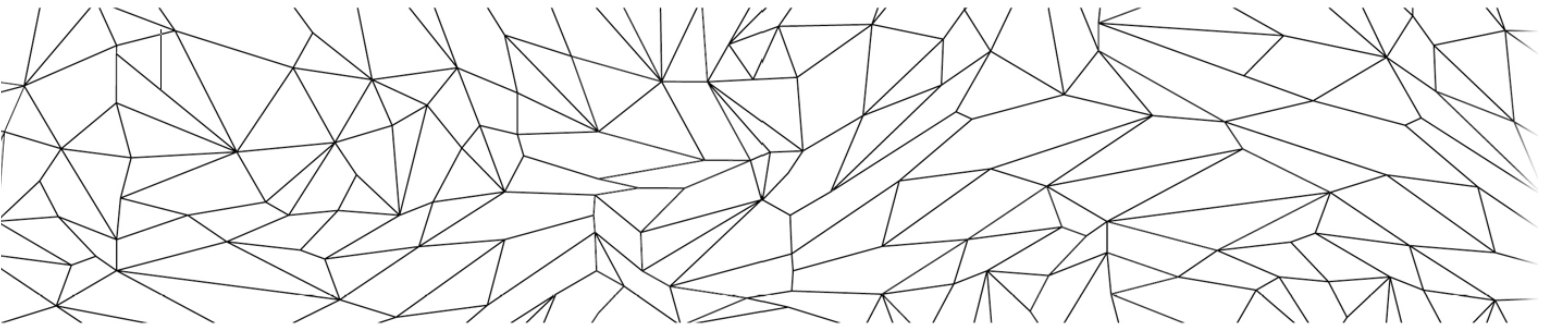


SOAS Department of Economics



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**Dina Toubasi**

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# **What is the impact of private finance initiatives on hospital capacity in the English NHS?**

Dina Toubasi\*

## **Abstract**

This research examines the effects of privatisation, especially in the form of private finance initiatives (PFI) on the capacity of NHS hospitals in England since the 1980s. The findings presented in this paper indicate that privatisation, especially through PFI, has imposed higher costs on the NHS, which were usually met through a transfer of resources from patient and clinical care to meeting financial obligations. The result has been a reduction in bed numbers across NHS hospitals, which has significantly undermined the ability of the service from meeting the health care needs of the population.

**Keywords:** NHS; private finance initiatives (PFI); privatisation; financialisation; hospital capacity; COVID-19

**JEL classification:** H51; I18; L33; L38.

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## **Introduction**

On the eve of the Covid-19 global health crisis, England's National Health Service (NHS) was already wrestling to meet rising patient demand for health care. In December 2019, a few months before the pandemic struck, waiting lists and waiting times for diagnostic tests, cancer treatment, elective surgery, and accidents and emergency (A&E) treatment were the highest in decades (Baker, 2020). As a result of mounting pressure and near- full hospital capacity during the winter flu season of January 2020, every hospital in England was ordered to postpone all elective surgery until at least February. This resulted in the cancellation of nearly 50,000 operations. In addition, twelve NHS trusts and two ambulance services covering approximately 9 million people declared a "black alert," warning that they had reached maximum capacity and could only admit patients with life-threatening cases (Donnelly, 2020). Two months later, the Covid-19 pandemic rapidly swept through England and infected over 400,000 people in a period of less than seven months (Department of Health and Social Care, 2020), putting a significant strain on hospitals across the country. Medical staff in NHS hospitals faced constraints in capacity to deliver care, as most were forced to resort to using operating theatres as intensive care units, and, in April, 83 per cent of hospitals were using escalating beds as makeshift hospital beds to meet the heightened demand in face of constrained capacity (BMA, 2020). Although numerous advocacy groups, health care workers, politicians, research institutes, and others have been voicing concerns over the state of health care in the UK for decades, the NHS's poor state of readiness and organisation was brought to the forefront of public debate once the service's ability to deal with heightened demand and pressure was put to test in response to the global pandemic.

The NHS has been subject to a series of structural reorganisations and policy developments which began with the rise of neoliberalism and weakening of the welfare state

in England since the early 1980s. These continue till our current day, entailing a steady progression towards privatisation, financialisation and marketisation of healthcare in England. This includes the rapid proliferation of private finance initiatives (PFI) as one of the main manifestations of privatisation in the NHS.

The use of PFI as the main procurement mechanism in the health care sector between 1992 and 2018 has been excessively costly, and thus inflicted financial burdens and affordability difficulties on the NHS. In order to bridge affordability gaps and ensure financial viability, PFI hospitals regularly resort to reducing bed and hospital capacity or laying off staff (Gaffney et al. 1999; Hellowell et al., 2009). For example, in an analysis by the National Audit Office in 2007, PFI hospitals were found to have significantly higher bed occupancy rates compared to the pre-PFI rates and the NHS average (NAO, 2008; Hellowell et al. 2009). It has been well established in the literature that high levels of bed occupancy and constrained hospital capacity raise critical issues in the ability of the NHS to meet increases in patient demand and maintain standards of safety inside hospitals (Kaier, 2012, Hellowell et al. 2009). In 2019, over half of NHS trusts had bed occupancy rates exceeding 90 per cent (Baker 2020).

The constrained capacity is also highlighted by the significant decrease of the number of beds in NHS hospitals throughout England since the introduction of PFI: from 232,201 in 1992/3 to 118,451 in 2020/21- an overall cut of 113,750 beds, equivalent to a 49 per cent decrease in total bed capacity throughout England (NHS Data, 2020). Moreover, a report by the British Medical Association (2020) highlights the difficulty facing NHS hospitals in dealing with the level of year-round demand for health care. This is also confirmed by the BMA's quarterly survey (2020), in which 92 per cent of doctors on the frontline agree that the NHS is "in a state of year-round crisis." These figures and reports are extremely alarming considering that high bed-occupancy rates have been associated with greater risks of

infection, poor health of staff, and negatively impact the delivery of safe and effective hospital functions in a myriad of ways (Keegan, 2010; Kaier, 2012; Cunningham et al., 2006). This dissertation examines the implications of privatisation and the introduction of PFI for hospital capacity since the 1980s.

In the first section, I present the changes in NHS hospital capacity in England over the past decades. I focus on the number of staffed beds, hospital occupancy rates, and waiting times for treatment as the main measures of hospital capacity. In the second section, I review and critically analyse the national policy developments and reforms characterised by the growing role of the private and financial sectors, including the introduction of PFI policy to the NHS. In the third section, I show that the introduction of PFI has been associated with the systemic erosion of NHS hospital capacity, thereby threatening the ability of the health care system to effectively meet the population's health care needs.

## **Section I: Review of hospital capacity in England**

This section reviews changing patterns in hospital capacity in England's NHS since the late 1980s. I present and analyse historical data obtained from the NHS about hospital bed numbers, bed occupancy rates, and waiting times in England's hospitals to demonstrate the gradual contraction of hospital capacity. With reference to medical literature criticising the reduction in hospital capacity, I argue that cuts to the NHS's capacity have been detrimental to the ability of the service to deal with patients' demand for health care.

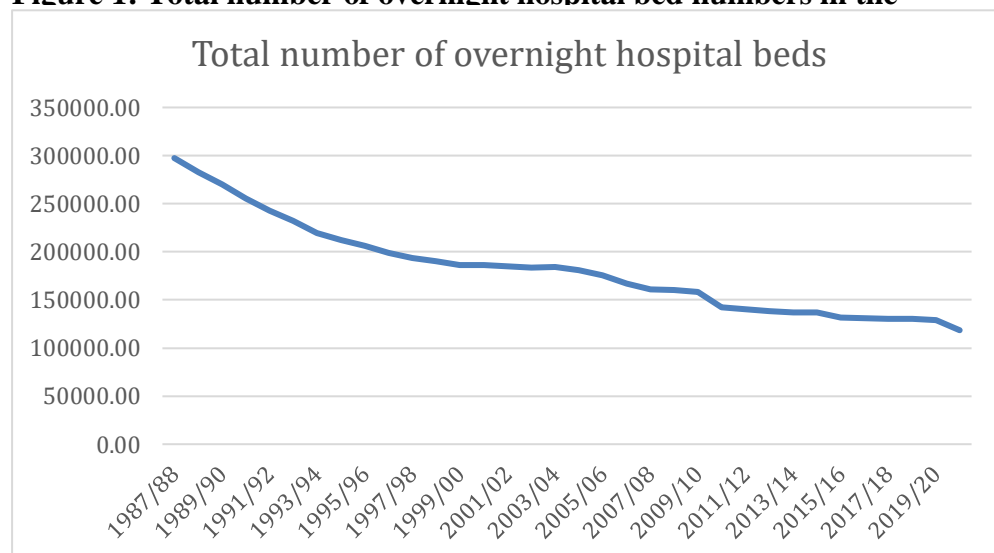
### ***Hospital bed numbers***

Hospital beds are critical in effective health care delivery. Adequate bed capacity is a key aspect in determining a healthcare system's resilience in the face of seasonal or unexpected increases in patient demand (Thomas, 2020). The term 'bed capacity' refers to the number of staffed, fully funded and equipped beds, which are available for use by patients in a hospital (Anandaciva et al., 2020). Trends in bed numbers are indicative of patterns in hospital and service capacity, the quality of care provision, staffing levels and resources available to accommodate local health care needs. The number of beds required for effective health care delivery depends on a multitude of factors including patient demand, local conditions, and national policy (Anandaciva et al., 2020). Patient demand for hospital beds is affected by the demographic features of a population, such as age, sex, and health needs. Patient demand may vary according to patients' expectations and behaviours, seasonal factors, and geographical discrepancies. The number of beds also depends on local conditions regarding models of health care delivery, internal hospital processes and patient discharge, medical innovation and technology, average length of stay, and access to hospital care. The other crucial factor in determining hospital bed capacity is national policy, which shapes funding mechanisms, standards of access, financial incentives, and the organisational structure of

health economics. As such, the optimal number of beds needed for effective health care delivery varies geographically and over time depending on the aforementioned factors of patient demand, local conditions, and national policy. The role and impact of national policy will be the focus of this research.

I examine trends in hospital bed capacity in England since 1987/88, which is the earliest point when national data became routinely available. This coincides with initial shifts in NHS policy in favour of health care privatisation. The timeframe between 1987 and 2020 is also useful as it allows for insightful comparisons of data before and after the introduction of PFI in 1992. Since 1987, bed numbers in NHS hospitals have been significantly decreasing. Between 1987/88 and 2020/21, the total number of overnight beds has been reduced by approximately 60 per cent, from 297,364 to 118,451 (NHS England, 2020) (*see* Figure 1).

**Figure 1: Total number of overnight hospital bed numbers in the**



**Source: NHS England (2020)**

Over this period, changes in different categories of beds varied considerably. For instance, while the number of overnight beds in general and acute departments, mental health, maternity and learning disability fell sharply, the number of daytime beds increased by a

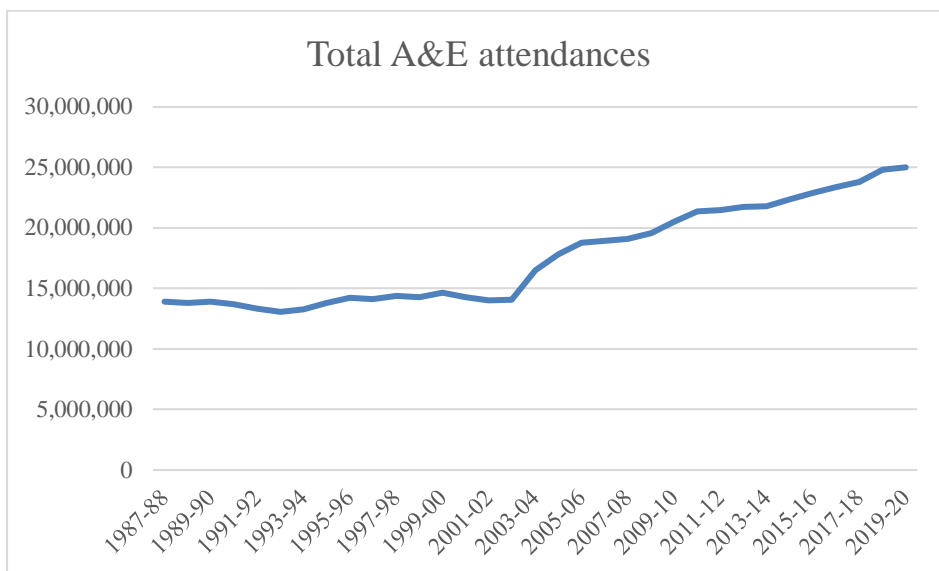


substantial proportion equivalent to 530 per cent (NHS England, 2020). The reductions in some sectors such as mental health and learning disability may be explained by the move to provide mental health care outside hospitals in community based centres, which led to large-scale closures of inpatient mental health and disability beds in hospitals across the UK in the 1980s (Gilburt, 2015). Advances in medical care, such as the evolution in surgical and anaesthetic techniques, where patients typically spend less time in the hospital than they did in the past have also contributed to hospital bed reductions in the past decades (Alderwick et al. 2015). This is evident, for example, in the decreasing average length of stay in A&E, which has fallen by 20 per cent since 2004/5 (Poteliakhoff et al., 2011, p.3).

However, while technological innovations and medical advancements may enable hospitals to deal with rising patient demand more efficiently, the mounting pressures on NHS hospitals during the past years have attracted much critical attention and led to concerns regarding the unsustainability of further bed reductions. For instance, analysis of data obtained from NHS hospital trusts by the British Medical Association (2020) shows that many NHS hospitals are regularly forced to treat patients in corridors using so-called escalation beds, which are temporary beds meant only for emergency use, in order to deal with growing patient demand. The report states that the “core bed stock is no longer able to deal with the level of year-round demand on the NHS [...] It is a sign of a broken system if trusts have to use [escalation beds] beyond winter” (BMA, 2020). In addition, in his speech to the NHS Confederation conference in June of 2019, Simon Stevens, the head of NHS England, affirmed that the cuts to hospital bed numbers are unsustainable, inappropriate, and need to be reversed as they have left hospitals “overly pressurised” and unable to cope with patient demand. Stevens also expressed the need for a “significant gear shift” in the assumptions about required acute bed capacity in NHS hospitals (Iacobucci, 2019; Campbell, 2019).

The cuts to England’s bed numbers occurred during a period when the population grew from 47.3 million in 1987 to 56.2 million in 2020 (ONS, 2020), and the percentage of older people, who are more likely to need hospitalisation, also grew and is expected to keep growing in coming years (ONS, 2019). In addition, demand for hospital services in the past decades has grown considerably, with the number of accidents and emergency (A&E) attendances, surgeries, finished consultations, and diagnostic tests performed all growing during the past years (NHS England, 2020; Baker, 2020) (*see* Figure 2).

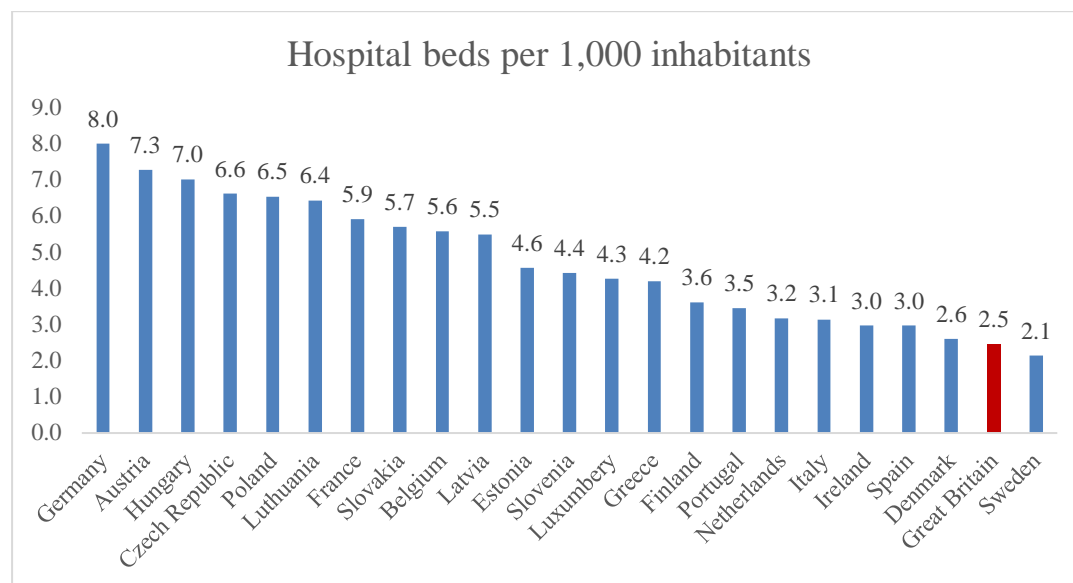
**Figure 2: Total A&E attendances and emergency admissions**



**Source: NHS England (2020). Quarterly Data**

Moreover, and acknowledging the difficulties inherent to international comparisons in the area of hospital capacity due to cross-country differences in the mode of health care delivery, internal hospital organisation, and national policy, hospital bed numbers per capita in the UK are strikingly low. Compared to other OECD countries and to its European counterparts, England has one of the fewest hospital beds, with 2.5 beds per 1000 population, compared with 8 in Germany, 5.9 in France, and 4.2 in Greece (OECD Data, 2020) (*see* Figure 3).

**Figure 3: hospital beds per 1,000 inhabitants in European Union countries**



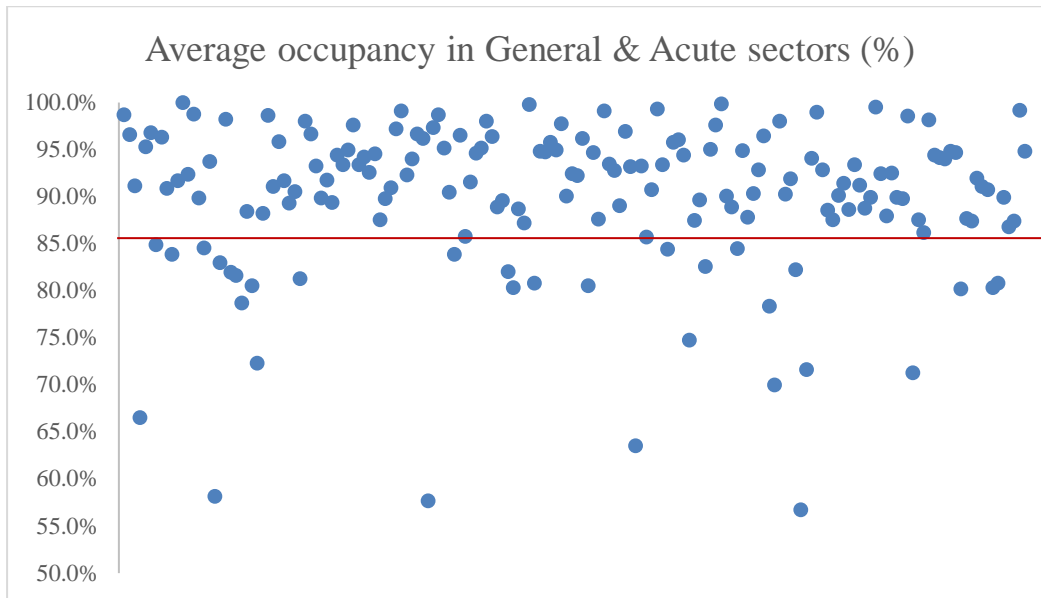
**Source: OECD (2020), Hospital beds (indicator) Latest available data. doi: 10.1787/0191328e-en**

### ***Bed occupancy rates***

The concern that hospital bed capacity has reached unsustainably low levels in recent years is further buttressed by figures indicating extremely high bed occupancy rates across NHS trusts in England, where the occupancy of general and acute (G&A) beds frequently exceeds 100 per cent (Royal College of Emergency Medicine, 2016, p.3). The contraction of bed capacity in hospitals across England corresponds to dangerously high rates of bed occupancy, with an average occupancy of 90 per cent in general and acute sectors during the third quarter of 2019/20, *before* the onset of the coronavirus pandemic placed further pressures on hospitals across the country (NHS England, 2020). Data shows that nearly one half of all hospitals have occupancy rates higher than 90 per cent, and one quarter have occupancy rates exceeding 95 per cent (*see* Figure 4). During the third quarter of 2019/20, only 18 per cent of general and acute sectors in England had occupancy rates within safe levels (less than 85 per cent), as it is shown in the figure below (NHS England, 2020).

This poses a great risk since bed occupancy levels exceeding the recommended 85 per cent pose discernible risks of infection transmission for patients and staff, and increased mortality rates for inpatients (Bagust et al., 1999; Cooke et al., 2004; Madsen, 2014).

**Figure 4: Average occupancy rates in general and acute sectors in NHS trusts in England.**



**Every data point represents the occupancy in one NHS trust, the horizontal red line at y=85% is the recommended 'safe level' rate. Source: NHS England: Bed Availability and Occupancy Data (2020)**

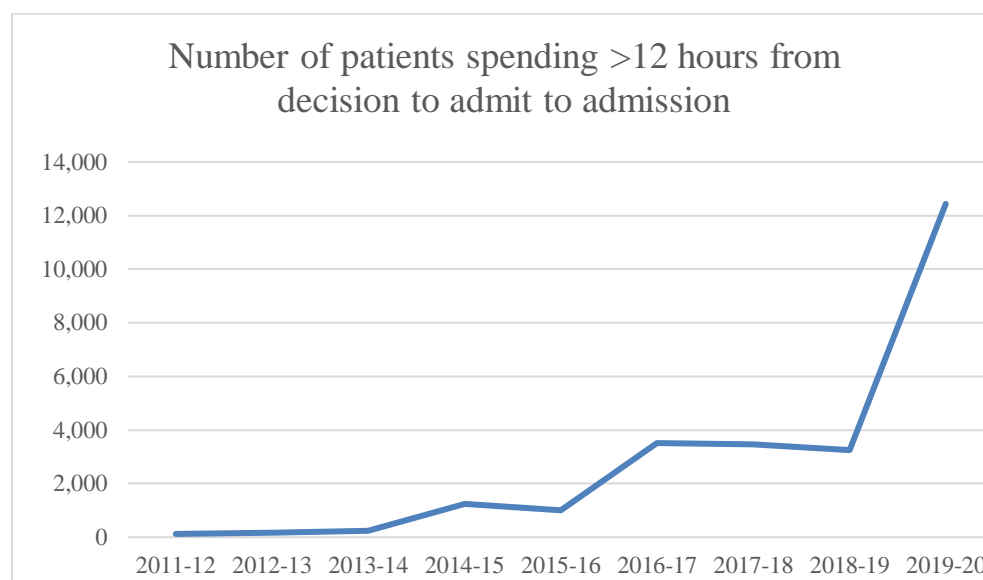
In a survey conducted by the Royal College of Nursing (2020), 73 per cent of nurses across England said that they were using trolleys in hospital corridors to deliver care on a daily basis. The director of the college commented by saying that “nurses in emergency departments are being put under intolerable pressure to keep patients safe,” adding that the cause of the escalating pressure is limited hospital capacity and insufficient bed numbers in NHS hospitals across the UK (Keough, 2020). Those concerns were echoed by Dr Katherine Henderson, the President of the Royal College of Emergency Medicine (RCEM), who stated that ending corridor care, which exposes patients to long waiting times in ‘undignified conditions’ should be of utmost urgency for the NHS. Analysis of NHS data by the RCEM

indicates the need for at least 4,000 to 6,000 staffed beds to keep bed occupancy at a safe level and ensure effective health care delivery in emergency departments (RCEM, 2019).

### ***Waiting times***

Research by Cooke et al. (2004) also indicates that increased bed occupancy levels correspond to higher waiting times for treatment, which have risen to record levels before the coronavirus crisis (Baker, 2020). In 2019, 31 per cent of patients had to spend over 4 hours in A&E to receive treatment, and the number of people waiting over 12 hours to receive emergency treatment has increased by 10,000 per cent since 2011, from 123 patients to 12,345 in late 2019 (NHS England, 2020) (*see* Figure 5). The number of patients waiting more than 12 hours for admission has doubled from 2018 to 2019, reaching the highest level on record (NHS England, 2020; Baker, 2020). Although waiting times tend to peak during times of heightened demand, such as during the winter flu season, there has been a definitive increase over the past decade.

