted diseases, tuberculosis, mental disorders or those under a supervised community treatment order; for patients under 16 or over 60; patients between 16-18 and in full time education; pregnant women and new mothers; war pensioners; NHS inpatients; on income support etc.

[53] Debbie Andalo (2015), *NHS Drug Spending in 2015*, The Pharmaceutical Journal

[54] *Prescribing Costs in Hospital and the Community* (2015), Health and Social Care Information Centre

[55] *Health Survey for England – 2013* (2014), Health and Social Care Information Centre

[56] These are more common among the elderly: Maher, Hanlon & Hajjar, *Clinical Consequences of Polypharmacy in Elderly* (2014), HHS

over the last decade. An example is paracetamol, which cost NHS England over £87 billion in 2015. The NHS pays £3.83 per prescription, while the medicine is sold generically in supermarkets for £0.25.

i. The German Reference Pricing System

Germany has seen the same rise in demand for pharmaceuticals with the ageing of its population. Germany's demographics have started altering much earlier than the UK's, and therefore has a slightly older population at the moment. This means the German system is already dealing with what the UK is only expecting. Germany has a median age of 46.1, while the UK's is only 40.4. Close to 13.6% of the Germany population is aged between 55 and 64, while only 11.6 of Britons are placed in that age group. Moreover, Germany has 21.1% of its population in the 65+ age group, while the UK's 65+ comprise as of 2015 17.7% of the total population.

Germany has been successful not only in keeping pharmaceutical expenditure in check, but actually lowering it consistently, from 15.6% of the healthcare budget in 1992 to 14.5% in 2014[57].

The German reference pricing system was introduced in 1989 to enjoy immediate success. Medicine prices dropped between 10%-26% in the following years. Under this system, similar drugs are grouped into therapeutic classes based on their ingredients and function. Patients are reimbursed for any drug from each therapeutic class at a fixed price. This means that if doctors prescribe more expensive drugs, or patients opt for the more expensive option, the additional cost must be paid by the patients. This does not prevent doctors from prescribing more expensive medicines, nor patients from using them, but creates a strong incentive for choosing cheaper treatment options. Doctors are instructed to explain additional benefits of the more expensive drugs they prescribe, and pharmacists ask patients again if they are willing to pay for proprietary drugs whenever generic equivalents are available. According to the Ministry of Health, 90% of patients prefer generic alternatives which are as effective as their proprietary versions, whilst 70% still prefer generic alternatives which are slightly less effective than their proprietary versions.

ii. Application to the UK

These incentives have the benefit of providing for clear thresholds beyond which the NHS would not have to spend, and promise to stabilize drug spending in the face of increasing demand. Likewise, the measure creates a culture of more careful use, reducing pharmaceutical waste.

Although the price referencing system would help stabilise drug expenditures, the core values of the NHS limit the extent to which policy makers can depart from the 'free at the point of use' principle. However, prescription drugs have always had a special treatment within the NHS. It is to be remembered that even at this

[57] Compare these figures with those in section 2.2 on NHS England drug spending

time, there is a flat rate of £8.40 for any prescribed item. It is only due to the many exceptions from this fee that that the NHS gets to pay for drugs from its own pockets. It is problematic, then, that – for example – once over the age of 65, one has the chance to procure prescription medicine free of charge, whatever the drug's cost to the system, when cheaper and equally effective alternatives are on offer. A system of reference pricing does not effectively make patients pay for the drugs they need, but changes the context in which they make their choice as to which of the many alternatives is to be dispensed.

If the system, applied uniformly is not politically satisfactory for an NHS that does not wish to move away every slightly from its founding principles, alterations can be made. Exceptions to the reference-pricing system, such as the ones already in place, can be implemented, with the most vulnerable being protected from paying for the drugs they have a real need for. In the context of decentralization, reference prices can be established by taking into context local factors, such as the median age, median salary or prevalence of certain types of illnesses.

III.V. Disease-management programs

More than 15.4m[58] people in the UK suffer at least one chronic illness. Among those older than 65, the percentage of people suffering from two or more long-term conditions can reach[59] 93% in 45-64 year olds and 98% in persons aged 65 and over.[60]. Typical causes of chronic illness are age and lifestyle factors, such as smoking. In England, chronic illnesses are responsible for 80% of GP visits[61] and the majority of drug prescriptions. A staggering 70% of NHS England's budget is spent on treating such conditions. Its link to age is fundamental. In the UK, the 65+ age group is expected to rise by another 16 million by 2035. Given the statistics on chronic illness, such conditions and their episodes of acute exacerbation will only become more prevalent, draining the NHS's resources.

While this is an inevitable phenomenon, hospital time can be kept in check despite it. At the moment, chronic illness is the leading cause of death in England and few coherent measures are in place to improve chronic patients' lives[62]. The consequence is a higher risk of complications, which result in more emergencies, GP visits, hospital time and drug prescriptions. These, while not severely problematic at the moment, would represent an unwelcome strain on the NHS's budget in the years of demographic change to come.

<u>i. CASE STUDY: Germany</u>

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[58] Goodwin, Curry, Naylor, Ross, Duldig, *Managing People with Long-term Conditions* (2010), The King's Fund

[59] *Idem*

[60] Figures from survey carried out in Canada, and therefore speculatory with respect to the UK; *Fortin et al* (2005)

[61] *Chronic Disease Management: a compendium of information* (2004), Department of Health

[62] Astin, Closs, Lascelles, *A 21st Century approach to chronic disease management in the United Kingdom: implications for nurse education* (2005),

The German health system's experience shows that healthcare costs can be kept in check through a comprehensive program aiming to help patients manage their chronic diseases.

Germany has in place disease management programs for patients with heart disease, diabetes and other common chronic conditions. The programs operate on the basis on enrollment by patients, at a doctor's recommendation. Those that do enroll must perform regular checkups and adhere to treatment recommendations. Doctors who that part in the programs educate patients about self-care and lifestyle choices that help manage their health conditions. There are incentives for both doctors and patients to participate: health improvements for patients and bonuses for doctors based on the number of patients they enroll.

The programs were highly successful. By 2012, over 15% of the German population was enrolled in one or more of the programs, and results are encouraging. The occurrence of exacerbations due to diabetes and COPD has decreased by 0.9%[63]. The diabetes program reduced the overall cost of care by 13 percent, while increasing survival rates[64]. Overall inpatient costs have dropped by 25% in the first 6 years of implementation[65].

ii. CASE STUDY: United States

The US has also experienced with DMPs; however, these have enjoyed less success than their counterparts in Germany, producing only modest results. The programs were too small compared to the US population to create a sizable impact[66]. DMPs depend on large participation to offset of the costs involved in their implementation.

The UK should not be expected to encounter the same drawbacks the US initiative did; the United States have a population of over 300 million, while the UK has little above 64 million. By comparison, Germany has a population of 80.6 million and, therefore, the UK is much more likely to have an experience with DMPs akin to that of Germany.

The US programs were also not run in coordination with each other, implemented by distinct bodies with different goals. Ostensibly, the programs need to be run at national level to enjoy optimum success, but their running at regional level would not be problematic. Responsibility for public health in Germany is constitutionally in the hands of the 16 federal states, but the DMPs themselves are coordinated.

iii. Application to the UK

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[63] Mehring et al (2014), *Disease Management Programs for patients with COPD in Germany*

[64] Laxy, Stark, Meisinger, Kirchberger, Heier, von Scheidt, Holle, *The Effectiveness of Germany disease management programs* (2015)

[65] Brandt, Hartmann, Hehner, *How to design a successful disease management program* (2010), McKinsey & Company

[66] *Idem.*

The NHS has much to learn from both the US and German models of implementation of DMPs. With a population and demographic similar to that of Germany, it is likely to achieve success by implementing coherent and coordinated programs, with the initial target of high participation. Because treatment of long-term conditions represents such a high proportion of NHS spending (70% in England), improvements to chronic patients' health can have dramatic effects on stalling rising costs and increasing efficiency within the system.

While coordination at national level is crucial, a decentralized model can bring additional benefits. Chronic disease prevalence can vary greatly between regions, as well as age groups. For example, diabetes is much more prevalent in North England than the rest of the country. Programs can receive different budgets in different regions, based on the prevalence of the specific disease as assessed regionally. A decentralized scheme can have the benefit of more accurately addressing local needs and therefore, engage more patients.

In the long run, the effect of such programs on the NHS budget would be one of stabilization, streamlining the treatment of long-term conditions and thus, increasing both cost-efficiency and productivity. This is achieved by replacing multiple GP appointments and unexpected instances requiring acute treatment with a controlled, more predictable and manageable long-term treatment, using up fewer resources.

III.VI. Long-term development

It is increasingly believed that while struggling to keep deficits from spiraling out of control and meet the £22 billion efficiency savings[67], NHS trusts are increasingly engaging in selling existing assets to raise cash in order to cover deficits. Besides implying that deficits are actually greater than the £1.85 billion reported for 2015/2016[68], this also means that there is less scope for developing new and improved methods of care. These alternatives could serve to reduce health care cost, by adapting care to the needs of a changing demographic.

i. CASE STUDY: Japan

A set of health care reforms in Japan implemented over the last decade have adapted methods of care to Japan's aged population. This was done by a switch to community-based care, and the encouragement of doctors to treat patients away from hospitals, and rather in their homes or in local clinics[69]. It was estimated that the health care cost was 1.8 times higher in hospitals than in clinics[70]. Treating 80% of hospital outpatients in clinics freed up 5% of total outpatient health care costs[71].

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[67] Dunn, McKenna, Murray, *Deficits in the NHS* (2016), The King's Fund

[68] *Idem*

[69] Atsushi, *Health care cost reduction by controlling the number of hospital outpatients in Japan* (2016), Advances in Social Sciences Research Journal

[70] *Idem*

[71] *Idem*

ii. Application to the UK

Efficiency savings produced in this way vary wildly upon the type and degree of adaptation of care to the population, based on age and type of care required. Japan's experience is especially peculiar to its own societal and health care needs, and the UK need not and must not adopt a faithful copy of the Japanese reforms. Instead, NHS policy needs to be directed towards long-term development of ways to deal with that which is causing its failures and inefficiencies, especially the changing demographic makeup of the UK.

Alongside a decentralized model for running the NHS, alternative methods of care can be suitably adjusted to local needs and, if properly coordinated, save more in efficiency than selling off capital assets ever could.

III.VII. Conclusions and Policy Recommendations

- Adoption of a cost-control method similar in principle to that implemented in Germany, but with concessions suitable in the consideration of political viability and the NHS's character and values. In a decentralized system, local factors can be used to set reference prices that vary regionally.
- Creation of Disease Management Programs, modeled on the existing ones in Germany, and taking into account regional variations.
- A change in policy from short-term deficit control to long-term planning of care methods adapted to an aged population and increased prevalence of chronic disease.

IV. CONCLUSION

This paper has analysed the current organisation and financial structure of the NHS. It has been concluded the healthcare needs of the UK are too varied and complicated to by served by a single health service controlled by national government. The current organisational structure of the NHS is burdened by unnecessary bureaucracy and overlapping lines of accountability. This single model prevents NHS from adapting to the individual needs of the different communities it serves in the different regions of the UK.

The efficiency targets set in the *Five Year Forward View* are unlikely to be met without a serious reduction in the quality of healthcare provided. It has been concluded that the reduction of the NHS tariff is an unsustainable way to increase productivity as providers have been unable to make savings at the same rate at which their income-per-treatment has been reduced, resulting in a deficit.

To reduce the level of burdensome bureaucracy which is currently stifling the NHS's ability to provide quality treatment to patients, it is recommended that decision-making power is decentralised from central government. This would allow clinicians to make decisions closer to the patients they serve, rather than having their focus distracted by target-setting on a national level. The decentralisation deal introduced in the form of Devo Manc is promising and the results of the radical devolution of power should be monitored closely.

Alternatively, NHS Foundation Trusts could be reinvented and given the fiscal autonomy that was planned for them.

In order to reduce the financial strain on the NHS and cope with increasing demand for services, it is recommended that the NHS adopts a cost-control method for prescription drugs, given that NHS drug-spending has increased dramatically over the last 5 years. It is recommended that disease management programmes are introduced to help patients manage their chronic diseases and reduce the cost of inpatient care. It is also recommended that the NHS changes its policy from short-term deficit control to long-term planning of care methods and increased prevalence of chronic disease.

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