

What the NHS can and cannot learn from the Singaporean health care system

BRIEFING PAPER

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Singapore spends less on healthcare than the UK, and achieves remarkable health outcomes. Yet it is often unclear how far these lower costs are due to the design of their healthcare system as opposed to wider societal and cultural factors. This paper focuses specifically on primary care, and argues that Singaporean-style polyclinics and telemedicine could help drive efficiency in the UK, as they have done in Singapore.

KEY POINTS

- There is no simple reason why Singapore spends less than other developed countries on healthcare:
 - Singaporean public hospitals do not deliver markedly lower unit costs than peer countries.
 - Singapore charges patients to access healthcare services, and while this moderates demand, it cannot fully explain Singapore's low hospital utilisation.
- Low demand is largely determined by population health and culture, which are difficult to emulate.
 - Hong Kong and Taiwan spend more than Singapore on healthcare, but much less than Western countries. All three East Asian states have very low levels of obesity, high life expectancy, and low health inequality.
- Health experts should not uncritically cite parts of Singapore's system to justify their favoured programme of reform. Instead, they should provide evidence that a specific part of Singapore's healthcare system works better than the NHS. This paper applies this method to primary care.

RECOMMENDATIONS

- **The NHS should grant prescribing rights to Singaporean doctors**, building on an existing EU Directive. Demand for private GP appointments is growing as patients struggle to access timely care. An appointment on a Singaporean telemedicine app costs half as much as private UK providers, and British patients are already using this service. The government should formalise this process, and make it accessible to more people.
- **NHS England should trial Singaporean-style polyclinics in areas of England with too few GPs.** Singaporean polyclinics deliver lower unit costs, and pay their doctors more than NHS GP practices.

FOREWORD – THE NHS SALVATION ROAD TO SINGAPORE

The NHS is in serious decline, struggling to recover from the devastating impact of the pandemic, Brexit and over a decade of austerity. The decline started before COVID-19: the NHS was failing on some of its key access performance measures in 2015. Its problems are systemic and more deep-seated than the backlog of treatments and staff unrest. Unless it changes fundamentally its approach to service delivery and investment, the NHS will be swamped by a wave of demand it cannot meet, fuelled by obesity and chronic conditions.

Politicians know radical change is necessary but are fearful of explaining what's needed to their electorate. Part of the trouble is they lack models they can draw on and cite as a way forward. Perhaps they should follow the shadow health secretary Wes Streeting's example and hop on a plane to Singapore. Before that they should read this pamphlet.

Singapore is a wealthy small city-state of 5.4 million people. But it only spends about 4.4% of its GDP on healthcare – less than half that of the UK. Its infant mortality rate is half that in the UK; it has much lower levels of obesity than us; and Singaporean life expectancy is a few years higher than in the UK. Yet the cost of their public hospitals is not significantly different that in other developed countries. So, what's their secret? The short answer is two-fold.

First, they take a population health approach to the delivery of health services, rather than the NHS focus of treating ill-health. They have remembered Beveridge's original message in his 1942 report. His central idea for a satisfactory post-war welfare state was that Britain needed "a national health service for prevention and comprehensive treatment available to all members of the community." Unfortunately, we have never delivered the prevention bit. Perhaps more to the point, Singaporean politicians don't seem to worry too much about accusations of 'Nanny Statism' if they tell their electorate how to stop dying earlier than need be.

Second, and critical, the Singaporeans are not fixated on delivering services from acute hospitals – the most expensive part of any healthcare system because of its fixed overheads and expensive maintenance. As this report demonstrates "the reason why Singapore spends so much less on health than other developed countries is its low hospital utilisation." Instead, Singapore has invested in highly productive polyclinics and low-cost telemedicine. The result is that Singaporeans can visit their GP more often than English patients. In their polyclinics they also improve productivity by separating chronic and acute care.

The English NHS started down the path of delivering more services outside hospitals with the 2006 White Paper "Our health, our care, our say", following a large public consultation. Lord Darzi, then a health minister in the Brown government, built on this with his idea of polyclinics providing primary and some acute care. These reforms were seen off by the British Medical Association and the powerful acute hospital lobby. The time has come to revisit these ideas and draw on the experience of Singapore.

This pamphlet provides valuable service delivery ideas that would help rescue our beleaguered NHS. It also contains some interesting ideas on how citizens can build up funds through an insurance system to make out of pocket payments later and reduce the burden on taxpayers.

It's an interesting read.

Lord Warner

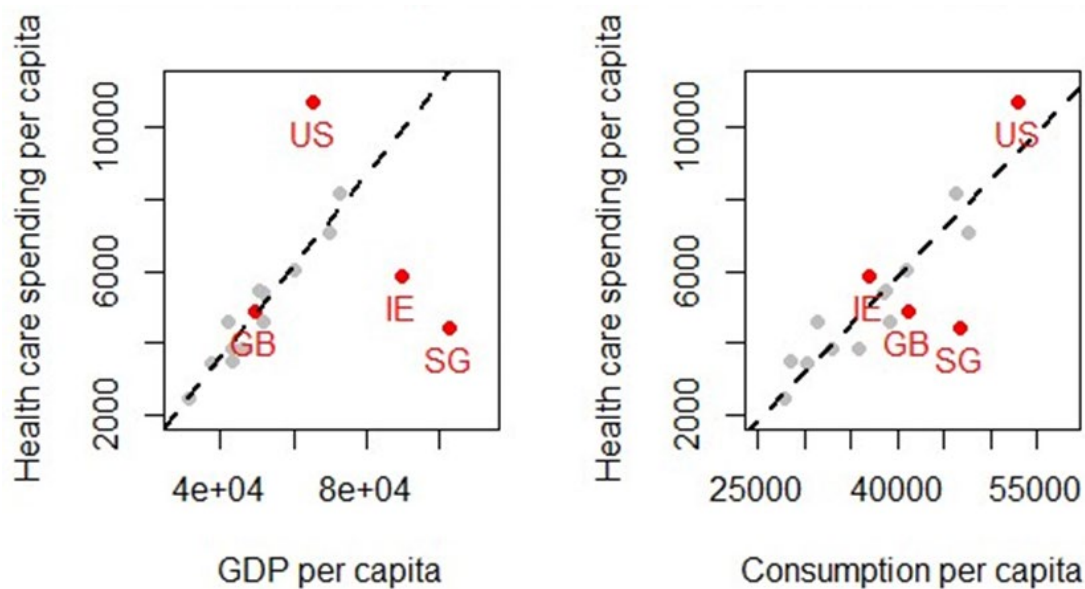
Independent Peer and former Health Minister

INTRODUCTION

Given the current challenges facing the NHS, and the adverse fiscal climate, policymakers naturally look further afield for inspiration. Singapore, a small East Asian city-state of 5.4 million people, is widely considered the world's most efficient healthcare system.¹ This is because Singapore is an outlier. Healthcare spending typically takes up a larger share of GDP as economies grow. Yet Singapore is much richer than the UK but has lower per capita healthcare spending (Figure 1). It nonetheless achieves outstanding outcomes. Infant mortality is half that of the UK; life expectancy is 83 (in the UK it is 81); cancer survival rates, while lower than those in the US, are similar to those in western Europe.²

Commentators often praise the efficiency of the Singaporean healthcare model, describe part of their system, and argue that other countries should follow suit. However, this approach often disguises more than it reveals. When Wes Streeting, the shadow health secretary, recently visited Singapore General hospital, he marvelled at its use of medical technology.³ But Singaporean public hospitals do not deliver substantially lower costs than their western counterparts. The economics commentator Tim Harford has written about how Singapore charges patients to access healthcare services.⁴ While patient charges reduce demand, low health utilisation is largely determined by factors like culture and population health, which are difficult to emulate.

In this article, I adopt a different approach. Focusing on primary care, I outline the key problems facing the UK GP model, examine how Singapore approaches the same challenges, and provide evidence of measurable efficiency gains that could be adopted in a UK context. I make two sets of recommendations. First, Singaporean telemedicine startups offer appointments at less than half the price of UK private providers. UK patients are already using this service, and the government should grant prescribing rights to Singaporean doctors. Second, Singaporean polyclinics achieve lower costs and pay their doctors more than NHS GP practices. NHS England should therefore trial Singaporean-style polyclinics in communities with poor access to primary care services.

Figure 1: Health care spending vs economic indicators, 2019

*Trend lines exclude outliers (IE, SG and US in the first graph; SG in the second graph)

**AU, CH, FI, FR, GB, IE, NL, SG, US, ES, GR, PT, IT, NO, KR, JP

Source: World Bank Development Indicators⁵

THE PROBLEM WITH TALKING ABOUT SINGAPOREAN EFFICIENCY

When experts discuss Singapore's healthcare system, they cite Singapore's superior outcomes, describe a particular aspect of their system, and conclude that it should be adopted in another context.⁶ This makes it difficult to determine what factors are contributing to lower costs, and what lessons can be applied in other healthcare systems, like the NHS. Drawing on both publicly available data, costings provided by National Healthcare Group Polyclinics and conversations with Singaporean civil servants, I will instead explain why Singapore spends so much less on healthcare than other developed countries.

Large parts of the Singaporean healthcare system are not more efficient than other developed countries. Rather than paying for a scan, staffing costs, and medicine separately, modern healthcare systems bundle payments for healthcare services. The Singaporean Ministry of Health uses the Australian system to organise these bundled payments by diagnostic group. Both the Singaporean and Australian governments publish costs by diagnostic group online. This allows you to compare costs in Singaporean and Australian public hospitals (Singaporean public hospitals account for 80% of patient hours).⁷ Hospital care is cheaper in Singapore than Australia, but only just.⁸ This is still impressive: Singapore is richer than Australia, and richer countries tend to spend more on healthcare. But if there is a way of achieving the same amount of hospital care for half as much as other developed countries, Singapore has not found it.

The reason why Singapore spends so much less on healthcare than other developed countries is its low hospital utilisation. Temporary migrants make up a fifth of the population, are younger than Singaporean citizens, and often have trouble accessing healthcare.⁹ But even dividing the total number of visits by just citizens and other permanent residents, the NHS has to cope with 76% more Accident and Emergency (A&E) visits per capita than Singaporean hospitals.¹⁰ This is supported by analysis by the Institute for Policy Studies, a Singaporean think tank, which estimates health spending by age group for Singaporean citizens and other permanent residents.¹¹ They found excluding temporary migrants reduces – but by no means eliminates – the gap between Singapore and other developed countries. Neither does adjusting health spending to account for Singapore's younger population: Singaporean citizens and permanent residents are only slightly younger than UK citizens.

In his 2005 book, *The Undercover Economist*, Tim Harford wrote approvingly about Singapore's system of medical savings accounts, called Medisave. "Singapore's government had the power to tackle the problem [overconsumption of healthcare] head on," Harford argues, "by using the forced savings and catastrophe insurance to make sure costs were manageable but keeping the power of patient choice at the heart of the system."¹² The Singaporean system of healthcare financing is complex, and is best illustrated with an example. Consider the case of Mr. Tan, a 45-year-old Singaporean citizen, who, like all working Singaporeans, contributes a portion of his salary to Medisave, a mandatory health savings account designed for medical expenses. When Mr. Tan experiences severe abdominal pain and requires an urgent surgical procedure, the cost amounts to £3,000. Under the Singaporean system, Mr. Tan initially uses his Medisave account to pay an out-of-pocket deductible for the procedure, roughly £1,500.¹³ This deductible is part of the cost-sharing design of Medisave, ensuring that Mr. Tan contributes towards his medical expenses. Once his deductible is met, MediShield Life, a basic health insurance provided by the government, kicks in to cover the remaining costs. However, under MediShield Life, Mr. Tan is still responsible for a co-payment, which ranges from 3 to 10% of the remaining bill.¹⁴

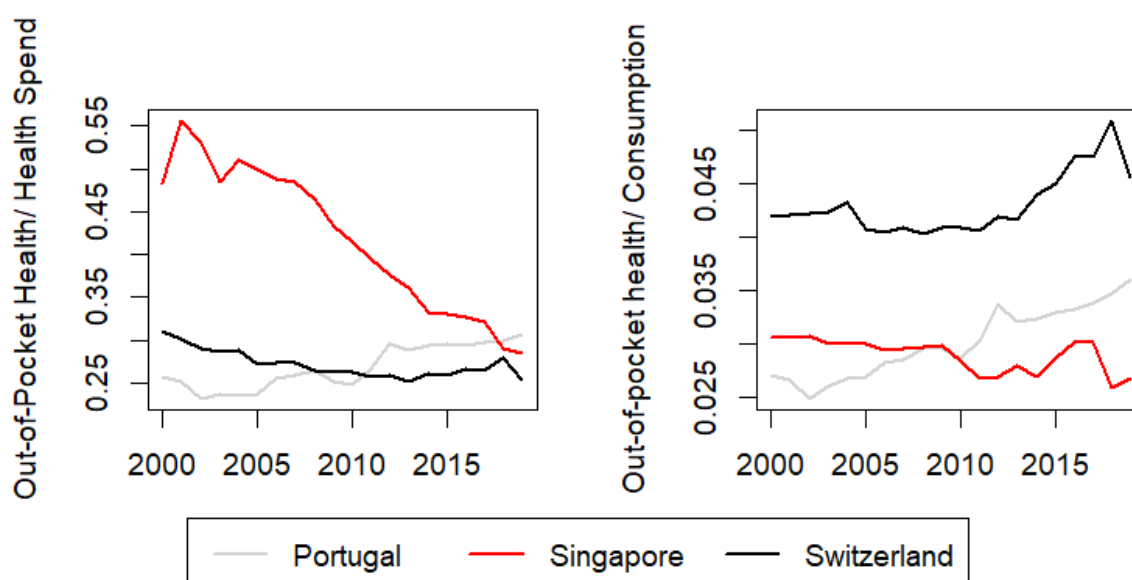
Health experts are divided on the question of whether charging for healthcare is an equitable way of managing demand for services. UK health economists, notably Alan Maynard, oppose user charges, favouring rationing of access to care through waiting lists. Maynard argues that user charges can deter necessary healthcare utilisation among the most vulnerable populations.¹⁵ On the other hand, there is a broad consensus among US health economists, supported by the findings of the RAND Health Insurance Experiment, that charging for healthcare can help manage demand. The RAND experiment found that patient charges reduced utilisation of both necessary and unnecessary care, but did not affect health outcomes for all but low-income patients.ⁱ

ⁱ It is important to note, however, that the often-cited 30 per cent reduction in demand cannot be directly applied to the NHS, because the Rand Health Insurance Experiment did not directly consider waiting lists as an alternative method for managing demand. Joseph P. Newhouse, "Free for All?: Lessons from the RAND Health Insurance Experiment", 1996

The Singaporean system is not a laissez-faire free-for-all. The Ministry of Health administers a progressive system of subsidies for Singaporean citizens, and a safety net to cover medical expenses for patients without any savings. But charging patients for healthcare is playing an important role in reducing demand. Citizens and permanent residents can pay for top-up insurance policies called riders that reduce out-of-pocket payments. Until 2018, 30% of Singaporeans had full riders, which meant they paid nothing out of pocket. The Ministry of Health banned full riders, presenting evidence that policyholders consumed 60% more health care than those who paid some form of co-payment.¹⁶ Their evidence was an observational study only, and all else being equal, you would expect patients willing to pay for riders to consume more healthcare. But the Singaporean Ministry of Health notes that rider policy holders are younger than the national average.

Patient charges alone cannot explain Singapore's much lower levels of health utilisation. In 2005, when Tim Harford wrote about Singaporean medical savings accounts, Singapore had the highest levels of out-of-pocket payments among developed countries, accounting for nearly 50% of total health spending. However, over the last 28 years, Singapore's out-of-pocket payments have started to converge with those of its peers. In 2019, they accounted for only 28% of healthcare spending: less than Portugal, which spends over 9% of GDP on healthcare. In 2015, the Ministry of Health also scrapped age and lifetime claims limits for MediShield, the basic public insurance plan. While Singapore spends more on healthcare than it did in 2005, it still spends much less than any Western country.

Figure 2: Out-of-pocket health spending



Source: World Bank Development Indicators¹⁷

Low demand for healthcare in Singapore can therefore largely be attributed to factors beyond its healthcare system. Other small East Asian states spend less than Western countries on healthcare. Before the pandemic, both Hong Kong and Taiwan spent just over 6% of their GDP, whereas Singapore was even lower, at around 4.4%.¹⁸ This is surprising, given that Singapore is wealthier than both Hong Kong and Taiwan, and healthcare spending typically increases with GDP. But while user charges and efficiency partially account for Singapore's lower healthcare spending, much of the gap between Singapore and systems like the NHS can be attributed to complex factors that are difficult to replicate.

Population health is likely playing a role moderating demand. In 2016, only 6% of Singaporeans were obese, compared to 26% of the UK population.¹⁹ Taiwan and Hong Kong also exhibit very low levels of obesity. Dutch studies suggest that obesity decreases lifetime healthcare spending, as healthier individuals live longer and, consequently, consume more healthcare in old age.²⁰ However, research from the United States has found that, for individuals of the same age, being obese increases healthcare consumption by 38%.²¹

More complex interactions between culture and healthcare utilisation are understudied in the field of health economics. For example, traditional Chinese medicine, despite its lack of robust support from randomised controlled trials is deeply integrated into East Asian societies. Data from the National Health Survey 2010 in Singapore, found that 39.6% of those surveyed had visited a traditional Chinese medicine practitioner in the previous year, 74% for acute and chronic conditions.²² This integration highlights a broader cultural acceptance of alternative health management practices, in stark contrast to Western contexts, where there is considerable concern over the medicalisation of social problems — situations in which medical treatments are prescribed despite limited effectiveness.²³ Cultural factors, like traditional medicine, might provide a cost-effective alternative to the trend of unnecessary health consumption.

AN EVIDENCE-BASED APPROACH TO LEARNING FROM THE SINGAPOREAN HEALTH CARE SYSTEM: PRIMARY CARE

Because much of Singapore's low healthcare spending has little to do with its healthcare system, policymakers cannot rely on general invocations of Singaporean efficiency to justify a given programme of reform. Instead, they should be clear about what problems they are trying to solve, and provide hard evidence that a feature of the Singaporean healthcare system is more efficient than the NHS. In this paper, I apply this approach to primary care but hope others will follow my model and conduct similar analyses for other parts of the healthcare system. Unlike secondary care, Singaporeans visit their GP more often than English patients (Table 1). Singapore improves access to primary care services through low-cost telemedicine services, as well as hyper-productive polyclinics, which achieve efficiencies by separating chronic and acute care.²⁴

Table 1: Healthcare utilisation in England and Singapore

	Inpatient discharges per capita	GP visits per capita ⁱⁱ	A&E visits per capita
Singapore – Total populationⁱⁱⁱ	0.109	5.608	0.178
Singapore – Permanent population^{iv}	0.153	7.916	0.252
England	0.174	5.573	0.444
England divided by Singapore total	160.4%	99.4%	248.7%
England divided by Singapore permanent	113.6%	70.4%	176.2%

Source: Singapore Ministry of Health, World Population, OECD, NHS England^v

DEREGULATING INTERNATIONAL TELEMEDICINE TO IMPROVE ACCESS TO PRIVATE GP SERVICES

According to the latest NHS England patient survey, patients are finding it increasingly hard to get appointments with their GP. The survey, which involved over 750,000 questionnaires, revealed that only about half of patients had a good experience trying to book an appointment, and less than half found it easy to get through on the phone.²⁵ This indicates a notable decline in accessibility and satisfaction regarding GP services. Spire Healthcare reported a 41% increase in patients booking their private GP appointments in 2022 compared to the previous year.²⁶ However, paying for a private GP remains prohibitively expensive for many patients (average costs range between £50 and £150 per appointment). The UK government should consider liberalising prescribing rights for Singaporean telemedicine providers, improving access to private

ⁱⁱ The total number of GP visits consultation is based on the number of polyclinic visits. The Ministry of Health estimate that 80 per cent of primary is carried out in the private sector. Lee Chien Earn, International Health Care System Profiles, Singapore <https://www.commonwealthfund.org/international-health-policy-center/countries/singapore>

ⁱⁱⁱ Based on total population, including temporary residents.

^{iv} Based on permanent population, population including Singaporean citizens and permanent residents.

^v Data not available for the private sector in England, only public hospitals and NHS commissioned services.

GP services. If this proves successful, the NHS could commission these services for rural areas with limited access to local GP practices.

During a recent trip, I met with the CEO of the largest telemedicine provider in Singapore. He casually mentioned that UK patients were already using his service. This seemed surprising. No comprehensive data is available for the costs of UK telemedicine services, so I googled the cost of online appointments in the UK and Singapore. Singaporean appointments are less than half the price of those in the UK. The most affordable online appointment I found in the UK was £29. Yet, many providers charge significantly more – for instance, Babylon Health lists its price for private GP appointments at £59. In contrast, Doctor Anywhere, Singapore's leading telemedicine provider, offers services for just £12.²⁷ Doctor Anywhere has an app where patients can log on and see patients virtually. They make and then register the diagnosis. The rest of the process, including referrals and prescriptions, is automated.

Doctor Anywhere operates under a unique regulatory framework established by the Singaporean Ministry of Health. Specifically, it is part of the regulatory sandbox for telemedicine providers, which falls under the Licensing Experimentation and Adaptation Programme.²⁸ This programme is designed to enable the development of innovative healthcare services in a controlled and safe environment. In addition to this, Doctor Anywhere adheres to the National Telemedicine Guidelines and the Singapore Medical Council's Ethical Code and Ethical Guidelines.²⁹ Their practices also comply with the Public Hospitals and Medical Clinics Guidelines, ensuring a high standard of medical care. The only drawback is that Singaporean doctors currently cannot write prescriptions for UK patients.

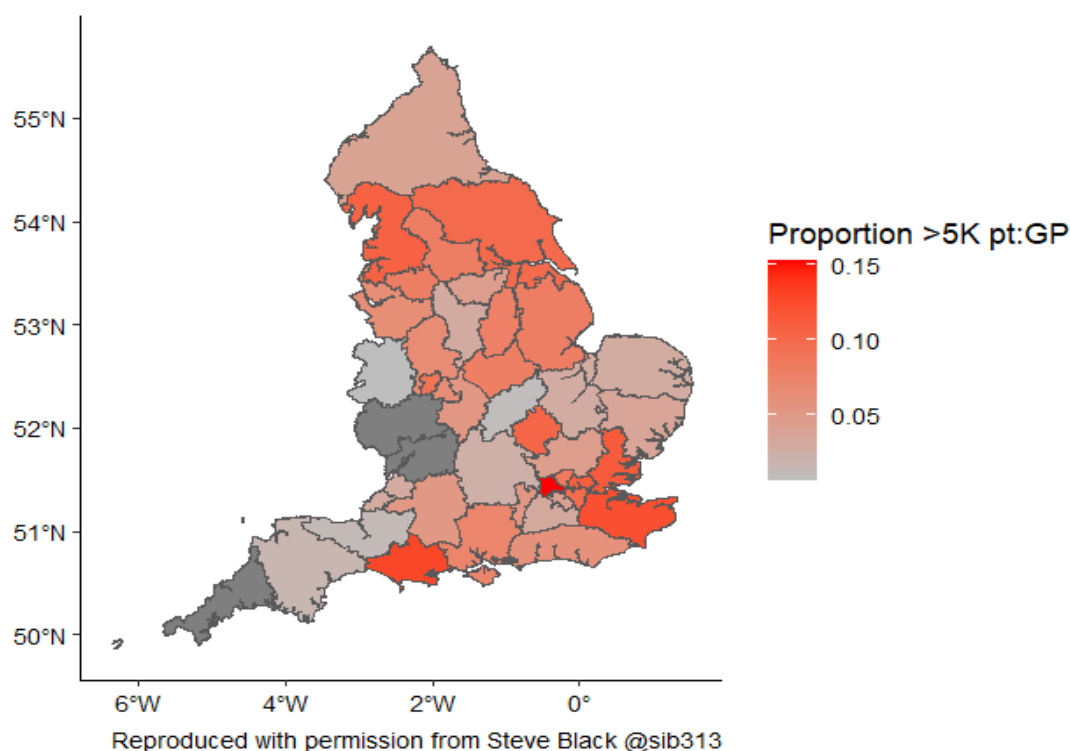
The UK government should consider formalising the use of Singaporean telemedicine services by UK patients, by granting UK prescribing rights to Singaporean doctors. After Brexit, concerns arose about potential delays in drug approvals in the UK, given the EU's larger market. To address this, the government introduced the "reliance procedure," which acknowledged the EU as a stringent regulator. This procedure guarantees UK approval within 67 days for any drug approved in the EU. Essentially, the reliance procedure maintained our pre-Brexit position and was initially intended to be temporary. However, from 2024, the government plans to make this procedure permanent and will recognise "certain other regulators."³⁰

The government could take an additional step by liberalising prescribing rights for international telemedicine consultations. Under Directive 2011/24/EU, EU citizens can receive a prescription in one EU country and have it dispensed in another. The directive addresses liability concerns by allowing a citizen in one member state to seek redress in another, providing a foundation upon which the UK could extend prescribing rights to Singaporean doctors. This change would likely necessitate the UK granting Singapore a data-sharing adequacy decision, but I see no reason why this wouldn't be possible post-Brexit. The UK government recently granted data adequacy to Guernsey.³¹

SINGAPOREAN-STYLE POLYCLINICS IN AREAS OF ENGLAND WITH POOR ACCESS TO GP SERVICES

There is significant variation in the number of patients per NHS GP across England (Figure 3). The average number of patients per GP is 2,306; in Kent, one in eight patients have to share their GP with over 5,000 other patients.³² Singaporean polyclinics deliver lower unit costs and pay their doctors more than English GP practices. NHS England therefore should trial Singaporean-style polyclinics in areas with poor access to GP services, and doctors should share in any productivity improvements through higher pay.

Figure 3: Geographical variation in the distribution of GPs, 2022



Source: Stephen Black, *Black Box Data Science*³³

Health centres that combine elements of primary and secondary care in the community are not a new idea. Indeed, politicians have been talking about variants of the polyclinic since the foundation of the NHS. In July 1948, an NHS pamphlet stated, "special premises known as health centres may later be opened in your district. Doctors may be accommodated there to provide you a wide range of services ...including dentistry and other services on the spot".³⁴ This quote is taken from Professor Lord Darzi's evidence to the House of Commons Health Select Committee. Lord Darzi was a health minister under New Labour and is the last in a long line of politicians who have tried and to some extent failed to introduce health centres in the NHS. In 2007, Lord Darzi published *Healthcare for London: A Framework for Action*. The review modelled large cost savings from delivering care in new health centres, which combined elements of primary care and diagnostic services in the community. It

estimated that polyclinics could replace 8% of in-patient, 50% of hospital A&E, and 41% of hospital out-patient services, saving £1.4 billion.³⁵

Lord Darzi did not like the term polyclinic – "it sounded too Soviet" – but the name polled well and several polyclinics were rolled out across London.³⁶ Some commentators argue the last Labour government tried implementing polyclinics and the modelled cost savings failed to materialise. But the plans were abandoned at an early stage, and there is not enough evidence to judge their effectiveness. The King's Fund, a leading health think tank, argued that the theoretical savings from delivering care in the community were difficult to achieve in practice.³⁷ In several trials that predated the introduction of Darzi-era polyclinics, co-location of primary and community care did not lead to more integrated work practices.

But these trials cited by the King's Fund bear little resemblance to Darzi-era polyclinics. For example, GPs referred patients for diagnostic services at their polyclinics on a future date. In contrast, Darzi-era polyclinics act as a one-stop shop: patients see a GP, and then walk upstairs for diagnostic services. The government commissioned an evaluation of Darzi-era polyclinics, but it was never published.

Singaporean polyclinics are publicly-owned and provide a combination of diagnostic and primary care services. Polyclinics date from the 1920s, when Singapore was a developing country and most of the population could not afford expensive hospital care.³⁸ Polyclinics now provide subsidised primary care services to 20% of Singaporean citizens, focusing on low-income patients with chronic health conditions. In the past, patients were not assigned to specific doctors, but more recently polyclinics have adopted a "teamlet" model which provides continuity of care to chronic patients. Patients with multiple chronic health conditions sign up to a "Teamlet", made up of two doctors, a nurse, and a health coordinator. Consultation rooms are connected by sliding doors and doctors see multiple patients at once. While the health coordinator is seeing a patient in one room; the doctor can attend to a second patient in another. The costs of Singaporean polyclinics vary significantly depending on their specifications, but a 6,000 square metre polyclinic including dental services costs approximately £30 million to build and fit out.³⁹

Unlike Darzi-era polyclinics, Singaporean-style polyclinics separate acute and chronic patients. This allows them to operate at higher volumes. Doctors that cater for walk-in patients see 56 acute patients a day, during regular working hours. Polyclinics also drive down costs by staffing the urgent care clinic with junior doctors, who are required to work for the government for five years after graduation. Teamlets often employ three senior doctors, and at any given time one of these doctors supervises the urgent care clinic. Urgent care doctors can book follow-up appointments as required. The British Medical Association recommends GPs see no more than 25 patients each day (though most GPs see more than this).⁴⁰ Teamlet doctors, see complex chronic patients, and therefore operate at lower volumes (35 patients a day), but after a successful trial, polyclinic managers are encouraging doctors to sign up less severe patients and increase patient volumes.

Unit costs in Singaporean polyclinics are lower than English GP practices. National Healthcare Singapore Polyclinics kindly provided me with financial data for the 2018–19 UK financial year. The University of Kent produces comparable unit cost estimates for the NHS. Singaporean polyclinic doctors earn slightly more than the average English GP. But cost per appointment is lower in Singapore than in England. National Healthcare Singapore Polyclinics classify patients by the number of chronic health conditions. The cost of a "Moderate Chronic Health Patient" (2–3 conditions) is 40% less than the cost of a English GP appointment. The cost of an acute visit with no chronic conditions is less than half the English average.⁴¹ The Singaporean Ministry of Health recognises the efficiency of the polyclinic model and is rapidly increasing the number of polyclinics. There are currently 23 polyclinics in Singapore; by 2030 there will be 32.⁴²

The NHS is already moving in this direction. In her 2021 NHS England stocktake report, Dr Claire Fuller recommends a new pathway to improve access to same-day urgent care treatment centres in the community.⁴³ She argues this would free up resources to enable greater continuity of care for patients who need it most, those with chronic health conditions. There is evidence from the United States that greater intensity of primary care for chronic patients reduces secondary health care utilisation, resulting in lower total health care spending.⁴⁴ The advantage of the polyclinic model – collocating urgent and chronic care – is that patients who present through the urgent care route with a chronic health condition can be signed up for a “teamlet.” Currently, patients who present at urgent treatment centres with problems related to a chronic health condition are turned away, and told to book an appointment with their GP practice.

CONCLUSION

This paper has challenged simplistic explanations of why Singapore spends so much less than other developed countries on healthcare. Most of the Singaporean health care system is not more efficient than that in other Western countries. And while Singapore’s practice of charging patients for healthcare reduces demand, low health care utilisation is largely determined by other factors, like population health and culture, which are difficult to emulate. Instead of invoking Singapore’s reputation for efficiency to justify a given programme of reform, policymakers should clearly explain what problem they are trying to solve, and provide evidence that Singapore offers a cost-effective alternative to established practice.

This dual realisation that not all of the Singaporean health care system is efficient, and no single explanation explains Singapore’s low healthcare spending, reveals practical opportunities for learning in other contexts, like the NHS. Applying this approach to primary care, I made two sets of recommendations. British citizens are struggling to access GP services, and increasingly turning to private providers, which are prohibitively expensive for most patients. Patients are already using Singaporean telemedicine services, but Singaporean doctors cannot currently write prescriptions for UK patients. The UK government should therefore grant prescribing rights to Singaporean doctors. There is significant variation in access to GP services, both between and within integrated care boards. Singaporean polyclinics offer lower unit

costs and pay their doctors more than English GP practices. NHS England should therefore trial Singaporean-style polyclinics in areas with poor access to primary care services, and allow doctors to share in productivity improvements through higher pay.

There are many other such avenues of potential research. For instance, while Hong Kong, Taiwan, and Singapore all spend less than their peers on healthcare and achieve outstanding outcomes, I have not been able to fully explain what endogenous factors are driving this trend. It is however noteworthy that while health inequality data is not available for Taiwan, both Singapore and Hong Kong have extremely low levels of inequality in life expectancy, even lower than Scandinavian countries with much more expansive welfare states.⁴⁵ Singapore's performance is both more impressive and less easily explicable than you would believe from reading conventional accounts. This uncertainty creates the potential to learn.

ENDNOTES

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