*Figure 5: Number of patients waiting 12 or more hours from decision to admit until admission to the hospital*



**Source: NHS England (2020)**

Under such conditions and following decades of significant cuts in NHS bed numbers and mounting pressure on medical professionals in England to deal with escalating demand,

the NHS was left in a fragile state on the eve of a serious global pandemic. In order to accommodate for the sudden increase in demand for medical services during the COVID-19 crisis, the NHS had to withdraw and postpone medical services from large cohorts of patients in the country, as the system struggled to provide health care for all patients. Consequently, between February and July of 2020, England witnessed the cancellation of more than 2 million elective surgeries (Sample, 2020), a decrease of 75 per cent in GP referrals of urgent cases of cancer (Hiom, 2020) and a 50 per cent decrease in A&E attendances for heart attacks (Bakker, 2020). This was accompanied with a staggering 52 per cent rise in dementia related deaths (Alzheimer's Society, 2020), and a 20 per cent drop in measles and rubella vaccinations (McDonald et al., 2020). Moreover, there has been an alarming increase of 22.8 per cent in emergency readmission rates within one month of initial inpatient discharge (NAO, 2018a). The government notes that the rise in rates “can serve as a warning indicator that local practices may not be providing the required quality of acute care and discharge planning,” and that hospital capacity does not currently meet local needs (NAO, 2018a, p. 7). These disquieting statistics are indicative of why the number of excess deaths in the UK doubled in April and is still higher than any other country in Europe during the course of the pandemic (Tallack, 2020).

The data presented in this section demonstrates the gradual corrosion of NHS hospital capacity, which has impeded the service from meeting the health care needs of the population, especially in times of heightened demand. In what follows, I examine changes in national policy in the UK, which are associated with the systematic reduction of hospital capacity in England since the 1980s.

## **Section 2: NHS privatisation and the private finance initiative (PFI)**

This section outlines the policy changes that resulted in the expansion of privatisation and financialisation in the public health care sector in England since the 1980s, including as a result of the introduction of private finance initiatives into the NHS. I deploy Ruane's (2016) definition of privatisation as the permanent or temporary "transfer of activities, staff, assets, responsibilities, funding, regulation or decision-making out of the public sector to private individuals or private organisations". For financialisation, I refer to a broad definition derived from Epstein (2005) as the increasingly prominent role of financial motives and practices in the organisation of a sector. This section also critically analyses the main arguments for PFI.

### ***Establishment of the National Health Service (NHS)***

In the aftermath of WWII, the British public welcomed political and social reform after decades of wartime austerity. As such, and with a vision of just and comprehensive social insurance, economist William Beveridge produced the *Beveridge Report* providing the foundations for a welfare state that offered necessary services to every British citizen. In his report, Beveridge sought to address the "five giants on the road of post-war reconstruction- Want, Disease, Ignorance, Squalor, and Idleness" (Beveridge, 1942, p. 6). The report was very popular with the public, and its principles offered a guide to the new Labour government led by Clement Attlee in the founding of a welfare system with a national health service at its heart. Accordingly, in 1948, the UK established the National Health Service (NHS) as the first universal healthcare system in the world. The NHS constitution states that the service "belongs to the people" as a comprehensive service, accessible to all, free at the point of delivery, and based on the patients' medical needs rather than on their ability to pay (Department of Health and Social Care, 2015). By joining clinics, hospitals, doctors, nurses, opticians, dentists, and pharmacists under one comprehensive institution, the NHS sought to deliver medical services to meet the various health care needs of the population in a fair,

effective, and sustainable manner, with a commitment to the quality of care and safety of patients (Department of Health and Social Care, 2015). Since its establishment, the NHS has been a highly valued public institution and an integral part of English society. In a 2020 nationwide survey conducted by Prospectus Global, the NHS topped the list in things that make Britons feel most proud of their nation (Newton, 2020).

For nearly thirty years after its inception, the organisational structure of the NHS remained mostly unchanged (Bayliss, 2016), as the service embodied an international ideal in the ability of the state to provide high quality health care to everyone in the country. However, since the 1980s, the NHS has been reorganised through a series of policy reforms which reflect a growing influence of private sector entities in the creation of internal and external markets, a significant increase in the processes involving outsourcing and subcontracting through the mobilisation of NHS funds to non-NHS providers, and the introduction and rapid growth of PFI.

### *NHS reforms during the 1980s and 1990s*

Although the NHS has involved some elements of privatisation in the form of outsourcing since its inception, it was only until the 1980s that this became formalised as policy (Rivett, 2019; Bayliss, 2016). During that period, and in light of concerns regarding stagflation caused by the oil shock of 1978- 1979, the US and UK under the administrations of President Ronald Reagan and PM Margaret Thatcher led the world with the political view highlighting the necessity to reverse post-war welfare spending in the favour of contractionary austerity policies, which were implemented across the board. The government expressed its philosophical conviction in the superior abilities of the private sector to deliver services and allocate investments more efficiently by fostering competition, while minimising the role of the state and maintaining the appearance of the government's fiscal responsibility



by keeping the debt-to-GDP ratio at the lowest levels possible (Pownall, 2013; Hellowell et al., 2010). As such, the government curbed public expenditure and encouraged an expanded role for the private sector by systematically recasting the structures of management, norms and cultures of public provisioning systems in a manner reflecting the perceived virtues of competitive markets and the private sector (Pownell, 2013). So, along with other sectors, health care was subject to radical forms of reorganisations which undermined the comprehensiveness of the service by “fragmenting its structures, significantly reducing its coverage, and undermining evenness of provision from one district to another” (Pollock, 2004, p. 53).

In 1983, the *Griffiths Report* introduced general management structures into all levels of the NHS, which changed the mode of decision-making within the service from consensus management by committee and paved the way for further marketisation by introducing compulsory competitive contracting in cleaning, catering, and laundry services (Evans et al., 2019). By the mid-1980s, the government also began a process of large-scale outsourcing of long-term elderly and mental health care, dentistry, and all optical care to the private sector. Patients were transferred to private providers with the argument that NHS hospitals under public management were inefficient and indeed ‘wasteful’ due to the lack of competition otherwise present in the private sector (Pollock et al. 2004). Such arguments were used despite the lack of evidence showing inefficiency in the NHS, or that competition can improve efficiency or quality in service delivery (Propper et al. 2008, p. 141). Since then, the growing encroachment on the NHS by the private sector has been progressively expanding and threatening the founding principles of England’s health service.

In 1991, the government passed the NHS and Community Care Act, which created an internal market within the NHS by imposing a bureaucratic split between purchasers and providers of health care with the aim of supporting ‘consumer choice’ and getting NHS

hospitals to behave more like private businesses. The purchasers, being the health authorities and some GPs, would 'buy' health care services from the providers- the hospitals, community centres and GPs at a contractually agreed-upon price (Pollock, 2004, p. 59). The notion of establishing an internal market and imposing compulsory competitive tendering within the NHS posed some challenges which stem from the difficulty in expecting hospitals, which are entities purposed for the service of public interest and fulfilment of essential needs, to compete with one another, pushing the weakest out of business, as would happen in a real market (Gosling, 2016). In addition, a study by Allen et al. (2016) found that healthcare providers regard collaborative strategies to be more helpful than competitive ones in their field. The marketisation of the service led to a reduction in the number and scale of health authorities (the providers) and many new trusts, being too small to efficiently and independently manage the responsibilities of human resource management and other planning operations were forced to seek assistance from large management consultancy firms (Pollock, 2004).

### ***The introduction of PFI***

In 1992, the government under the leadership of John Major introduced legislation allowing private finance initiatives (PFI) in public sectors such as health care, defence, transport, education, etc. PFI schemes in the NHS were formally and significantly expanded under the National Health Service (Private Finance) Act of 1997 and were endorsed and further extended under the successive 'business-friendly' New Labour governments of Tony Blair (2007-2010) and Gordon Brown (2010- 2016) (Leys et al., 2011).

Under conventional outsourcing and procurement schemes, the public sector contracts and directly pays a private sector entity to construct a particular asset or oversee the completion of a project. However, PFI is a procurement mechanism wherein the government

enters into a contract with a private company, otherwise known as a Special Purpose Vehicle (SPV), which pays for a project by raising finances through debt and equity investments. The Treasury then mobilises public funds for contractually specified availability payments, which cover debt and interest repayments, shareholder dividends, asset management costs, and often also include payment for certain services such as cleaning, security, catering, and maintenance (NAO, 2018). So, rather than paying for the asset during the period of construction, the public sector pays a periodic fee commonly referred to as a ‘unitary charge’ (UC) using taxpayers’ money to the private provider once the project is completed and the services are provided. The unitary charge covers the costs associated with financing, construction, maintenance, and lifecycle replacement expenditure. The payment is contingent upon performance standards specified in the initial contract. This mechanism of contractual remuneration is supposed to underpin the risk transfer process and incentivise the private sector entity to fulfil its contractually specified obligations (HM Treasury, 2019). PFI contracts tend to run over the period of 20-30 years and have an average duration of 27.5 years (NAO, 2018).

In 2012, the UK government passed the Health and Social Care Act (HSCA), which further entrenched market structures within the NHS, and introduced Clinical Commissioning Groups (CCGs) in which GPs were given responsibility of the NHS budget. The Act triggered a rise in private outsourcing by creating an ‘external market’ for the NHS (Davies, 2013). The HSCA minimised the role of the state in health care provision and fuelled the growth of competitive tenders in the NHS, inviting large equity investors and deeply financialised multinational corporations to dictate decision-making processes within the NHS based on profit-seeking motives (Davis, 2015; Leys et al., 2011). Bayliss (2016, p. 6) notes that the increased role of private sector companies in the NHS transforms the purpose of health care provision from a local community service to “several global investment portfolios

of international private finance.” The frequent reorganisation of the NHS culminating in the HSCA in 2012 has attracted much criticism from politicians, medical workers and academics alike, leading to the establishment of numerous advocacy groups such as Doctors for the NHS, Keep our NHS Public, NHS for Sale, We Own It, People vs. PFI, Protect our NHS, and others. For instance, the BMA, which has been a prominent critic of the marketisation and privatisation of the NHS since the creation of internal markets in 1989, expressed its concern with the high costs and ‘perverse incentive’ resulting from the marketisation enforced upon the service. In a public statement criticising the impact of the institutional reorganisations on the founding principles of England’s health service, the Chairman of Council at the Association, Dr Hamish Meldrum, said that “many of the reforms of recent years threaten to erode the principles of free access, care based on need, and risk-pooling. We need a democratically accountable, local approach to health care delivery, with funding based on the needs of patients, and providers encouraged to co-operate rather than compete” (Doctors for the NHS, 2015).

In 2012, PFI was amended as PF2 to address concerns about the inflexibility and lack of accountability articulated by various public bodies such as the National Audit Office, the Office for Budgetary Responsibility, and the Committee of Public Accounts. However, the structure of PF2 is essentially the same as its predecessor despite claims of increased transparency and accountability (HM Treasury, 2019).

For health care, PFI enabled the private financing of investments by NHS trusts in so-called public-private partnerships, with the projected aims of harnessing competition and efficiency, and increasing accountability. NHS trusts, which are the public sector contracting agency in this case, typically award a 30-year contract to private sector companies to design, build, operate, maintain, and finance new or existing hospitals (Hellowell et al. 2009).

Between 1992 and 2018, PFI was the main source of capital investment for the tax-funded NHS, accounting for more than 90 per cent of total capital invested in healthcare programs in England (Hellowell et al., 2010). Among others, some of the private corporations which are responsible for managing and operating NHS hospitals include Virgin Care, PwC, McKinsey & Company, Blackstone, and UnitedHealth Group (Gosling, 2016; Davis, 2015). The most recent figures indicate that compared to other departments, the health sector has used PFI as a capital investment mechanism more than any other sector (NAO, 2018, p. 26). The Department of Health and Social Care has the largest PFI/PF2 investment portfolio, with a nominal capital value of £13 billion (equivalent to 21.6 per cent of the total £60 billion for all departments), under which there are 125 hospital projects currently in operation (HM Treasury, 2019). In his book, *NHS for Sale* (2015), Davis notes that many of the private sector companies which were contracted in England's health sector are listed on the stock market exchange and are backed by private equity investors who frequently engage in risky financial practices with the aim of increasing stock value and maximising shareholder returns (*see also* Bayliss, 2016; Gosling, 2016). The nature of the firms involved in NHS contracts through PFI and conventional outsourcing exacerbates the financial risk they pose on the service. Due to the heavy reliance of those firms on global financial markets, their financial continuity is directly contingent upon conditions of global finance and may be undermined by foreign economic turbulence (Asenova et al., 2006).

### ***Rationale and critique of PFI***

The decision to hand over investments in public infrastructure to private consortia and multinational corporations under PFI was driven by arguments about enhanced efficiency in service provision, reduced public indebtedness and expenditure, better value for money, and

allowing effective risk transfer from the public sector to private sector corporations (Booth, 2015). In addition to the growing ideological conviction in the virtues of privatisation and marketisation under the neoliberal politico-economic ethos during the 1980s and 1990s, the rationale for introducing PFI in the health care sector in England was driven by the political appeal of fiscal prudence, which is often (misleadingly) regarded as a measure of the economic competence of a government (Hellowell et al., 2009). This is because privately financed investment moves spending ‘off-balance sheet’ and thus reduces the nominal public sector debt-to-GDP ratio in the short run. The invisibility of privately financed investment to national accounts is, however, but a national accounting idiosyncrasy, and does not reflect the amount of resources available at a government’s disposal, since PFI requires a future resource commitment by the government to pay creditors (Heald et al., 1997; Pollock et al., 2002).

The other most common argument used in favour of PFI revolves around cost-efficiency, or, in other words, value for money assessments. This line of argumentation has been repeatedly challenged by economists who maintain that PFI investment incurs higher costs compared with direct public investment (NAO, 2018; Hellowell et al., 2009). Unlike direct government spending, PFI payments are subject to annual increases because they are indexed to inflation (Pollock et al., 2013). Additionally, analysis by the HC Treasury Committee (2011) estimates that the cost of a privately financed hospital is almost 70 per cent higher than if it were financed directly by the Department of Health (NAO, 2018, p.15). Also, a survey conducted by the Committee found that 7 out of 11 departments reduced their use of PFI in recent years due to “concerns about cost efficiency and value for money” (NAO, 2018, p. 23).

PFI also imposes additional costs due to high management consultancy and administrative fees. A study commissioned by the Department of Health in 2005 found that administration and management costs rose exponentially following the creation of internal

markets and the introduction of PFI into the NHS. The study estimates that in the mid 1970s, administrative costs comprised about 5 per cent of the NHS budget, and in 2005 increased to make up more than 14 per cent of the total budget (Bloor et al., 2005).

Moreover, private finance is riskier than public finance because governments are less likely than private corporations to default on their debt due to issues such as bankruptcy. And, the transaction costs are lower for governments because the market for public debt is efficient and liquid, making it both feasible and safe for governments, such as that of the UK, to increase their spending at a much lower cost than the private sector (Hellowell et al., 2009). The Public Accounts Committee has criticised the use of PFI and PF2 by the government as the dominant investment mechanism for new projects for their inflexibility, and the Office for Budget Responsibility has stated that rather than being an effective method of risk transfer, private finance initiatives pose a ‘fiscal risk to government’ (HM Treasury, 2019). This risk is usually transferred to non-PFI parts of the NHS, which carry the liability of financial consequences when difficulties arise because the government has ‘effectively ringfenced’ payments to the SPV as part of expenditure allocated by the public sector (Froud et al., 2001).

A report published by the official government watchdog, the National Audit Office (NAO), in January 2018, which was instrumental in leading to the abolition of new PFI/PF2 projects in the UK in October of the same year, critically examines the arguments for PFI and conclusively states that there is no evidence of increased operational efficiency under PFI, which manage more than 700 facilities in England. The NAO’s report also finds that some costs, such as cleaning, maintenance, and management, are higher under PFI than direct government spending. The NAO’s findings come in stark contrast to the arguments proposed by proponents of PFI about the higher value for money and lower financing costs. As the report demonstrates, government borrowing costs are significantly lower than borrowing

under PFI, to the extent that the costs of private finance “are around 40 per cent higher than the cost of a project financed by government borrowing” (NAO, 2018, p.14). The Committee of Public Accounts (2018) finds that the cost of borrowing is 2 per cent to 3.75 per cent higher for the private sector compared to the cost of public borrowing. Gaffney et al. (1999) note that the higher cost of borrowing under PFI is usually met through cuts in clinical spending on the local level, and through cuts to subsidies from NHS capital budgets at the national level.

Some other areas where the use of private finance results in additional costs otherwise absent in direct public borrowing or spending include: insurance on buildings and business interruption, cash management fees incurred by SPVs holding surplus cash (estimated to be 4 billion collectively), costs of hiring external advisers, fees to lenders equivalent to 1 per cent- 2 per cent of the amount lent, and costs of SPV company management, production, administration, and auditing of accounts, which amount to 1 per cent- 2 per cent of the total PFI payment (NAO, 2018). Combined with the higher cost of finance under PFI, those additional costs indicate that the total cash spending on PFI/PF2 projects is significantly higher than direct publicly financed option.

Despite its massive scale and influence across public sectors in England, PFI remains largely unregulated and unaccountable to the public because most contracts enjoy commercial confidentiality rights (Toms et al. 2009). The lack of transparency entails a lack of effective monitoring and evaluation practices, even when they are conducted by official government bodies such as the NAO. Due to ongoing concerns about account transparency and value for money as the mounting deficits caused the closure of multiple PFI hospitals across the country, and after the collapse of Carillion, one of the largest PFI providers, the UK Government abandoned PFI as a procurement mechanism in 2018 (Nuffield Trust, 2019). Although the 2018 decision means that the government will not go into any new PFI



contracts, the future charges of the existing 704 PFI contracts extend till the 2040s and will cost the public an estimated £220 billion, in addition to the £110 billion which the government has already paid (NAO, 2015; HM Treasury, 2019; O’Dowd, 2018).

### **Section 3: PFI and reductions in hospital capacity**

In this section, I show that the higher costs associated with PFI have been instrumental in the systemic reduction of NHS hospital capacity, thereby threatening the ability of the health care system to effectively meet the health care needs of patients.

The high cost of services and debt repayments of investments under PFI has led to the creation of a serious affordability gap in England's NHS. As mentioned in the Section 2, under PFI, the public sector pays private providers a periodic fee called the 'unitary charge' throughout the period of the contract. However, for PFI contracts in healthcare, the unitary charge comprises of two elements: *the availability charge*, which covers the costs of building and equipment, and pays for returns to subordinated and senior debt and dividends to equity holders; and the *service charge*, which covers the costs of ancillary services such as cleaning and catering, as well as facilities management (Hellowell et al., 2010). The availability charge is often paid instead of capital charges because most PFI contracts are 'off-balance sheet,' and this fee tends to exceed average costs due to the higher cost of constructing new buildings, and due to the higher cost of finance under PFI. Compared to the 6 per cent availability charge paid by the Treasury through direct public investment, the fee under PFI ranges between 11.2 per cent and 18.5 per cent (Gaffney et al. 1999a). The high costs of PFI are exacerbated by the fact that annual PFI payments increase on a yearly basis because they are indexed to inflation. In times of economic downturn, like the 2007-2009 global financial crisis the increments in PFI payments posed a serious financial burden in the light of high inflation and reduced public expenditure. As a result of the turmoil in global financial markets during the crisis, many trusts with PFI schemes faced increasing struggles in meeting their obligations, which led the Treasury to establish a £1.5 billion bailout fund to mitigate the financial difficulties and prevent the closure of hospitals (Whitfield, 2017). In 2009, only 11 out of 22 planned PFI hospital schemes were being pursued (Rivett, 2019). By 2011, 22 NHS trusts responsible for 60 hospitals around the country were facing major PFI debt, with a total value of £5.47 billion. By 2015/16, 57 NHS trusts had deficits ranging between 5 per cent and 26.9 per cent of total income. (Whitfield, 2017). This generated more scrutiny of

PFI, which increasingly became regarded as a threat to the financial and clinical stability of hospitals.

This system of capital charging imposed on the NHS through PFI gives rise to affordability problems, which frequently dictate the implementation of cost-cutting measures to ensure the financial viability of the projects at hand. Unfortunately, the cost-cutting measures have often been made to clinical budgets through reductions in hospital size, and cuts to bed numbers and staff. Commenting on the financial burden posed by PFI, the BMA explains that “as a legal contract, PFI removes discretion in capital spending and it is likely that hospitals will be forced to make cuts to health care services to make the ongoing PFI repayments” (HC Treasury Committee, 2011). The result is a distortion in the allocation of healthcare resources, where the NHS budget for clinical care has to be diverted from patient care to capital payments

Hence, NHS privatisation, especially under PFI, created a channel to transfer resources from public services to the private and financial sectors to cover shareholder dividends, equity investors, and banks (Hellowell et al., 2012, Pollock et al., 2013). Gail Cartmail, the Assistant General Secretary at the trade union Unite, commented on this matter saying: “The money that has poured into the pockets of profit-hungry financial institutions and private companies could have been much better spent directly on public service projects and infrastructure. PFIs are a rip-roaring example of out-of-control ‘bandit capitalism’” (JPI Investigations Team, 2019).

The decisive shift from needs-based hospital planning to a more ‘pragmatic’ and financialised process of planning, meant that NHS trusts would adjust their provision of facilities and health care services based on financial circumstances rather than local health care needs. This gave rise to a mismatch between hospital trusts’ level of income and the existing medical needs of the population. Therefore, and given the absence of a mechanism

instituted to balance the two aspects, local health authorities often fail to offset the results of the imbalance and fall short of planning hospitals based on need, creating a lack of capacity at the expense of meeting financial obligations. Accordingly, since the introduction of PFI in the 1990s, it increasingly became common practice for NHS trusts to close down two or three hospitals in order to release assets and funds to finance the construction of a new one (Hellowell et al. 2010; Pollock et al. 2004).

Pollock et al. (2013) find that the first wave of hospital projects completed under PFI underwent cuts in bed numbers and staffing by 7 per cent to 44 per cent, with an average reduction of 30 per cent. Research also indicates a strong correlation between deficits in hospital capacity and staffing and the presence of large PFI buildings (Pollock et al., 2004, p.21). As a result of the trade-off between financing and hospital capacity, within the first five years from the signing of a PFI contract until the opening of a new hospital, bed numbers were reduced by an average of 30 per cent, and clinical staff budgets were cut by an average of 25 per cent (Pollock et al. 2004). Extensive research by Hellowell and Pollock (2010) has shown that the excessively high cost of finance under PFI has led to the significant underfunding of NHS hospitals. They also found that the extent of underfunding is positively correlated to the size of the PFI.

There are numerous cases where the financial difficulties encountered by NHS trusts operating through PFI have forced hospitals to close and reducing acute and other critical health care services and laying off staff to ensure the financial viability of PFI contracts. For example, in 2009 a scheme was put into place to save two PFI hospitals in South East London (Bromley and Queen Elizabeth Hospital) from insuperable deficits. The scheme, named *A Picture of Health*, approved the closure of emergency admissions and a significant reduction in bed capacity. This involved the closure of 284 acute beds, in addition to furloughs of medical, nursing, and non-clinical staff (Palmer, 2011; Rivett, 2020). Needless to say, this

caused a considerable deterioration in the scale and quality of health care services (Palmer, 2011). Also, a survey conducted in 2002 shows that members of the Royal College of Nursing argue that bed numbers are lower in PFI hospitals, and that staff in all larger PFI schemes report a decrease in bed numbers as a result of PFI (HC Committee on Health, 2002).

A report by the NHS Consultant's Association (NHSCA) points out that PFI hospitals are 'far smaller' and have fewer beds than older ones, forcing patients with potentially curable conditions to wait long periods of time which harms their wellbeing (Beecham, 2000). Jones (2009) underscores the hazards to medical service provision as a result of hospital downsizing and reductions in bed numbers in new hospitals constructed under PFI. He states that there is no reason whatsoever for hospital size to decrease given the measurable and steady increases in admissions to most hospital departments. The research shows that declining capacity margins in NHS hospitals inevitably lead to cancelled operations, longer waiting times, increased operational chaos, and a 'rapid' loss of clinical pathways; all which lead to lower quality medical service and increase the threat to the lives of patients.

In another study investigating hospital downsizing, Dunnigan and Pollock (2003) find 'compelling evidence' for a measurable and independent PFI effect. By comparing hospital bed numbers, admissions, and data on length of stay in PFI and non-PFI hospitals in Scotland and England, the researchers find that acute bed numbers fell by 20 per cent between 1995/6 and 2000/1 in PFI hospitals, compared to 7.8 per cent in non-PFI hospitals. Within the first decade of PFI contracting becoming the dominant strategy of financing and building new NHS hospitals, several hospitals across England reported difficulties in managing capacity due to increased financial pressures arising from affordability issues associated with higher capital costs under PFI schemes. One example is a hospital North Durham which reported struggling to meet patient demand and access following the PFI scheme. In an investigation by the HC Health Committee (2002), it notes

that evidence collected from individuals involved in the new 900-bed hospital in Durham that “every stage in the procurement process has been associated with a reduction in bed numbers with the consequence that the final figure for beds has fallen to 454 [...] which forced a reduction in clinical staffing budgets with the result that only 350 beds would be staffed” (HC Committee on Health, 2002). In a letter directed to the then finance director of the trust, Ian Hawthorn, the lead surgeon at North Durham wrote:

The new hospital gives the surgical and urology departments fewer beds than we have now, a recipe of total disaster. The bed model dreamed up to fit into the PFI budget was based on a model which as we know has proved unsound [...] In essence the bed model is based entirely on numbers dreamed up to fit the budget [...] We are trapped in a PFI web, the problem is country-wide, and secrecy has no place at this stage. The PFI project as it stands fails the people of North Durham for the foreseeable future (Lawrence, 2001).

Similarly, a PFI hospital in Halifax reported being under severe pressure in terms of bed availability, unsafe occupancy levels, and increases in waiting lists and waiting times for treatment, as well as an increasing number of elective surgery cancellations (Dunningan et al. 2003). Another example is a PFI hospital in Worcester which, shortly after being tendered through PFI, identified financial deficits as the cause for serious capacity constraints on bed availability, very high occupancy rates, and ‘unacceptably’ long waiting times with increasing volumes of patients waiting between 9 and 12 months for elective treatment (Dunnigan et al., 2003, p. 5). Hospitals in Carlisle, Huntingdon, Norfolk, and Norwich reported similar concerns (Lawrence, 2001). In a report by the Government’s Select Committee on Health (2002), it states that “most of the evidence we received from bodies representing health workers suggested that bed reductions and PFI were inextricably linked.” The report also quotes the Head of UNISON, Robin Moss, who expresses his conviction that the “number of beds in the hospital was tailored to the financial equation, not to health needs” (HC Committee on Health, 2002).

Moreover, Kirkwood et al. (2016) investigate the direct and local impacts of privatisation on the provision of medical services in the NHS. The study finds that “those NHS boards with the greatest use of private sector for elective surgery experienced the largest reductions in direct NHS provision” (Kirkwood et al., 2016, p. 597). The study also finds compelling evidence of significant socio-economic inequalities in the provision of service. The researchers state that the impact of private sector provision of NHS services in England “shows a bias towards patients from less deprived areas,” such that patients living in the most disadvantaged localities of the country “receive 70 per cent fewer hip replacement surgeries than needed,” while the private sector provides treatments to a disproportionately high number of people living in the most affluent areas. This is quite unfortunate considering that the NHS was initially established with a vision of needs-based care regardless of the ability to pay. In a 2008 study on the impacts of competitive structures on measures of quality in NHS hospitals between 1990 and 1999 when competition in the NHS was actively promoted by policy, Propper et al. (2008) find that death rates were significantly higher in hospitals located in areas where the policy was implemented.

Even by 2000, less than a decade after the introduction of PFI into the NHS, there was growing public concern that bed reductions had gone too far, even when the number of beds was nearly 57 per cent higher than the current number (NHS Data, 2020). So, twenty years ago, and in response to the growing concerns, the Department of Health established the National Beds Inquiry to determine whether or not bed cuts had indeed gone too far. The inquiry was carried out by forecasting the implications of growing demand on hospital beds and health care facilities in England over time (Anandaciva, 2020). It found that there is very limited scope for clinical productivity gains, measured by length of stay, throughput, and bed occupancy rates in the NHS (Pollock et al., 2000). In a consultation document named *Shaping the future NHS: long term planning for hospital and related services* from the

Department of Health regarding the beds inquiry, it states that in order to manage the critical shortage in bed numbers, “a radically different approach” is needed in managing care within the NHS (Yamey, 2000). With the National Beds Inquiry, the government recognised the unsustainability of further reductions in hospital capacity, but it remained reluctant to reverse the policies of privatisation underlying the capacity reductions.

In 2010, the Economic Affairs Committee of the government’s House of Lords affirmed that the cost of PFI on the healthcare system poses a significant public interest concern due to the serious impact of excessively costly payments made to private sector consortia of hospitals’ revenue streams. In addition, a report by the Healthcare Commission found that the quality of operational services such as cleaning, portering, catering, and laundry, is lower in PFI hospitals than in non-PFI ones, despite the significantly higher costs (NAO, 2010). So, rather than improving the resilience and capabilities of the health care system in England, the structural reorganisations in favour of privatisation and financialisation have destabilised the processes of service delivery, sapped morale from the dedicated health care workers, and created more uncertainty for patients about the ability of the NHS to provide adequate and effective health services for them and their families (Walshe, 2010)

PFI policy, and other variants of privatisation, have the potential to seriously impair social and physical human welfare when they are employed in the provision of essential goods and services such as health care, for which the social value greatly exceeds the private value.

This is also the case because private sector corporations need to prioritise profit seeking motives to ensure their own economic continuity and break-even in terms of costs, regardless of the implication to the good or service they provide. So, in an area such as healthcare, where ethical considerations of public interest ought to come before all other factors, the



effects of privatisation and PFI contracts more often than not breach public interest rather than enhance it. For the NHS, the effect has been a reduction in capacity and a threat to the ability of the system to manage local and national needs.

## **Conclusion**

This paper explores the effects of privatisation and private finance initiatives on the capacity of NHS hospitals to deal with local health care needs in England. While the gradual increase in privatisation since the 1980s was initially intended to be cost-effective, and offer better value-for-money and an effective means of risk-transfer, the neoliberal policies, of which PFI is a product, created the conditions conducive to capital accumulation, but detrimental for health care, which is an area where public interest ought to be the guiding

principle in decision-making processes. Far from enhancing public interest, the effects of PFI have been threatening the ability of the NHS in meeting local health care needs, thereby jeopardising public health and interest.

The first section of this paper demonstrates the gradual yet systematic reductions in England's hospital capacity since the late 1980s. Despite the growth in England's total and elderly population, data shows that bed numbers have been severely reduced across most hospital departments. The reduction in bed numbers has correspond to bed occupancy rates rising to unsafe levels, with the vast majority of hospitals experiencing occupancy rates exceeding the recommended safe level of 85 per cent in 2019/20. The reduction in capacity has meant that patients are faced longer waiting times, and the cancellation of millions of elective surgeries in recent years. The corrosion in hospital capacity has undermined the ability of doctors and nurses to effectively deliver high quality medical services, and this has been most pronounced during times of heightened demand such as the winter flu season and during the ongoing coronavirus pandemic.

The second section of the study outlines the series of structural reorganisations implemented in the NHS through national policies aimed at expanding the role of private providers in the health care sector in England by the imposition of market structures, increase in outsourcing and subcontracting, and through the introduction of private finance initiative. This section critically analyses the rationale underlying PFI and presents findings to show that this method of investment poses higher costs in finance and management, does not offer better value for money, poses fiscal risks to the government, and lacks transparency and accountability. This section also shows that despite the cessation of new PFI schemes in 2018, the long duration of PFI contracts will remain costly for the public through the 2040s.

The third section establishes a relationship between the higher costs of PFI and the reduction in hospital capacity. The various additional costs imposed by PFI create an

affordability problem for hospitals, which often entails reductions in bed numbers and the closing down of hospital facilities to render PFI contracts viable. This section also presents various cases of NHS hospitals which underwent significant capacity reductions as a consequence of PFI deficits and unaffordable costs.

As an integral feature of modern human society, hospitals have an indispensable role in responding to the health care needs of a population. The experience of England's NHS in the past decades demonstrates that the risks inherent to transferring the responsibility of health care to the private and financial sectors can come at high costs, both financial and human.

## References

- Alderwick, H., Dunn, P., McKenna, H., Walsh, N., & Ham, C. (2016). *Sustainability and transformation plans in the NHS*. King's Fund. Available via: [https://www.kingsfund.org.uk/sites/default/files/field/field\\_publication\\_file/STPs\\_in\\_NHS\\_Kings\\_Fund\\_Nov\\_2016.pdf](https://www.kingsfund.org.uk/sites/default/files/field/field_publication_file/STPs_in_NHS_Kings_Fund_Nov_2016.pdf)
- Allen, P., Osipovič, D., Shepherd, E., Coleman, A., Perkins, N., Garnett, E., & Williams, L. (2017). Commissioning through competition and cooperation in the English NHS under the Health and Social Care Act 2012: evidence from a qualitative study of four clinical commissioning groups. *BMJ open*, 7(2), e011745.
- Alzheimer's Society (2020) 'ONS Report Shows 52% Increase in Excess Deaths of People Dying of Dementia', press release. Available via: <https://www.alzheimers.org.uk/news/2020-06-05/onsreport-shows-52-increase-excess-deaths-people-dying-dementia-alzheimers-society>
- Anandaciva, S. (2020, February 28). Is it time for a new National Beds Inquiry, or a national policy decision? Retrieved September 1, 2020, from: <https://www.kingsfund.org.uk/blog/2020/02/is-it-time-for-new-national-beds-inquiry>
- Anandaciva, S., Ewbank, L., Thompson, J., & McKenna, H. (2020, March 26). 'NHS hospital bed numbers.' The King's Fund. Retrieved August 22, 2020, from <https://www.kingsfund.org.uk/publications/nhs-hospital-bed-numbers>
- Asenova, D., & Hood, J. (2006). PFI and the implications of introducing new long-term actors into public service delivery. *Public Policy and Administration*, 21(4), 23-41.
- Bagust, A., Place, M., & Posnett, J. W. (1999). Dynamics of bed use in accommodating emergency admissions: stochastic simulation model. *Bmj*, 319(7203), 155-158.
- Baker, C. (2020). *NHS Key Statistics, England, February 2020 Briefing Paper*. (House of Commons Library no. 7281). London. UK Parliament. <https://commonslibrary.parliament.uk/research-briefings/cbp-7281/>
- Bakker, J. (2020). Lives at risk due to 50% drop in heart attack A&E attendances. *press release, British Heart Foundation*. Available via:
- Bayliss, K. (2016). The financialisation of health in England: lessons from the water sector. Available via: <http://eprints.soas.ac.uk/22176/1/Financialisation%20of%20Health.pdf>
- Beecham, L. (2000). PFI poses threat to health care. *British Medical Journal*, 320(7247), 1479-1479.
- Beveridge, W. (1942). Social insurance and allied services. Available via: <https://dspace.gipe.ac.in/xmlui/bitstream/handle/10973/32621/GIPE-033701.pdf?sequence=3>

- Bidgood, E. (2012). PFI: still the only game in town. *Institute for the Study of Civil Society, Civitas: London*. Available via:  
< <https://civitas.org.uk/content/files/PFIDec2012.pdf>>
- Bloor, K., Harvey, E., & Maynard, A. (2005). NHS management and administration staffing and expenditure in a national and international context. *York: York University*.
- Booth, L., & Starodubtseva, V. (2015). PFI: Costs and Benefits PPP. House of Commons Briefing Paper Number 6007, 13 May 2015. House of Commons Library.
- British Medical Association (BMA). *Bed Occupancy in the NHS*. 1 May 2020, [www.bma.org.uk/advice-and-support/nhs-delivery-and-workforce/pressures/bed-occupancy-in-the-nhs](http://www.bma.org.uk/advice-and-support/nhs-delivery-and-workforce/pressures/bed-occupancy-in-the-nhs).
- Campbell, D. (2019). “Hospital bed cutbacks have gone too far; NHS England boss says.” *The Guardian*. Available via:  
<https://www.theguardian.com/society/2019/jun/19/hospital-bed-cutbacks-have-gone-too-far-nhs-england-boss-simon-stevens-says>>
- Cooke, M. W., Wilson, S., Halsall, J., & Roalfe, A. (2004). Total time in English accident and emergency departments is related to bed occupancy. *Emergency Medicine Journal*, 21(5), 575-576.
- Cunningham, J. B., Kernohan, W. G., & Rush, T. (2006). Bed occupancy, turnover intervals and MRSA rates in English hospitals. *British journal of nursing*, 15(12), 656-660.
- Curtis, P. (2011, September 22). Reality check: Is PFI really to blame for NHS financial difficulties? Retrieved September 13, 2020, from <https://www.theguardian.com/global/2011/sep/22/reality-check-nhs-pfi>
- Davies, A. C. (2013). This time, it's for real: the Health and Social Care Act 2012. *The Modern Law Review*, 76(3), 564-588.
- Davis, J. (2015). *NHS for Sale: Myths, Lies & Deception*. Merlin Press.
- Department of Health and Social Care (2015). The NHS constitution for England. *London: Department of Health*. Available via:  
[https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment\\_data/file/480482/NHS\\_Constitution\\_WEB.pdf](https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/480482/NHS_Constitution_WEB.pdf)
- Department of Health and Social Care, UK Government. (2020, August 21). Coronavirus cases in the UK: Daily updated statistics. Retrieved August 07, 2020, from <https://www.gov.uk/guidance/coronavirus-covid-19-information-for-the-public>
- Department of Health. (2000). Shaping the future NHS: long term planning for hospitals and related services. *Consultation Document on the Findings of the National Beds Inquiry-Supporting Analysis*.
- Doctors for the NHS (2015). An NHS beyond the market. Available via:  
<https://www.doctorsforthenhs.org.uk/an-nhs-beyond-the-market/>

- Donnelly, L., & Bodkin, H. (2018, January 02). NHS hospitals ordered to cancel all routine operations in January as flu spike and bed shortages lead to A&E crisis. Retrieved August 11, 2020, from <https://www.telegraph.co.uk/news/2018/01/02/nhs-hospitals-ordered-cancel-routine-operations-january/>
- Dunnigan, M. G., & Pollock, A. M. (2003). Downsizing of acute inpatient beds associated with private finance initiative: Scotland's case study. *Bmj*, 326(7395), 905.
- El-Gingihy, Y. (2018). *How to Dismantle the NHS in 10 Easy Steps: The Blueprint that the Government Does Not Want You to See*. John Hunt Publishing.
- Epstein, G. A. (Ed.). (2005). *Financialization and the world economy*. Edward Elgar Publishing.
- Evans, J., & Ruane, S. (Eds.). (2019). *Data in society: challenging statistics in an age of globalisation*. Policy Press.
- Froud, J., & Shaoul, J. (2001). Appraising and evaluating PFI for NHS hospitals. *Financial Accountability & Management*, 17(3), 247-270. Available via: < <http://www.academia.edu/download/51334413/1468-0408.0013020170113-2405-dvoa4n.pdf>>
- Gaffney, D., & Pollock, A. M. (1999a). Pump-priming the PFI: why are privately financed hospital schemes being subsidized?. *Public Money and Management*, 19(1), 55-62.
- Gaffney, D., Pollock, A. M., Price, D., & Shaoul, J. (1999). NHS capital expenditure and the private finance initiative—expansion or contraction?. *Bmj*, 319(7201), 48-51.
- Gaffney, D., Pollock, A. M., Price, D., & Shaoul, J. (1999b). PFI in the NHS—is there an economic case?. *Bmj*, 319(7202), 116-119.
- Gilburt, H. (2015). Mental health under pressure. *London: The King's Fund*. Available via: [https://www.kingsfund.org.uk/sites/default/files/field/field\\_publication\\_file/mental-health-under-pressure-nov15\\_0.pdf](https://www.kingsfund.org.uk/sites/default/files/field/field_publication_file/mental-health-under-pressure-nov15_0.pdf)
- Gosling, J. (2013). Privatising the NHS. *International Socialism Journal*, (139), 77-97. Available via: [https://researchonline.lshtm.ac.uk/id/eprint/1567812/1/Privatising%20the%20NHS\\_GREEN%20VoR.pdf](https://researchonline.lshtm.ac.uk/id/eprint/1567812/1/Privatising%20the%20NHS_GREEN%20VoR.pdf)
- House of Commons Treasury Committee. (2011). Private Finance Initiative: Seventeenth report of session 2010–12. *HC*, 1146, 26.
- Heald, D., & