

Niemietz, Kristian

**Working Paper**

## Wizards of Oz? What the UK can learn from Australia's healthcare system

IEA Discussion Paper, No. 102

**Provided in Cooperation with:**

Institute of Economic Affairs (IEA), London

*Suggested Citation:* Niemietz, Kristian (2021) : Wizards of Oz? What the UK can learn from Australia's healthcare system, IEA Discussion Paper, No. 102, Institute of Economic Affairs (IEA), London

This Version is available at:

<https://hdl.handle.net/10419/314002>

**Standard-Nutzungsbedingungen:**

Die Dokumente auf EconStor dürfen zu eigenen wissenschaftlichen Zwecken und zum Privatgebrauch gespeichert und kopiert werden.

Sie dürfen die Dokumente nicht für öffentliche oder kommerzielle Zwecke vervielfältigen, öffentlich ausstellen, öffentlich zugänglich machen, vertreiben oder anderweitig nutzen.

Sofern die Verfasser die Dokumente unter Open-Content-Lizenzen (insbesondere CC-Lizenzen) zur Verfügung gestellt haben sollten, gelten abweichend von diesen Nutzungsbedingungen die in der dort genannten Lizenz gewährten Nutzungsrechte.

**Terms of use:**

*Documents in EconStor may be saved and copied for your personal and scholarly purposes.*

*You are not to copy documents for public or commercial purposes, to exhibit the documents publicly, to make them publicly available on the internet, or to distribute or otherwise use the documents in public.*

*If the documents have been made available under an Open Content Licence (especially Creative Commons Licences), you may exercise further usage rights as specified in the indicated licence.*

IEA Discussion Paper No.102

# WIZARDS OF OZ?

What the UK can learn from Australia's  
healthcare system

Kristian Niemietz  
August 2021



iea

Institute of  
Economic Affairs

With some exceptions, such as with the publication of lectures, IEA Discussion Papers are blind peer-reviewed by at least one academic or researcher who is an expert in the field. As with all IEA publications, the views expressed in IEA Discussion Papers are those of the author and not those of the Institute (which has no corporate view), its managing trustees, Academic Advisory Council or senior staff.

# Contents

About the author	4
Summary	6
Introduction: why we need to talk about alternatives in healthcare	8
Public insurance systems	19
Australia's healthcare system	22
Outcomes: UK vs. Australia	30
Assessment and conclusion	43
References	50



**Dr Kristian Niemietz** is Head of Political Economy at the Institute of Economic Affairs. He studied Economics at the Humboldt University Berlin and the University of Salamanca, graduating in 2007 as *Diplom-Volkswirt* (≈MSc in Economics). He also studied Political Economy at King's College London, graduating in 2013 with a PhD.

Kristian previously worked at the Berlin-based Institute for Free Enterprise (IUF), and taught economics at King's College London. He is the author of the books *Socialism: The Failed Idea That Never Dies* (2019), *Universal Healthcare Without the NHS* (2016), *Redefining the Poverty Debate* (2012) and *A New Understanding of Poverty* (2011).

## Summary

- Australia and the UK had very similar healthcare systems until the end of the 1940s, when they diverged. The UK created the National Health Service, while Australia opted for more gradual reforms within its existing system. We can see the Australian system as a plausible counterfactual for how healthcare in Britain might have evolved if the NHS had never been created.
- The Australian model of today is best described as a multi-layered hybrid system. It is, in the main, a public health insurance system, comparable to the systems in France, Canada, Taiwan and South Korea. A universal insurance programme (Medicare) pays for most healthcare costs, but Medicare does not run any healthcare facilities of its own. Instead, it maintains contractual relations with a range of healthcare providers.
- On top of universal public health insurance, most Australians have private health insurance (PHI). PHI potentially offers faster access to treatment, greater choice, higher levels of comfort, and additional services not covered by Medicare.
- Private health insurers in Australia are not allowed to discriminate on the basis of individual health risks. A person in poor health pays the same insurance premium as a person in good health. Thus, private health insurance in Australia is similar to social health insurance (SHI) in Europe or Israel.
- Australians with PHI tend to use the public system less. This is recognised in the Australian tax and transfer system: people with PHI receive a rebate, which effectively lowers their public insurance premium by around a quarter. This makes PHI more widely affordable.

- The Australian system is more decentralised than the British one. Australia's nine regions (the states and territories) are fully responsible for managing their own hospital sectors. The system is also more pluralistic. About one in three hospitals (adjusted for hospital size) are private.
- Total healthcare spending is lower in Australia, and it has been for nearly two decades. In 2019, it stood at 9.3 per cent of GDP, compared to 10.3 per cent in the UK. Public healthcare spending stood at 6.3 per cent of GDP in Australia, and 8 per cent of GDP in the UK.
- Australia achieves substantially better healthcare outcomes than the UK. Cancer survival rates are several percentage points higher, while heart attack and stroke mortality rates are several percentage points lower. In terms of Mortality Amenable to Healthcare (a measure of avoidable premature deaths), Australia is about a decade ahead of the UK. Even the Commonwealth Fund study (a study which is uniquely flattering to the NHS) acknowledges the superiority of the Australian system when it comes to outcomes.
- The NHS, however, appears to have a lead when it comes to avoidable hospitalisation rates for chronic conditions. On average, NHS hospitals also have shorter waiting times for various types of surgery than public hospitals in Australia.
- We cannot directly compare the two health systems in terms of their Covid-19 performance, because the NHS had to deal with a vastly greater Covid-19 caseload than the Australian system. We can, however, note that the UK still had higher Covid death rates and excess death rates than a number of countries which had to deal with an even greater caseload.
- The Australian system has its shortcomings, complexities and inconsistencies but it also gets some important things right. The ideas of tax rebates for PHI, and community rating in PHI, are certainly worth looking into, and so is the generally more decentralised nature of the Australian system. If nothing else, the Australian system can teach us to be more relaxed about the benefits of private sector involvement in healthcare delivery, private insurance and decentralisation.



# Introduction: why we need to talk about alternatives in healthcare

It has become a cliché to describe the National Health Service as 'Britain's national religion' or some other variation of Nigel Lawson's famous quip. It as an observation which is neither very original nor especially helpful.

However, like a lot of unoriginal and unhelpful observations, it is also true. Criticism of the NHS really does tend to trigger a wave of hysterical defensiveness.

The reactions which the IEA's work in this area usually provokes are an excellent illustration of this. Over the past seven years, the IEA has published a series of reports which compared the NHS to other universal healthcare systems, found it lagging in many respects, and advocated learning from international best practice.

Many of the media responses to those publications were favourable, or critical in an intellectually curious and open-minded way.<sup>1</sup> But there have also been plenty of furious and hysterical responses, often infused with conspiracy theories about how the IEA was supposedly pulling the strings in some fiendish plot to destroy the NHS.

---

<sup>1</sup> See, for example: 'Britain's National Health Service Isn't A World Beater', *Forbes*, 30 October 2016 (<https://www.forbes.com/sites/tedbromund/2016/10/30/britains-national-health-service-isnt-a-world-beater/#66c681ae45f9>); 'Up to 46,000 die each year as NHS lags behind world's best', *The Times*, 23 October 2016 (<https://www.thetimes.co.uk/article/up-to-46-000-die-each-year-as-nhs-lags-behind-worlds-best-0bxmp63cd>); 'Care in Europe is safer than NHS, death rates reveal', *The Times*, 2 April 2015 (<https://www.thetimes.co.uk/article/care-in-europe-is-safer-than-nhs-death-rates-reveal-q2smdd0sj3v>);

For example, in 2018, George Monbiot wrote in the *Guardian*:

[W]e are beginning to understand the role of dark money in politics, and its perennial threat to democracy... Dark money can be seen as the underlying corruption from which our immediate crises emerge: the collapse of public trust in politics, the rise of a demagogic anti-politics, assaults on the living world, public health and civic society...

The problem is exemplified, in my view, by the Institute of Economic Affairs (IEA)...

Recently, it has been repeatedly dissing the NHS, that it wants to privatise...

I see such organisations as insidious and corrupting... I see them as representing everything that has gone wrong with our politics.<sup>2</sup>

The *Independent* also reported:

[T]he Institute of Economic Affairs (IEA) [is] a vocal critic of the current NHS model. Its head of health and welfare, economist Kieran Niemitz [sic], has... called the service one of the most 'overrated, inefficient systems in the world'.

Campaigners told The Independent they were worried...

'The IEA is very much a right-wing, free market think tank and there's loads of evidence they want to abolish the NHS and make it much more market based with privatisation,' said... NHS campaigner Dr Clive Peedell.<sup>3</sup>

---

'Give patients tax cuts for going private', *The Times*, 31 October 2014 (<https://www.thetimes.co.uk/article/give-patients-tax-cuts-for-going-private-vjrvjqhmr77>); 'Do we want better health care, or do we want to keep the NHS?', *Telegraph*, 8 May 2015 (<https://www.telegraph.co.uk/news/nhs/11590377/Do-we-want-better-health-care-or-do-we-want-to-keep-the-NHS.html>); 'A new health tax will solve nothing, as long as the NHS remains a monopoly', *Telegraph*, 11 January 2018 (<https://www.telegraph.co.uk/business/2018/01/11/new-health-tax-will-solve-nothing-long-nhs-remains-monopoly/>); 'Let's be honest: the NHS is costing thousands of lives', *Telegraph*, 25 October 2016 (<https://www.telegraph.co.uk/news/2016/10/25/lets-be-honest-the-nhs-is-costing-thousands-of-lives/>).

2 'Dark money lurks at the heart of our political crisis', *Guardian*, 18 July 2018 (<https://www.theguardian.com/commentisfree/2018/jul/18/dark-money-democracy-political-crisis-institute-economic-affairs>).

The *British Medical Journal* claimed (Gornall 2019):

Whatever the eventual consequences of Brexit for the NHS... an even greater threat to public health may emerge...

Kristian Niemietz... compared the NHS unfavourably with other national health systems. In a speech launching the report [Owen] Paterson [MP] questioned whether 'a centralised state-run monopoly is the best and only way to run a universal healthcare system that is fair.'

*The Canary*, a 'Corbynite' online magazine, was also alarmed:

A sinister organisation has deeply worrying links... The organisation in question is a free-market think-tank – the Institute of Economic Affairs (IEA)...

The IEA's views on the future of the NHS are not in any doubt...

[W]e should be extremely worried.<sup>4</sup>

And elsewhere:

The IEA... wants the [health] service to be sold off...

Dr Kristian Niemitz [sic] ... spoke to the Oxford Economics Society in 2015... During the speech, Niemitz wrote off public concerns and justified the IEA's proposals...

[O]ne thing is clear: anyone who believes our NHS is safe... needs to think again.<sup>5</sup>

- 
- 3 'New health secretary Matt Hancock received £32,000 in donations from chair of think tank that wants NHS "abolished", *Independent*, 12 July 2018 (<https://www.independent.co.uk/news/health/nhs-privatisation-donations-matt-hancock-health-secretary-institute-economic-affairs-a8442001.html>).
  - 4 'A sinister organisation has deeply worrying links with some of the government's new big hitters', *The Canary*, 11 July 2018 (<https://www.thecanary.co/uk/analysis/2018/07/11/a-sinister-organisation-has-deeply-worrying-links-with-some-of-the-governments-new-big-hitters/>).
  - 5 'Jeremy Hunt lays out the government's new plans for the NHS, and they're an absolute disaster', *The Canary*, 4 October 2016 (<https://www.thecanary.co/uk/2016/10/04/jeremy-hunt-lays-governments-new-plans-nhs-theyre-absolute-disaster/>).

*Evolve Politics*, another 'Corbynite' online magazine, talked about:

a notorious free-market thinktank whose clear policy it is to abolish the NHS and privatise healthcare in the UK...

The IEA are a well-known free-market neoliberal thinktank who have long argued in favour of privatising the NHS... Kristian Niemietz... can be regularly found... arguing firmly in favour of more private sector involvement.

Given their firm support for abolishing Britain's most-cherished institution, it is no surprise that many on social media have raised huge concerns...

Were the IEA's stance on NHS privatisation to be implemented on Britain, we would likely see our NHS abolished and turned into an insurance based system similar to that of the United States.<sup>6</sup>

The socialist *Morning Star* newspaper talked about the 'anti-NHS think tank the Institute of Economic Affairs (IEA)' and lamented:

[T]he IEA called for the NHS to be replaced with a 'European style' private insurance system...

Keep Our NHS Public co-chairman Tony O'Sullivan told the Star that the government's agenda was 'to defund and ultimately privatise' the service.<sup>7</sup>

The campaign group *Open Democracy* took a 'will-someone-please-think-of-the-children?' line, complaining about the IEA's student magazine:

The Institute of Economic Affairs has been accused of 'pumping seemingly paid-for propaganda' into schools after analysis by openDemocracy found that its free magazine for A-Level students has carried articles arguing... in favour of NHS privatisation...

---

6 'The new Tory health Secretary Matt Hancock is funded by rabid NHS privatisation lobbyists', *Evolve Politics*, 10 July 2018 (<https://evolvepolitics.com/the-new-tory-health-secretary-matt-hancock-is-funded-by-rabid-nhs-privatisation-lobbyists/>).

7 'New Health Secretary Matt Hancock "took thousands from anti-NHS think tank"', *Morning Star*, 12 July 2018 (<https://morningstaronline.co.uk/article/new-health-secretary-matt-hancock-took-thousands-anti-nhs-think-tank/>).

Articles written by... Kristian Niemietz in several editions advocate privatisation of the NHS.<sup>8</sup>

Another outbreak of media hysteria ensued earlier this year, when the IEA released a report which, among other things, compared how different healthcare systems were coping with the pandemic, and found that there was nothing outstanding about the NHS's performance (see Niemietz 2021). The *Guardian* reported:

In a letter to the health secretary, the Labour deputy leader, Angela Rayner, urged Hancock to ... condemn the 'disgraceful attack' on the NHS.

She wrote: 'As health secretary it is your job to protect and defend our country's greatest institution – our National Health Service – and stand up for our NHS staff...'

The IEA and Department of Health and Social Care have been approached for comment.<sup>9</sup>

The *Independent* also reported:

Labour deputy leader Angela Rayner described the [IEA's] comments as 'disgraceful' and called on the health secretary to distance himself from them by condemning the report...

She said: '...If you are committed to the protection of our NHS you must take action immediately to assure NHS staff and the British people that you don't share the views of... the Institute of Economic Affairs.'<sup>10</sup>

---

8 'Right-wing think tank accused of promoting tobacco and oil industry "propaganda" in schools', Open Democracy, 28 November 2018 (<https://www.opendemocracy.net/en/dark-money-investigations/right-wing-think-tank-accused-of-promoting-tobacco-oil-indu/>).

9 'Thinktank critical of NHS Covid response has links to Hancock', *Guardian*, 9 February 2021 (<https://www.theguardian.com/politics/2021/feb/09/thinktank-critical-of-nhs-covid-response-has-links-to-hancock>).

10 'Matt Hancock urged to distance himself from report which found "nothing special" about NHS response to Covid', *Independent*, 9 February 2021 (<https://www.independent.co.uk/news/uk/politics/coronavirus-iea-matt-hancock-angela-rayner-b1799817.html>).

The *Express* added:

The row erupted when an IEA report suggested insurance-based health services elsewhere in the world had performed as well or better than the NHS...

Rayner said Mr Hancock must have been aware of what she said was the free-market thinktank's 'long-standing campaign to abolish our NHS and replace it with a privatised healthcare system'.<sup>11</sup>

An especially emotive article in *Metro* stated:

[A]n outright attack on the NHS *is personal* to all of us...

This attempt to stir up anti-NHS feeling during the most challenging time in its history... further erodes staff morale, which is already at rock-bottom. The report's authors [sic] should be ashamed.

I *am* genuinely grateful for the NHS *every single day*, and not only for the care they bestowed upon my mother. Because of the NHS I hold my two children when my arms could so easily be empty...

The vast majority of the public though have shown in their collective actions... that they *do* appreciate the NHS... [T]his free-market think-tank does not speak for Britain. [Emphasis in the original]<sup>12</sup>

To cut a long story short: as unoriginal and unhelpful as it may be to describe these publications' hypersensitivity around the NHS as cultish and quasi-religious, it is also hard to see how else one could describe it.

There is no other policy area in which we treat international performance comparisons, and arguments for learning from international best practice, as something sinister. When, for example, the PISA study finds that Britain's educational outcomes are not as good as those of many comparable countries, then the media reports on those findings, and we debate what

11 'Angela Rayner urged to apologise over "untrue" letter - "You and Labour have got it wrong"', *Express*, 17 February 2021 (<https://www.express.co.uk/news/politics/1399063/angela-rayner-matt-hancock-iea-donation-labour-news-keir-starmer>).

12 'To those who say the NHS is "nothing special" – you should be ashamed', *Metro*, 10 February 2021 (<https://metro.co.uk/2021/02/10/to-those-who-say-the-nhs-is-nothing-special-you-should-be-ashamed-14055684>).

the reasons for that gap might be. Of course, we usually disagree on what the right lessons are, and different people draw different conclusions from the data. But it would not occur to anybody to describe critical reporting, which highlights the shortcomings of our school system, as ‘a disgraceful attack on our teachers and pupils’.

Nobody would write an open letter to a cabinet minister, telling them that ‘as education secretary, it is your job to protect and defend our country’s greatest institution – our national school system – and stand up for our teaching staff who are sacrificing so much to make sure our children can learn how to read and write. If you are committed to the protection of our school system you must take action immediately to assure teaching staff and the British people that you don’t share the views of those critics.’

Criticism of the school system is considered perfectly socially acceptable in Britain. So is criticism of the pension system, the public transport system, the social housing sector, the childcare sector, and many other areas. We may disagree with the critic; we may deem their criticism unfair, or we may think that their proposed alternative would be even worse. But we would not usually see criticism as illegitimate, or malicious. Healthcare is one of the very few policy areas, and possibly the only one, where people do this.

IEA authors are in a privileged position. They can afford to say controversial and unpopular things. They are under no obligation to limit themselves to saying what is currently deemed socially acceptable. A bit of media drama has no negative consequences for them (if anything, it can act as free publicity). But the general climate of hysteria, defensiveness, hypersensitivity, and socially enforced conformity has a chilling effect. It is telling that when IEA authors receive positive feedback for their work on healthcare from readers, it is often prefaced with statements such as ‘I would not say this publicly, but...’ or ‘I would not say this in front of my colleagues, but...’.

Yet, while the gatekeepers of socially acceptable opinion have been largely successful in their attempts to stifle debate on alternative approaches to healthcare, this has not made healthcare in the UK any better. Our healthcare outcomes continue to be quite consistently below average by the standards of high-income countries. Among the 38 OECD developed nations for which we have comparable data, the UK ranks 21st on age-adjusted breast cancer survival rates, 21st on prostate cancer survival, 29th on lung cancer survival, 26th on colon cancer survival, and 17th on

rectal cancer survival (Allemani et al. 2015).<sup>13</sup> These are not some cherry-picked outliers: these are, by far, the most common types of cancer, which, taken together, account for over half of all cancer cases in the UK.<sup>14</sup> The UK ranks 23rd on the age-adjusted chances of surviving a heart attack, 30th on surviving a haemorrhagic stroke, and 26th on surviving an ischemic stroke.<sup>15</sup> Again, these are not some cherry-picked outliers: these are some of the leading causes of death in Britain today, and a percentage point difference in survival rates can translate into thousands of lives saved – or not. On infant mortality, the UK is 28th.<sup>16</sup> For respiratory diseases, the UK has one of the highest standardised death rates in Europe.<sup>17</sup> On treatable avoidable mortality, the UK ranks 24th out of 38 countries in the OECD.<sup>18</sup> There are a few health system performance measures on which the UK does well – diabetes is perhaps the best example – but one has to look long and hard for them.

The UK's poor performance during the pandemic is a continuation of this general trend. Despite the success story which is the UK's exceptionally fast vaccine rollout, in cumulative terms, we still have one of the highest Covid death rates, and one of the highest excess mortality rates, in the developed world. It is true that the NHS came under greater strain than many other healthcare systems, because the UK was suffering from a very high number of Covid cases. But even if we filter out all countries where the healthcare system never came under comparable strain, the UK is still one of the worst performers within the remaining set.<sup>19</sup>

Nor is this episode over yet. We are emerging from the pandemic, but there is still a huge backlog to clear. In 2019 and early 2020, median

13 See also: 'Health care quality indicators: Cancer care, five year net survival', OECD, 2010-2014 (<https://stats.oecd.org/>).

14 'The Twenty Most Common Cancers', Cancer Research UK, 2017 (<https://www.cancerresearchuk.org/health-professional/cancer-statistics/incidence/common-cancers-compared#heading=Zero>).

15 'Health care quality indicators: Acute care, 30 day mortality using linked data', OECD, 2017 (<https://stats.oecd.org/>).

16 'Health status: Maternal and Infant mortality, Infant mortality, No minimum threshold of gestation period or birthweight', OECD, 2018 (<https://stats.oecd.org/>).

17 'Causes of death — diseases of the respiratory system, residents', Eurostat, 2017 ([https://ec.europa.eu/eurostat/statistics-explained/index.php?title=File:Causes\\_of\\_death\\_%E2%80%94\\_diseases\\_of\\_the\\_respiratory\\_system\\_residents\\_2017\\_Health20.png](https://ec.europa.eu/eurostat/statistics-explained/index.php?title=File:Causes_of_death_%E2%80%94_diseases_of_the_respiratory_system_residents_2017_Health20.png)).

18 'Health status: Avoidable mortality (preventable and treatable)', OECD, 2017 (<https://stats.oecd.org/>).

19 'England & Wales had most excess deaths in Europe's covid-19 first wave', *New Scientist*, 14 October 2020 (<https://www.newscientist.com/article/2256986-england-wales-had-most-excess-deaths-in-europes-covid-19-first-wave/#ixzz6d6gkpf00>).



waiting times for hospital and specialist treatment were about eight weeks, and about one in seven people had to wait for longer than 18 weeks. By summer 2020, median waiting times had soared to almost 20 weeks. The most recent figures show that median waiting times have since fallen back to 13 weeks again, with one in three people waiting for longer than 18 weeks.<sup>20</sup> This is still noticeably above pre-pandemic levels, and the true backlog is almost certainly substantially greater than that, because those figures obviously do not include people who never got on the waiting list in the first place.

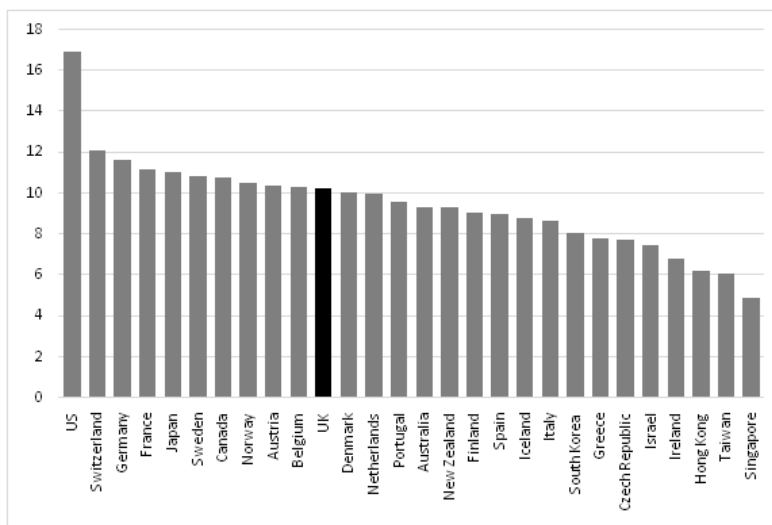
Insofar as defenders of the current system acknowledge its shortfalls, they blame it on underfunding. That was never especially credible: a more generously funded system can offer more generous benefits, but it is not automatically better at its core functions. A business class flight with an upmarket airline offers lots of comforts and conveniences that a standard flight with a budget airline cannot offer, but this does not make it any better at its core function of getting people from A to B on time.

In any case, the 'underfunding' argument, while it had some merit during the 'austerity' years after 2010, is now somewhat dated. In recent years, the UK has overtaken several of its neighbour countries, and drawn level with others, in terms of total healthcare spending as a percentage of GDP (see Figure 1). The UK is still some way behind the world's highest healthcare spenders. But on the whole, there are only about a dozen countries in the world which spend more than 10 per cent of GDP on healthcare, and the UK is a member of that club (if only just). Healthcare spending in the UK is now slightly higher than in Denmark and the Netherlands, and virtually the same as in Belgium and Austria. It is higher than anywhere in Southern or Eastern Europe, Australasia, or the developed parts of Asia, with the exception of Japan. The 'cash is cure' argument may still be correct, and additional funding injections may still be part of the solution. But it is no longer credible, if it ever was, to dismiss any comparison of the NHS with other systems by shouting 'underfunding!'. The UK is fairly average in terms of healthcare spending, but quite consistently below-average in terms of outcomes.

---

20 'Consultant-led referral to treatment waiting times data 2020-21', NHS England, 2021 (<https://www.england.nhs.uk/statistics/statistical-work-areas/rtt-waiting-times/rtt-data-2020-21/>).

**Figure 1: Total healthcare spending by percentage of GDP, 2019 or latest available year<sup>21</sup>**



We can continue to brush this all aside with non-sequiturs such as ‘But the NHS saved my mum!’ (as if other healthcare systems did not also save people’s mums), or ‘But the NHS is there for everyone, rich or poor!’ (as if that were not also true of dozens of other systems). Or we can start to develop a bit of intellectual curiosity about what other systems do differently, and what the results are. The IEA’s workstream on healthcare is trying to contribute to the latter.

This paper is a minor addition to more substantive work undertaken a few years ago, especially to the book *Universal Healthcare without the NHS* (Niemietz 2016). The original idea behind that book was to not just critique the existing system, but also to discuss various potential alternatives, by offering a broader overview of very different types of healthcare systems around the world. Due to constraints of space and time, this then remained mostly limited to a discussion of alternatives closer to home, namely, of social health insurance (SHI) systems.

21 ‘Health Expenditure and Financing’, OECD, 2019 (<https://stats.oecd.org/>); ‘National Health Expenditure’, Ministry of Health and Welfare (Taiwan), 2019 (<https://mohw.gov.tw>); ‘Statistics - Food and Health Bureau’, Food and Health Bureau (Hong Kong), 2019 (<https://fhb.gov.hk>); ‘Global Health Expenditure Database’, World Health Organization, 2021 (<https://who.int>).

SHI systems have a lot going for them; indeed, if the author of this paper could choose an 'ideal' health system, it would probably borrow most of its features from that type of system. But they are, of course, not the only game in town. There is another major 'family' of healthcare systems which produce some outstanding results in some areas, and which previous IEA publications have only briefly touched upon: public insurance systems.

## Public insurance systems

A public insurance system is a system in which a state-run health insurance scheme commissions and finances most healthcare, but it does not run any healthcare facilities of its own. Instead, it maintains contractual relationships with competing healthcare providers, which can be publicly or privately owned, and which can operate in a competitive marketplace.

The (geographically) nearest example of a public health insurance system is the French system. In France, the National Health Insurance Fund (CNAM) is the main healthcare financing agency. But the CNAM is not ‘the French NHS’ – because there is no ‘French NHS’. CNAM is a health *insurer*, not a health *service*. It does not run its own healthcare facilities. There is no such thing as a ‘CNAM hospital’ or a ‘CNAM doctor’. Instead, the CNAM contracts a range of providers. 62 per cent of French hospitals are publicly owned, 24 per cent are owned by for-profit companies, and 14 per cent are owned by charitable organisations.<sup>22</sup>

South Korea and Taiwan run comparable national health insurance schemes (Niemietz 2021: 45–46). In South Korea, almost all healthcare providers are private,<sup>23</sup> although they must be run on a non-profit basis. Taiwan has a mix of public and private non-profit healthcare providers (Cheng 2015).

The Canadian system is a more decentralised version of the same type of system. Canada has no national insurance scheme covering the whole country; instead, each province runs its own regional insurance scheme,

---

22 ‘Health care resources: Hospital beds’, OECD, 2018 (<https://stats.oecd.org/>). Strictly speaking, these figures refer to the number of hospital *beds*, not the number of hospitals, in order to adjust for differences in hospital size. Thus, one hospital with 1000 beds counts for as much as two hospitals with 500 beds each, or four hospitals with 250 beds each.

23 ‘Health care resources: Hospital beds’, OECD, 2018 (<https://stats.oecd.org/>).

so health insurance can differ from province to province. Canadian hospitals are notionally private non-profit entities, although subject to a significant degree of political control (indeed, the OECD simply classifies them as 'public').

Finally, the Australian system, the case study chosen for this paper, is a hybrid system which also mainly falls into the public insurance category.

In public insurance systems, people cannot choose between competing insurers and competing health plans. The public insurer is a monopoly operator, which usually covers the entire resident population. Every long-term resident is required to sign up to it, and to pay regular contributions to it. Contributions are typically income-dependent, and the government will pay the contributions of the poorest.

From a liberal, free-market perspective, a state monopoly or near-monopoly in health insurance is clearly not ideal. However, in public insurance systems, the *provision* of healthcare can be highly competitive, and consumer-driven. Public insurance systems are not 'free-market systems', but they allow varying degrees of market-orientation. It depends on the details. It depends, for example, on how much provider choice patients have, on the extent to which funding follows patients, on how much autonomy healthcare providers have, or on whether entries into and exits from the healthcare market are possible. For example, if healthcare providers are run by the same arm of government which also runs the public health insurer, if they have little independence, or if they are generously subsidised irrespective of their ability to attract patients, then there will not be much of a 'healthcare market'. Under those circumstances, there would not be much point in having a public insurance system in the first place: one might as well just go for an NHS-type system. But if patients enjoy a high degree of provider choice, if healthcare providers enjoy a high degree of autonomy, and if their economic success depends on their ability to attract patients, public funding can be compatible with a competitive healthcare market. It would then be analogous to a voucher scheme, in which, even though the funding is mostly public, consumers choose freely, the money follows the choices they make, and providers compete for customers.

The OECD considers the Australian, the French, the Belgian<sup>24</sup> and the Canadian systems as part of the same family of healthcare systems, namely, systems characterised by:

public basic insurance coverage combined with heavy reliance on market mechanisms at the provider level: users are given a wide choice among providers; private provision of both in-patient and outpatient care is relatively abundant; incentives for providers to produce high volumes of services tend to be important, and user information on quality and prices may act as a disciplining factor (Journard et al. 2010: 48).

They also describe them as

[a] group of countries [...] where the basic coverage is provided by public insurers and which rely heavily on market mechanisms at the provider level, with a large share of private provision and strong incentives for providers to produce high volumes of services (ibid.: 55).

The Australian system is a particularly suitable case study (although to a lesser extent, the points made in this paper could also apply to France, Canada, South Korea and Taiwan). Given the two countries' shared history, it is perhaps not surprising that British and Australian healthcare originally evolved in parallel. From about the middle of the 19th to the middle of the 20th century, healthcare in both Britain and Australia was financed by a mixture of cooperative mutual insurance associations (Friendly Societies), commercial health insurance, out-of-pocket payments and charitable donations (Wettenhall 2018; Healy et al. 2006: 23-25). The two countries only began to diverge in 1946-1948, when Britain opted for a radical break, namely the wholesale nationalisation of the healthcare sector.

Similar ideas existed in Australia around that time but, unlike in Britain, they were never implemented. Instead, Australia opted for more gradual reforms within the existing system. Given their parallel history up until that watershed moment, we can see the Australian system as one plausible counterfactual for how healthcare in Britain might have evolved if the NHS had never been created.

---

24 The inclusion of Belgium in this family is debatable. Van de Ven et al. (2013) see the Belgian system as part of the same family as the Dutch, the German, the Swiss and the Israeli system – the aforementioned SHI systems.

## Australia's healthcare system

Britain is one of the few countries where one single institution, the National Health Service, has become near-synonymous with the health system as a whole. When specifically asked, we realise that 'the health system' is more than the NHS, but in everyday language, we use the terms 'the NHS' and 'the health system' almost interchangeably. When asked for how long their health system has been around, and who set it up, most (informed) Britons would probably answer 'since 1948', and 'Aneurin Bevan'.

An Australian citizen could not answer such a question. Their health system has no start date, and no founding father. Nor is there any single institution which is near-synonymous with the system as a whole. There are pivotal dates when important changes were brought in, but no watershed moment when one system 'ended' and another one 'began'.

It is more of a story of continuous evolution. In the post-war decades, voluntary private health insurance remained the norm. Until 1975, almost 80 per cent of the population were privately insured, while means-tested subsidies covered the healthcare costs of those who could not afford it (APRA 2019a; Duckett and Nemet 2019: 13-14).

This changed in 1975 with the creation of Medibank, a universal, mandatory government health insurance programme. Medibank's successor Medicare, established in 1984, survives to this day, and it has since become the single most important financing agency in Australia's healthcare system.

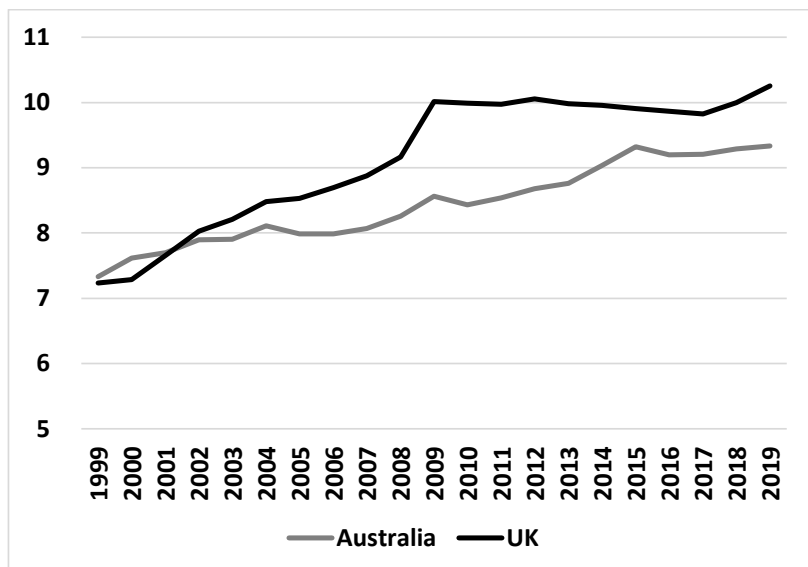
After the introduction of Medibank and then Medicare, private health insurance coverage began to decline. A comprehensive universal public insurance system leaves only a limited role for voluntary private insurance. Still, private insurance never disappeared. To this day, most Australians

also have some form of private health insurance, partly in addition to, and partly as a substitute for Medicare. In this way, an echo of the old private insurance system still survives alongside the public insurance system. Dixit and Sambasivan (2018: 3) describe the resulting mix as

a hybrid model under which... residents... can buy private insurance coverage in addition to the public insurance they already have and gain access to both private and public hospitals... Australia, Belgium, Canada and France have similar healthcare systems because they provide public insurance for the basic coverage, and private insurance can be purchased by individuals on top of the public insurance.

In terms of total healthcare spending, Australia and the UK are fairly similar. Australia currently spends just over 9 per cent of GDP on healthcare, compared to the UK which spends just over 10 per cent (see Figure 2). Both figures are somewhat above the OECD average, but not particularly high when compared to most of north-western Europe.

**Figure 2: Total healthcare spending by percentage of GDP, UK vs. Australia, 1999-2019<sup>25</sup>**



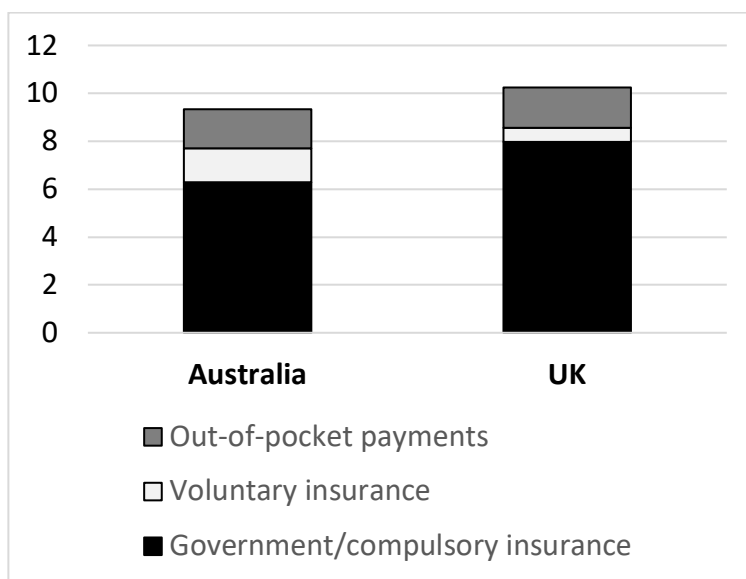
25 'Health Expenditure and Financing', OECD, 2019 (<https://stats.oecd.org/>).



While the overall level of spending is similar, the composition is rather different. In Australia, public spending on healthcare (mostly Medicare) accounts for about two thirds of the total, or just over 6 per cent of GDP. The rest is roughly evenly spread between voluntary insurance and out-of-pocket spending (see Figure 3).

In the UK, public spending (mostly the NHS) accounts for almost 80 per cent of the total, or eight per cent of GDP. The rest is mostly out-of-pocket spending (e.g. for dental care, eyewear, prescription charges), with only a small role for voluntary health insurance.

**Figure 3: Composition of healthcare spending (% of GDP), UK vs Australia, 2019<sup>26</sup>**



Medicare is partly funded by an earmarked tax on income, the Medicare Levy, which is currently set at 2 per cent,<sup>27</sup> and partly from general taxation.

<sup>26</sup> 'Health Expenditure and Financing', OECD, 2019 (<https://stats.oecd.org/>).

<sup>27</sup> 'Medicare levy', Australian Taxation Office, 2020 (<https://www.ato.gov.au/Individuals/Medicare-and-private-health-insurance/Medicare-levy/>).

Primary and community care are commissioned at the national level, and mostly delivered by the private sector, i.e. self-employed private contractors. The hospital sector consists of public hospitals, which are run by regional governments, and private hospitals, which can be run by charitable organisations or for-profit companies. Almost half of Australia's hospitals are private.<sup>28</sup> However, public hospitals are, on average, larger, so if we adjust for size, public hospitals account for two thirds of the total hospital sector. Private non-profit ones account for 15 per cent, and private for-profit ones for 19 per cent.<sup>29</sup>

There are a variety of payment mechanisms: different providers are paid in different ways. Specialists are mostly paid on a fee-for-service basis, public hospitals via case payments, and primary care providers through a mixed system, which also includes fee-for-service elements. There are no statutory co-payments for medical services in the public system.

The widespread use of fee-for-service payments has the downside of incentivising high volumes of activity, potentially leading to overtreatment, or at the very least, treatment that is not cost-effective (Charlesworth et al. 2012). It also leads to coordination problems, because it does not reward medical providers for working together across professional boundaries. On the upside, it does give providers an incentive to be responsive to patients' demands.

Private health insurance (PHI) in Australia broadly falls into two categories: hospital coverage and general treatment coverage. The former covers the cost of treatment at a private hospital of the patient's choice, or alternatively, it enables them to be treated as a private patient at a public hospital. Being a private patient, whether at a private or a public hospital, generally means greater choice, comfort, and convenience, as well as shorter waiting times. Private hospital insurance covers services that are, in principle, also available through the public system. Private general treatment insurance covers services that are not routinely available through the public system.

Around 45 per cent of the population have private health insurance for both hospital care and general treatment. Close to 10 per cent have private health insurance for general treatment only (APRA 2019b; APRA 2019c).

---

28 'Facts about private', Australian Private Hospitals Association, 2021 (<https://apha.org.au/why-choose-private/>).

29 'Health care resources: Hospital beds', OECD, 2016 (<https://stats.oecd.org/>).

Overall, 53 per cent of the Australian population have private health insurance of some sort, compared with just 10.4 per cent in the UK.<sup>30</sup>

There are currently 26 private health insurers that are open to the general public. In addition, there are twelve restricted membership insurers attached to professional associations, large employers or trade unions.<sup>31</sup> The market structure is quite polarised. The two largest insurance companies hold a combined market share of just over half, while many very small insurers hold a market share of less than one per cent each. On average, Australian health insurers spend just under 86 per cent of their revenue on medical benefits, and another nine per cent on administrative expenses, leaving a profit/surplus margin of just under six per cent.

'Private health insurance' does not mean the same thing in Australia as it does in the UK.<sup>32</sup> It is much more similar to social health insurance in countries such as the Netherlands, Switzerland or Germany. Premiums are community-rated rather than related to individual risk, which means that people in poor health ('bad risks') do not pay more than people in good health ('good risks'). Insurers cannot turn down applicants nor discriminate in other ways. The so-called 'Risk Equalisation Trust Fund', administered by the Australian Prudential Regulation Authority, redistributes revenue between insurers, in such a way that those with a more favourable risk profile compensate those with a less favourable one (APRA 2019d). This makes non-discrimination economically viable and removes the incentive to discriminate against bad risks.

But it creates its own set of problems. Since the good risks subsidise the bad risks, the system is much more lucrative for the latter than for the former. There is therefore an incentive to game the private system by, for example, opting out of it while in good health, and then opting in as one's health status deteriorates.

European SHI systems have a very simple solution to this problem: they make participation mandatory for the entire population, so that the good risks have nowhere to go. Since the Australian PHI system is voluntary, it must allow *some* limited discrimination, in order to reduce opportunities for gaming the system.

---

30 'Social Protection: Private health insurance', OECD, 2018 (<https://stats.oecd.org/index.aspx?queryid=30139>).

31 'Health Insurers', Private Health Insurance Ombudsman, 2021 (<https://www.privatehealth.gov.au/dynamic/insurer>).

32 'Private Health Insurance Basics', Private Health Insurance Ombudsman, 2021 ([https://www.privatehealth.gov.au/health\\_insurance/howitworks/index.htm](https://www.privatehealth.gov.au/health_insurance/howitworks/index.htm)).

Firstly, insurers can offer time-limited age-based premium discounts for those who join before the age of 30, and they can charge time-limited age-based premium surcharges for those who join after the age of 30.<sup>33</sup> The longer people wait, the more expensive it gets, as the premium can rise by 2 per cent for every additional year of life.

This combination of discounts and surcharges goes some way towards encouraging people to sign up early, even though it is not enough to eliminate the age gap. Only about one in four people in their early twenties have private health insurance, whereas almost two thirds of people in their early seventies do (APRA 2019b).<sup>34</sup>

Australian insurers are also allowed to impose a twelve month qualifying period for pre-existing conditions, if somebody newly enters the PHI system, or upgrades their insurance policy.<sup>35</sup> Without this restriction, it would be possible to opt into the PHI system episodically when one needs healthcare, and then opt out again immediately afterwards: a behaviour which would be individually rational, but collectively irrational, because if large numbers of people acted that way, the system would collapse.

The Australian PHI rules are a compromise between conventional PHI (e.g. BUPA or AXA in the UK) and conventional SHI (e.g. any insurer in the Netherlands or Switzerland). They seek to limit opportunities to game the system, while still preserving the general principle of non-discrimination.

---

33 'Age-based discount', Private Health Insurance Ombudsman, 2021 ([https://www.privatehealth.gov.au/health\\_insurance/surcharges\\_incentives/discount\\_age.htm](https://www.privatehealth.gov.au/health_insurance/surcharges_incentives/discount_age.htm)).

34 See also 'Age structure - Five year age groups. ID Community Demographic Resources', ID, 2019 (<https://profile.id.com.au/australia/five-year-age-groups>).

35 'Waiting periods', Private Health Insurance Ombudsman, 2021 ([https://www.privatehealth.gov.au/health\\_insurance/howitworks/waiting\\_periods.htm](https://www.privatehealth.gov.au/health_insurance/howitworks/waiting_periods.htm)).

**Table 1: Different models of private insurance compared**

	<b>Conventional PHI</b>	<b>Conventional SHI</b>	<b>Australian PHI</b>
<b>Is participation mandatory?</b>	No	Yes	No
<b>Can premiums vary with age?</b>	Yes	No	Within limits, according to a formula set by the regulator
<b>Can premiums vary with individual health risk?</b>	Yes	No	No
<b>Can insurers deny coverage for pre-existing conditions?</b>	Yes	No	Not permanently, but for the first 12 months
<b>Relationship with the statutory system</b>	Part substitute, part supplement	n/a (It is the statutory system)	Part substitute, part supplement

In the Australian system, PHI is, to some extent, a substitute for public insurance, and to the extent that it is, it takes some of the pressure off the public system. This fact is recognised in the Australian tax system in various ways. Most importantly, people with private insurance receive a premium subsidy, which increases with age, and decreases with income. For most people, it reduces their PHI premium by about a quarter.<sup>36</sup> One could see this as an indirect tax rebate, acknowledging these people's reduced use of the public system.

By the same token, high earners who do *not* have private insurance have to pay a penalty, the Medicare Levy Surcharge (MLS), which is an add-on to the aforementioned 2 per cent Medicare Levy that most households

<sup>36</sup> 'Australian Government Private Health Insurance Rebate', Private Health Insurance Ombudsman, 2021 ([https://www.privatehealth.gov.au/health\\_insurance/surcharges\\_incentives/insurance\\_rebate.htm](https://www.privatehealth.gov.au/health_insurance/surcharges_incentives/insurance_rebate.htm)).

already have to pay. The MLS rate starts at 1 per cent of income and rises to 1.5 per cent for the highest earners.<sup>37</sup>

Critics of Australia's private healthcare sector tend to see the PHI rebate as a subsidy to private industry.<sup>38</sup> Why subsidise private healthcare for some, they ask, when that money could also be spent on improving publicly funded healthcare for everyone?

This is not necessarily correct. If somebody receives a rebate of say £500 to take out PHI, and then, as a result of having PHI, reduces their use of publicly funded healthcare to the tune of say £600, this represents a £100 net saving for the public system. The rebate, then, is not a handout, but a recognition of the reduced demand on the public system. It would then be wrong to assume that those £500 have somehow been taken away from Medicare patients.

Still, the critics of the PHI rebate have a point. It is not at all clear whether the rebates, in the way they currently work, really do result in net savings (see Duckett and Nemet 2019). PHI does not reduce people's entitlement to publicly funded healthcare. It is, in principle, possible for someone to claim the full rebate, and then still use all the Medicare-funded services that they would have used anyway, using PHI exclusively for optional extras. In this case, the 'rebate' would not be a rebate at all, but a subsidy for private consumption.

According to Duckett and Nemet (2019), the problem is that Australian governments have never really thought through, from first principles, what the role of private health insurance in a universal public health insurance system should be. Is it there to relieve the public system, by taking some pressure off it? Is it there to supplement the public system, for those who want more, and are prepared to pay for it? Is it a combination of both? Or is it something else entirely? The sector's purpose, and the way it interacts with the public system, has important implications for what its tax treatment should be.

---

37 'Medicare levy surcharge', Australian Taxation Office, 2021 (<https://www.ato.gov.au/Individuals/myTax/2019/in-detail/Medicare-levy-surcharge/>).

38 'A bigger cash handout is not the answer for private health insurance woes', *Guardian*, 8 October 2019 (<https://www.theguardian.com/commentisfree/2019/oct/08/a-bigger-cash-handout-is-not-the-answer-for-private-health-insurance-woes>).

## Outcomes: UK vs. Australia

There is no standard, commonly accepted measure of the performance of a health system. But there are some measures that can give us an idea. Survival rates, or their mirror image, mortality rates, for the leading causes of death, are relatively unambiguous measures. Their downside is that they are usually several years out of date: the OECD's cancer database, though probably the most frequently updated one of its kind, stops in 2014. Survival rates do not usually change drastically over the course of a few years, so the figures below are still informative, but it would clearly be preferable to have a more recent dataset.

Table 2 shows age-adjusted survival rates for the most common types of cancer, which, taken together, account for over half of all cancer cases diagnosed in the UK. It shows that Australia is usually more than five percentage points ahead of the UK, which, for conditions that affect tens of thousands of people, makes a huge difference in absolute terms. If the UK matched Australia's survival rates – or even if it just met them half-way – thousands of additional lives would be saved each year.

**Table 2: Age-adjusted and (where applicable) sex-adjusted 5-year survival rates, 2010-2014 or latest available 5-year period<sup>39</sup>**

Type of cancer		Number of cases diagnosed, UK 2017	% of all cancer cases	Survival rate	
				UK	Australia
Breast cancer		55,109	15%	85.6%	89.5%
Prostate cancer*		48,588	13%	83.2%	88.5%
Lung cancer		47,968	13%	14.7%	21.4%
Bowel cancer	Colon cancer	42,081	11%	60.0%	70.6%
	Rectal cancer			62.5%	71.0%

\*Refers to 2005–2009

A study on cancer survival rates in the *Lancet*, which covers seven different types of cancer in seven countries (Australia, Canada, Denmark, Ireland, New Zealand, Norway, and the UK), also finds:

In the most recent 5-year period of diagnosis (2010–14), the highest 1-year survival for most cancer sites was in Australia, followed by Canada and Norway... The lowest 1-year survival was observed for stomach, colon, rectal, and lung cancer in the UK; and for oesophageal cancer in Canada, pancreatic cancer in New Zealand, and ovarian cancer in Ireland. Similar patterns were observed for 5-year survival... with consistently higher survival in Australia than in the other countries, except for lung (Canada) and ovarian cancer (Norway), and lower survival in the UK, except for oesophageal (Denmark) and ovarian cancer (Ireland). (Arnold et al. 2019: 1497)

39 Allemani et al. (2015); Arnold et al. (2019); 'The Twenty Most Common Cancers', Cancer Research UK, 2017 (<https://www.cancerresearchuk.org/health-professional/cancer-statistics/incidence/common-cancers-compared#heading-Zero>); 'Health care quality indicators: Cancer care, five year net survival', OECD, 2010-2014 (<https://stats.oecd.org/>).



### ***Heart attack and stroke survival***

Table 3 shows (age-adjusted and sex-adjusted) 30-day mortality rates for heart attacks and strokes. Here, the UK, with its much higher population density, should have a natural advantage, simply because in the case of an emergency, a British patient will typically be much closer to a suitable hospital than an Australian patient. Nonetheless, Australia is clearly ahead.

Given that more than 100,000 people in the UK suffer from a stroke each year,<sup>40</sup> this translates, again, into thousands of additional lives that could be saved if the NHS reached Australian standards.

**Table 3: Age- and sex-adjusted 30-day mortality rates for strokes and heart attacks (%), latest available year<sup>41</sup>**

	<b>UK (2017)</b>	<b>Australia (2016)</b>
<b>Acute myocardial infarction (heart attack)</b>	6.8%	3.8%
<b>Haemorrhagic stroke</b>	28.2%	19.4%
<b>Ischemic stroke</b>	8.8%	6%

### ***Infant and maternal mortality***

The UK has a higher infant mortality rate, and a higher maternal mortality rate, than Australia (see Table 4). On these (and many other) measures, the UK is not just behind Australia, but behind most OECD countries.

---

40 'Save research. Rebuild lives', Stroke Association, 2020 (<https://www.stroke.org.uk>).

41 'Health care quality indicators: Acute care, 30 day mortality using linked data', OECD, 2017 (<https://stats.oecd.org/>).

**Table 4: Infant and maternal mortality, 2018 or latest available year<sup>42</sup>**

	UK	Australia
<b>Infant mortality (deaths per 1,000 live births)</b>	3.9	3.1
<b>Maternal mortality (deaths per 100,000 live births)</b>	6.5	4.8

Dayan et al. (2018: 37-38) argue that the UK's high maternal mortality rate could well be, in part, due to confounding factors rather than poor healthcare, and that if those factors could be fully controlled for, the UK would be closer to the OECD average. But they also argue that this is not the case for child mortality:

The UK has consistently higher rates of mortality than the average of our comparator countries... Characteristics of the wider population... play an important role in driving these tragic outcomes... However, these do not account for all of the difference and health care does influence outcomes: a study recently found that different care might have made a difference in 80% of child mortality cases in a UK sample.

### ***Summary measures***

Mortality Amenable to Healthcare (MAHC) is a more comprehensive measure of health system performance, which attempts to estimate the number of premature deaths that could, in principle, have been avoided through better treatment (GHDx 2019)

It has major limitations, one of them being that it is affected by cross-country differences in lifestyles, and other determinants of health that are beyond the reach of the healthcare system. However, Australia and the UK do not seem to be that different in terms of non-medical determinants of health, such as smoking rates, alcohol consumption and obesity rates.<sup>43</sup>

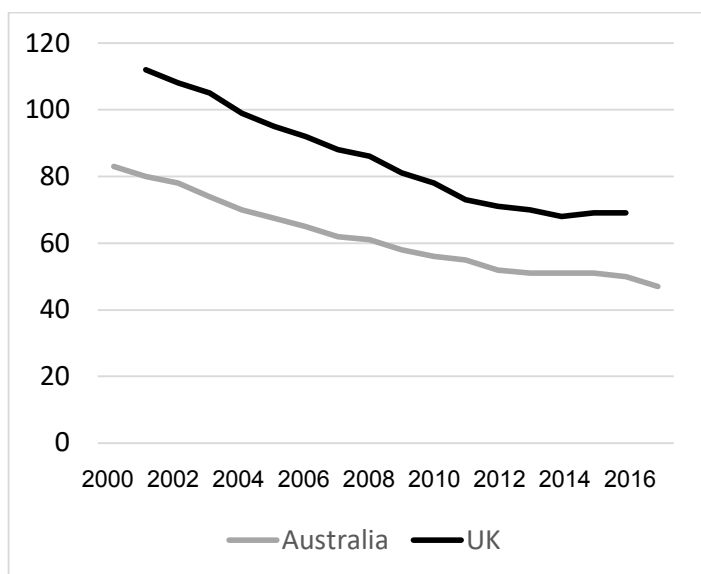
According to this measure, there are about 70 avoidable deaths per 100,000 people in the UK per year, and about 50 avoidable deaths in Australia. Over

<sup>42</sup> 'Health status: Maternal and infant mortality', OECD, 2018 (<https://stats.oecd.org/>).

<sup>43</sup> 'Non-Medical Determinants of Health', OECD, 2018 (<https://stats.oecd.org/>).

time, the gap between Australia and the UK has narrowed. Nonetheless, the most recent figures for the UK are about the same as the Australian figures from the mid-2000s, so in this sense, the UK is still a decade behind Australia (see Figure 4).

**Figure 4: Treatable mortality amenable to healthcare: avoidable premature deaths per 100,000, 2000-2017<sup>44</sup>**



The Healthcare Access and Quality Index (HAQ) is a ‘processed’ version of Mortality Amenable to Healthcare, which tries to control for some country-specific risk factors (Fullman et al. 2018). This brings us a step closer to what we are interested in (the performance of the healthcare system), but it has the downside of being less tangible. MAHC has a straightforward interpretation: it is the number of theoretically avoidable deaths. HAQ, in contrast, has no such interpretation: it is an index on a scale from 0 (worst) to 100 (best).

44 ‘Health status: Avoidable mortality’, OECD, 2017 (<https://stats.oecd.org/>).

On the HAQ index, Australia ranks fifth best in the world, with a score of 95.9. The UK ranks 23rd, with a score of 90.5. Since the score does not mean much on its own, it is worth pointing out that Australia’s score puts the country in the same league as Switzerland and the Netherlands, while the UK’s score puts the country in the same league as Greece and Slovenia (see Table 5).

**Table 5: The Healthcare Access and Quality Index (HAQ)  
(Scale: 0-100), 2015**

	UK	Australia
Score	90.5	95.9
Rank	23	5
Comparable to	Greece (90.4) Slovenia (90.8)	Netherlands (96.1) Switzerland (95.6)

Source: Fullman et al. (2018)

The Commonwealth Fund study, an international ranking of (up to) eleven healthcare systems, also contains a subcategory called ‘Health Care Outcomes’. It is based on measures of population health, a version of Mortality Amenable to Healthcare and the rate of change therein, and mortality/survival rates for a number of selected conditions (Schneider et al. 2017: 24). In that category, Australia has consistently been in the top five, while the UK has consistently been second-to-last (see Table 6).

**Table 6: The Commonwealth Fund’s ‘Health Care Outcomes’ (previously ‘Healthy Lives’) category**

	Number of countries included	UK rank	Australia rank
<b>2017</b>	11	10	1
<b>2014</b>	11	10	4
<b>2010</b>	7	6	1
<b>2007</b>	6	the UK and New Zealand receive identical scores, jointly occupying ranks 4 and 5	1
<b>2006 2004</b>	Category not yet included		

Sources: Schneider et al. (2017); Davis et al. (2014); Davis et al. (2010); Davis et al. (2007).

Overall, the Commonwealth Fund is the one outlier study which regularly ranks the NHS as the world’s best healthcare system. This is because ‘Health Care Outcomes’ is just one category in that study, so the UK can make up for its poor performance in that category elsewhere. The problem is that the other categories of the Commonwealth Fund study are far less rigorous, less reliable, and less internationally comparable (see Niemietz 2016: 38-45). The UK’s top position in the Commonwealth Fund study is highly sensitive to that specification: small changes to the study’s methodology could completely change the UK’s position.

A joint publication by the Nuffield Trust, the King’s Fund, the Institute for Fiscal Studies and the Health Foundation also compares the performance of the NHS to that of comparable health systems (although not specifically to Australia) (Dayan et al. 2018). It is evident that the authors of that study try hard to come to a balanced, on-the-one-hand-on-the-other-hand conclusion.

They often seem to accept lower standards for indicators that show the NHS in a positive light than for indicators that show it in a negative light.<sup>45</sup>

But in the end, the authors cannot get around the fact that the NHS is a poor performer in terms of outcomes. Their overall verdict is:

The NHS has definite strengths relative to other health systems. It provides unusually good financial protection to the public from the consequences of ill health; it appears to be relatively efficient; and it performs well in managing some long-term conditions...

However, the NHS does not have especially good outcomes relative to other wealthy countries. For the most important illnesses in directly causing death, it is a consistently below-average performer...

[O]n an overall view it is... hard to argue that it remains the 'envy of the world'... The reality is that the NHS is not doing as well as its counterparts at saving the lives of patients with many of the most common and lethal illnesses (ibid: 39-40).

---

45 For example, the authors include the UK's relatively low suicide rate among mental health patients, despite acknowledging that for mental health, it is much harder to establish a causal relationship between treatment and outcomes than it is for physical health. They also use the NHS's relatively low staffing levels as a purely external constraint, whereas one could make a good case for treating the ability to attract and retain staff as, in part, a performance measure in its own right.

### **Chronic conditions**

Survival and mortality rates, and their various derivatives, have the advantage of being relatively unambiguous measures. A patient diagnosed with the respective condition is either still alive after a certain period, or they are not.

For chronic conditions, which are not usually matters of life or death, there is no such obvious measure of success. The challenge here is to manage those conditions well, that is, to minimise their impact on a patient's daily life and prevent them from deteriorating. But there is no straightforward way of telling whether patients suffering from a particular condition are, on average, better off in this system or that system.

Hospitalisation rates could be an approximation, if we assume that if a condition is properly managed through the primary/community care system, it should usually not be necessary to hospitalise a patient at all.

This is, of course, a bit of a leap of faith. A low hospitalisation rate need not per se be a good thing; if it were, we could easily 'improve' a system's performance by simply making it harder for people to access hospital care. Indeed, rather implausibly, on some of these measures, Mexico would appear to outperform Switzerland.

However, to the extent that lower hospitalisation rates reflect genuine differences in the quality of primary care, in this respect, the NHS seems to have an edge over the Australian system. Australian hospitalisation rates for people suffering from chronic conditions are up to twice as high as UK rates (see Table 7).

**Table 7: Age-sex standardised hospital admission rates (per 100,000 patients) for chronic conditions<sup>46</sup>**

	<b>UK (2017)</b>	<b>Australia (2016)</b>
<b>Asthma and chronic obstructive pulmonary disease</b>	281	403
<b>Congestive heart failure and hypertension</b>	115	264
<b>Diabetes</b>	74	144

46 'Health care quality indicators: Primary care', OECD, 2017 (<https://stats.oecd.org/>).

### **Waiting times**

Internationally comparable data on waiting times are only available for about a dozen countries. Of these, the Netherlands usually comes out as the best performer, while both the UK and Australia are somewhere in the middle. On the whole, waiting times tend to be shorter in the UK than in Australia, and for some procedures, substantially so (see Table 8).

**Table 8: Median waiting times (days) from specialist assessment to treatment, 2018<sup>47</sup>**

	<b>UK</b>	<b>Australia</b>
<b>Cataract surgery</b>	65	84
<b>Coronary bypass</b>	55	17
<b>Prostatectomy</b>	35	44
<b>Hysterectomy</b>	54	61
<b>Hip replacement</b>	92	119
<b>Knee replacement</b>	98	209

In comparing those figures, a note of caution is, however, required. OECD waiting times figures only cover waiting times for healthcare funded through the statutory system, not waiting times for healthcare funded through optional private insurance (or, for that matter, for self-funded healthcare).

For the UK, where only about one in ten people have voluntary PHI (and where PHI is associated with expensive upmarket healthcare), that is not much of an omission. But in Australia, where about half of the population have voluntary PHI, it is. In Australia, PHI can offer faster access to treatment for at least some procedures – indeed, this is a point frequently raised by critics of Australia’s private healthcare sector, who (with some justification) see it as creating a two-tier system.<sup>48</sup> But none of this will be captured by OECD figures.

47 ‘Health Care Utilisation: Waiting times’, OECD, 2018 (<https://stats.oecd.org/Index.aspx?QueryId=49344>).

48 ‘Public patients waiting twice as long for elective surgery, hospitals data reveals’, *Guardian*, 24 May 2018 (<https://www.theguardian.com/australia-news/2018/may/24/public-patients-waiting-twice-as-long-for-elective-surgery-hospitals-data-reveals>).



### ***Covid-19***

Covid-19 has been the ultimate health challenge of 2020/21. In terms of their Covid performance, the UK and Australia are at opposite ends of the spectrum. The UK had over 1,800 Covid deaths per million inhabitants, and about as many excess deaths (the number of deaths over and above what we would expect in a 'normal' year). These are some of the highest figures in the developed world. Australia, on the other hand, only had three dozen Covid deaths per million people, and no excess deaths at all.

How much of this immense gap can be attributed to differences in the two countries' healthcare systems?

The answer is: not very much. The Australian system had a much easier job than the NHS. The UK had to deal with close to 65,000 Covid cases per 1 million people, Australia with not much more than 1,000 per 1 million. So, the difference in death rates mainly reflects the difference in caseloads. The best healthcare system in the world would have struggled with British caseloads, and even a weak healthcare system could have coped with Australian caseloads.

We therefore cannot directly compare the two countries in terms of Covid performance, and we cannot isolate the contribution of the healthcare system. But what we can do is narrow things down a bit, by comparing each country to a more suitable peer group. We can compare the UK to a group of countries where Covid infection rates have been similarly high, or even higher; and we can compare Australia to a group of countries where infection rates have been similarly low, or even lower. This is shown in Table 9.

In Australia's peer group, the 'low-Covid group', we have included its neighbour New Zealand, as well as the 'Asian Tigers' of Taiwan, Hong Kong and South Korea. All members of that group show exceptionally low Covid death rates, and no excess deaths at all, so there is not much scope for within-group variation. In those countries, the healthcare systems have played their part, but they were given comparatively easy parts to begin with.

In the UK's peer group, the 'high-Covid group', we have included Italy and Austria, with infection rates similar to the UK's, as well as Switzerland, Spain, the Netherlands, Belgium and Israel, where infection rates have been a good deal higher.

**Table 9: Covid prevalence and Covid performance<sup>49</sup>**

		Covid cases per million	Covid deaths per million	Excess deaths per million
<b>High-Covid group</b>	Israel	91,056	690	470
	Belgium	83,922	2,069	1,610
	Netherlands	83,648	990	1,120
	Spain	74,752	1,665	1,760
	Switzerland	74,022	1,212	1,100
	Austria	66,591	1,108	990
	Italy	65,931	1,986	1,970
	UK	64,479	1,868	1,830
<b>Low-Covid group</b>	South Korea	2,274	35	0
	Hong Kong	1,553	28	n/a
	Australia	1,150	35	0
	New Zealand	520	5	0
	Taiwan	46	0.5	0

Within its peer group, the UK is not a uniquely bad performer. It is in the same league as Italy, Spain, and Belgium (see also Niemietz 2021). But the UK's performance is clearly inferior to that of Austria, Switzerland, the Netherlands and Israel, which have substantially lower Covid death rates and lower excess death rates, despite suffering from higher Covid infection rates.

We can still not confidently attribute this to differences in the way the healthcare systems are organised. We cannot read Table 9 as saying, 'If we had swapped the NHS for a system like the Dutch one, our Covid death rate would have been only half of what it actually was.' But when

49 'Tracking covid-19 excess deaths across countries', *The Economist* online database, 21 April 2021 (<https://www.economist.com/graphic-detail/coronavirus-excess-deaths-tracker>); 'Reported Cases and Deaths by Country, Territory, or Conveyance', Worldometers, 2021 (<https://www.worldometers.info/coronavirus/#countries>).

neighbouring countries are faced with similar health challenges, and record such big differences in outcomes, it would be strange if it turned out that the healthcare systems played no role in this whatsoever.

Where the UK clearly has excelled compared to most of its peers is in the rollout of the vaccine. At the time of writing, half of the UK population have had at least one dose of the vaccine, compared to just a quarter in the EU, and hardly anybody in Australia. This is the UK's one big redeeming feature, which has already narrowed the gap between the UK and its peers, and which may well narrow it further.

In short: we cannot say much about how well or badly the Australian system dealt with Covid, because while Australia's overall Covid response has been very effective, the heavy lifting was done elsewhere. What we can say is that the UK has substantially higher death rates than several countries which were just as badly hit, or worse.

## Assessment and conclusion

The conclusion to be drawn from this paper is *not* ‘Ditch the NHS, and adopt the Australian system instead’.

There are plenty of problems with the Australian system. Several expert assessments agree that it lacks a clear assignment of responsibilities, and that this leads to frequent coordination problems (Sammut et al. 2016; Healy et al. 2006).

Compared to other public insurance systems, the Australian system is unusually fragmented. In France, responsibility for the commissioning of healthcare services lies primarily at the national level, while in Canada, it lies at the regional level. Which of these arrangements is preferable is a matter of debate, as well as of value judgements, but both arrangements are internally consistent. In both arrangements, there is an organisation which is responsible for commissioning the entire ‘supply chain’ of healthcare. In a different way, this is also true in SHI systems. There may be dozens of health insurers operating in parallel in a given area – but for any given patient at any given time, one single organisation (their current insurer) covers the entire spectrum of their healthcare needs. If a Swiss or a German health insurer sets up an effective disease management programme (e.g. for diabetics or asthmatics), which reduces hospitalisation, the insurer benefits financially, because it saves on hospitalisation costs. The same is true of a Canadian regional insurer or of France’s national insurer.

But it is not true in Australia. Sammut et al. (2016: 4) point out:

Under Australia’s complex division of health responsibilities... [n]o single level of government or funder has full responsibility for all the health care needs of patients, and no direct control over the

kind of services patients receive and the locations where those services are provided.

If the national government comes up with a way to strengthen primary care to keep people out of hospital, they will incur the political cost that often comes with changes to established healthcare practices, and perhaps the upfront investment required. But the main political beneficiaries will be the regional governments because it will relieve the pressure on 'their' part of the health system. Meanwhile, regional governments may have an interest in improving primary care, but they have little influence over this area. Sammut (2016: 5) argues:

The debate about chronic care has provoked a long-running 'blame game' between federal and state governments, as each would prefer that the other take responsibility and bear the cost of funding chronic disease services. State governments claim that closing the service gaps in the primary care system is a federal policy responsibility, and blame the persistence of the problem on federal government inertia. This seems fair enough... Yet it could be said that state governments act equally irrationally...

The fragmentation of responsibilities which prevails in the public system is replicated in the private system as well. Private health insurers are explicitly banned from covering primary care, specialist care outside of hospital, and diagnostics outside of hospital.<sup>50</sup> This enforced compartmentalisation prevents the PHI sector from taking a more holistic view and trying to deliver a more integrated 'supply chain'.

These problems are compounded by the inflexible payment structure, which is as binding for the PHI sector as for Medicare. As mentioned, healthcare providers in Australia are often paid, fully or partly, on a fee-for-service basis. Fee-for-service is appropriate where the objective is to increase the volume of services and responsiveness to demand. But imposing any one payment structure prevents experimentation with alternatives which may in some cases be more appropriate. Private insurers could not, for example, negotiate with a provider to pay them on the basis of some outcomes-based measure. As Sammut et al. (2016: 4) put it:

---

50 'What is private health insurance?', Department of Health, 2021 (<https://www.health.gov.au/health-topics/private-health-insurance/about-private-health-insurance>).

[F]inancial incentives are misaligned because, in both the public and private health systems, the bulk of health funding is locked up in inflexible fee-for-service payment models. Healthcare providers... are principally rewarded... for providing one-off episodes of... care when acute illness or disease strikes. Rather than a comprehensive health insurance and risk management system, the rigid public health system and regimented private insurance system both primarily function as provider-captured payment mechanisms for separate sets of hospital-based care and community-based primary care.

Fee-for-service payments not only prohibit the development of alternative models of integrated healthcare covering the full service spectrum and full cycle of care; they also encourage doctors to increase activity to maximize income, and thus lead to costly and unnecessary over-servicing – including elevated rates of hospital use.

There are also ongoing debates in Australia about the appropriate role of the private insurance system, the appropriate role of the private hospital sector, and about what the interface between the public system and the private system should look like. Some argue for a greatly reduced role of private healthcare and private insurance, some argue for a greatly expanded role. Some argue for a stricter separation of the private and the public system, some for much closer collaboration and integration.

There are plenty of reform options to address the inconsistencies in the current system that are being discussed by Australian health economists and healthcare experts. But an observer who is familiar with continental European SHI systems cannot help noticing that many of these proposals would essentially just make the Australian system more similar to the system of the Netherlands or Switzerland.

For example, Paolucci et al. (2011) propose a system under which people can fully opt out of Medicare, claim a tax rebate, and use that rebate to take out PHI as primary insurance instead. Under that proposal, the choice between Medicare and PHI would become an either-or choice. People could either be covered by Medicare, or by a private insurer, but not both at the same time, and those who are privately insured would not be entitled to any Medicare-funded healthcare. Private insurers would be allowed to offer the full range of health benefits, including those that are currently only available via Medicare. Under these authors' system, the PHI rebate

would have to be much greater than it currently is, because it would have to compensate people for the value of the relinquished Medicare benefits. But it would now be a genuine rebate: it would no longer be possible to claim the rebate and then use Medicare-funded healthcare anyway.

Medicare would remain the default insurer, but if people opted out in large numbers, then over time, Medicare would become just another insurer, like any other. Opting out of Medicare, and switching to a private insurer, would be no different from switching from one private insurer to another within the PHI system. The Australian system would then strongly resemble a European SHI system with multiple, competing insurers.

Under a different proposal known as 'Medicare Select', Medicare would be privatised, and the state would issue private health insurance vouchers. These vouchers would enable every citizen to take out private health insurance, and it would be mandatory to use them (Sammut 2016: 14). Again, this would make the Australian system in effect indistinguishable from a European-type SHI system with mandatory insurance, choice between competing insurers, and subsidies for those who cannot afford their premiums.

Sammut et al. (2016) come up with a proposal under which health insurers in selected parts of the country would be allowed to opt out of the current contracting and payment structures and set up local alternatives. They could, for example, set up an integrated care network, covering the full spectrum of services. This would improve incentives to provide coordinated care with well-established clinical pathways, and to provide that care in a low-cost setting, minimising overtreatment, duplication, and avoidable hospitalisation rates. These alternative models of healthcare delivery would be entirely voluntary. People would have to opt out of standard arrangements and opt into those alternatives. If they did, Medicare funding would follow.

Again, something quite similar to this already exists in at least some SHI systems. It sounds very much like a description of the Swiss 'HMO Model',<sup>51</sup> a health insurance option under which people waive their free choice of healthcare provider and agree to get most of their healthcare from an integrated, multi-specialty healthcare centre (see Niemietz 2016: 100,

---

51 Health Maintenance Organizations (HMOs) were originally set up in the USA, where they became a regular part of the health system in the 1970s. They spread to Switzerland in the 1990s (Breyer et al. 2015: 440-448).

111-112). Less far-reaching forms of vertical integration and care coordination also exist in the Netherlands (Niemietz 2016: 105-106). The Israeli SHI system, meanwhile, is a system of competing integrated healthcare groups (ibid: 115-117).

Ducket and Nemet (2019) critique the tax rebates for the PHI sector, which they see as a middle-class subsidy. They do not develop a specific reform plan of their own, but a reform which would address that critique would also be likely to make the Australian system more similar to a European SHI system. In SHI systems, there is a much clearer division of roles between statutory insurance and voluntary insurance than there is in the Australian system. Statutory insurance covers the package of healthcare services, and the level of comfort and convenience, that everybody is entitled to. Voluntary insurance covers the cost of optional extras or upgrades. Thus, it is clear that voluntary insurance cannot substitute for statutory insurance – it can only supplement it. There is therefore no reason for tax rebates, subsidies, or other forms of favourable treatment. Voluntary PHI is a form of private consumption like any other, and its beneficiaries are expected to pay for it in full.

Previous IEA publications, especially the book *Universal Healthcare without the NHS*, made the case for a competitive, market-based SHI system (Niemietz 2016: 119-137). This – and not an Australian-style system – remains the author's preferred option. Nonetheless, in terms of healthcare outcomes for the major life-threatening conditions, the Australian system is up there with the very best in the world (including the SHI systems). It achieves all that at lower levels of overall spending than most of north-western Europe and North America. The Australian system clearly gets many important things right.

The system has its downsides. Waiting lists at public hospitals can be fairly long, although a relatively accessible fast-track option is available, in the form of the voluntary PHI system. Hospitalisation rates for people with chronic conditions tend to be higher than in the UK (or, for that matter, several other Western European countries), which suggests weaknesses in coordination and chronic care.

Compared to the NHS (and other Western European systems), the Australian system is less equitable. Private insurance may not be a luxury good, but it is not universally accessible either. The Australian system does cover everybody – it is not a system in which poor people have to



worry about medical bills – but money can buy greater choice and faster access. If better data were available, it would be interesting to specifically compare healthcare outcomes among the poorest – say, the bottom quintile – in both societies, rather than the population as a whole.

But overall, it is safe to say that the Australian system is, in some important ways, superior to the NHS. Australia has important lessons to teach the UK. A more relaxed attitude towards private sector involvement, both in healthcare provision and in healthcare financing, would be a good start.

The idea of giving people tax rebates for taking out private health insurance would certainly be transferable to the British context – although some caution would be required in the design of a rebate system. Rebates must not become subsidies for the private healthcare industry, or for its customers. They should merely ensure that people do not pay twice, that is, they should be a recognition of the fact that insofar as private healthcare is a substitute for public healthcare, people with PHI will use the public system less than they would otherwise have. Thus, rebates cannot be given in a situation in which people are effectively double-insured, both publicly and privately. They would have to be reserved for cases where PHI involves the waiving of at least some entitlement to free NHS treatment, so that its beneficiaries cannot cash in on the rebate, and then use the NHS anyway. But if private healthcare users no longer had to pay double, PHI would become affordable to more people.

Applying community rating and risk structure compensation to the PHI industry could make private healthcare in the UK more accessible to people in poor health. Risk-adjusted rebates, which would enable high-risk individuals to pay for risk surcharges, would have the same effect. Extending the private healthcare option to more people would give patients greater choice over their healthcare, and it could lead to greater experimentation with different models of healthcare delivery.

The Australian system also shows that the national government need not be involved in the running of hospital care and hospital planning. The Australian system could do with some tidying-up (perhaps along Canadian lines), as it is not always clear which layer of government is responsible for what. But in principle, a decentralised arrangement, with a much greater role for sub-national levels, is certainly workable.

Fee-for-service payments are not appropriate in all contexts. In fact, where the main aim is to promote integration and/or cooperation across specialties, or to reduce overtreatment, it can be actively counterproductive. But where the aim is to increase activity, and/or the responsiveness of healthcare providers to patient demand, fee-for-service payments can be a means to do that. They create a system in which the money follows the patient, something which Britain has been trying since the mid-2000s, with only partial success.

The main point of this paper, though, is not to claim that this type of system, or that type of system, has got everything right, nor to come up with a list of specific policy recommendations. The main point is simply that there are plenty of interesting and attractive alternatives out there, which deserve greater attention. As long as we reduce everything health-related to a dance around the golden calf of the NHS, we will keep missing out on a lot.

## References

AIHW (2018) Health expenditure Australia 2016–17. Health and welfare expenditure series no. 64. Cat. no. HWE 74. Canberra: Australian Institute of Health and Welfare.

Allemani, C., Weir, H., Carreira, H., Harewood, R., Spika, D., Wang, X., Bannon, F., Ahn, J., Johnson, C., Bonaventure, A., Marcos-Gragera, R., Stiller, C., Azevedo e Silva, G., Chen, W., Ogunbiyi, O., Rachet, B., Soeberg, M., You, H., Matsuda, T., Bielska-Lasota, M., Storm, H., Tucker, T., Coleman, M. and CoNCoRD Working Group (2015) Global surveillance of cancer survival 1995–2009: Analysis of individual data for 25676887 patients from 279 population-based registries in 67 countries (CoNCoRD-2). *The Lancet* 385: 977–1010.

APRA (2019a) Private Health Insurance Membership Trends. Australian Prudential Regulation Authority.

APRA (2019b) Private health insurance annual coverage survey. Privately Insured People with Hospital Treatment Cover. Annual Analysis by Sex, Age and State. Australian Prudential Regulation Authority.

APRA (2019c) Private Health Insurance Membership and Benefits. Australian Prudential Regulation Authority.

APRA (2019d) Private Health Insurance - Risk Equalisation Financial Year Results. Australian Prudential Regulation Authority.

Arnold, M., Rutherford, M., Bardot, A., Ferlay, J., Andersson, T., Myklebust, T., Tervonen, H., Thursfield, V., Ransom, D., Shack, L., Woods, R., Turner, D., Leonfellner, S., Ryan, S., Saint-Jacques, N., De, P., McClure, C., Ramanakumar, A., Stuart-Panko, H., Engholm, G., Walsh, P., Jackson,

C., Vernon, S., Morgan, E., Gavin, A., Morrison, D., Huws, D., Porter, G., Butler, J., Bryant, H., Currow, D., Hiom, S., Parkin, M., Sasieni, P., Lambert, P., Møller, B., Soerjomataram, I. and Bra, F. (2019) Progress in cancer survival, mortality, and incidence in seven high-income countries 1995–2014 (ICBP SURVMARK-2): a population-based study. *The Lancet* ([https://www.thelancet.com/journals/lanonc/article/PIIS1470-2045\(19\)30456-5/fulltext](https://www.thelancet.com/journals/lanonc/article/PIIS1470-2045(19)30456-5/fulltext)).

Breyer, F., Zweifel, P. and Kifmann, M. (2005) *Gesundheitsökonomik*. Berlin and Heidelberg: Springer.

Buckingham, H. and Dayan, M. (2019) Privatisation in the English NHS: fact or fiction? London: Nuffield Trust (<https://www.nuffieldtrust.org.uk/news-item/privatisation-in-the-english-nhs-fact-or-fiction>).

Charlesworth, A., Davies, A. and Dixon, J. (2012) Reforming payment for health care in Europe to achieve better value. Research Report. London: Nuffield Trust.

Cheng, T. (2015) Reflections on the 20<sup>th</sup> anniversary of Taiwan's single-payer national health insurance system. *Health Affairs* 34(3): 502-510.

Davis, K., Doty, M., Holmgren, A., Schoen, C., Schoenbaum, S., Shea, K. and Kriss, J. (2007) *Mirror, Mirror on the Wall: An International Update on the Comparative Performance of American Health Care*. New York and Washington, DC: The Commonwealth Fund.

Davis, K., Stremikis, K. and Schoen, C. (2010) *Mirror, Mirror on the Wall: How the Performance of the U.S. Health Care System Compares Internationally, 2010 Update*. New York and Washington, DC: The Commonwealth Fund.

Davis, K., Stremikis, K., Squires, D. and Schoen, C. (2014) *Mirror, Mirror on the Wall. How the Performance of the U.S. Health Care System Compares Internationally, 2014 Update*. New York and Washington, DC: The Commonwealth Fund.

Dayan, M., Ward, D., Gardner, T. and Kelly, E. (2018) *How good is the NHS?* The Health Foundation, the Institute for Fiscal Studies, The King's Fund and the Nuffield Trust.

Department of Health (2019) Annual Medicare Statistics – Financial Year 1984-85 to 2018-19 (<https://www1.health.gov.au/internet/main/publishing.nsf/Content/Annual-Medicare-Statistics>).

Duckett, S. and Nemet, K. (2019) The history and purposes of private health insurance. Melbourne: Grattan Institute.

Fullman, N., Lozano, R., Murray, C., Yearwood, J., Barber, R., Chalek, J., Eldrenkamp, E. and Shields, C. (2018) Measuring performance on the Healthcare Access and Quality Index for 195 countries and territories and selected subnational locations: a systematic analysis from the Global Burden of Disease Study 2016. *Lancet* 391: 2236–71 (<https://www.thelancet.com/action/showPdf?pii=S0140-6736%2818%2930994-2>).

GHDx (2019) Global Burden of Disease Study 2015, Healthcare Access and Quality Index Based on Amenable Mortality 1990–2015. Seattle: Global Health Data Exchange (<http://ghdx.healthdata.org/record/ihme-data/gbd-2015-healthcare-access-and-quality-index-1990-2015>).

Gornall, J. (2019) Big tobacco, the new politics, and the threat to public health. *BMJ* 365: l2164 (<https://www.bmj.com/content/365/bmj.l2164>).

Grey, S. and Macaskill, A. (2020) In shielding its hospitals from COVID-19, Britain left many of the weakest exposed. Reuters Special Report (<https://www.reuters.com/investigates/special-report/health-coronavirus-britain-elderly/>).

Healy, J., Sharman, E. and Lokuge, B. (2006) Australia: Health system review. *Health Systems in Transition* 8(5): 1-158. World Health Organization and European Observatory on Health Systems and Policies.

Journard, I., André, C. and Nicq, C. (2010) Health Care Systems: Efficiency and Institutions. OECD Economics Department Working Papers No. 769. Paris: OECD Publishing (<http://dx.doi.org/10.1787/5kmfp51f5f9t-en>).

Niemietz, K. (2015a) Internal Markets, Management by Targets and Quasi Markets: An Analysis of Health Care Reforms in the English NHS. *Economic Affairs* 35(1): 93-108.

Niemietz, K. (2015b) Diagnosis: Overrated – An analysis of the structural flaws in the NHS. IEA Discussion Paper No. 66. London: Institute of Economic Affairs.

Niemietz, K. (2016) *Universal Healthcare without the NHS*. Hobart Paperback 185. London: Institute of Economic Affairs.

Niemietz, K. (2021) Viral Myths. IEA Covid-19 Briefing 18. London: Institute of Economic Affairs.

Paolucci, F., Butler, J. and van de Ven, W. (2011) Removing Duplication in Public/Private Health Insurance in Australia: Opting Out With Risk-adjusted Subsidies? *Agenda* 18(2): 49-70.

Sammut, J., Thomas, G. and Seaton, P. (2016) MEDI-VATION: 'Health Innovation Communities' for Medicare Payment and Service Reform. CIS Research Report No. 21. Sydney: Centre for Independent Studies.

Sammut, J. (2016) MEDI-VALUE: Health Insurance and Service Innovation in Australia — Implications for the Future of Medicare. CIS research report No. 14. Sydney: Centre for Independent Studies.

Schneider, E., Sarnak, D., Squires, D., Shah, A. and Doty, M. (2017) *Mirror, Mirror 2017: International Comparison Reflects Flaws and Opportunities for Better U.S. Health Care*. New York and Washington, DC: The Commonwealth Fund.

Wettenhall, R. (2018) Australia's friendly history. *Public Affairs*. University of Melbourne (<https://pursuit.unimelb.edu.au/articles/australia-s-friendly-history>).







The Institute of Economic Affairs  
2 Lord North Street  
London SW1P 3LB  
Tel 020 7799 8900  
email [iea@iea.org.uk](mailto:iea@iea.org.uk)

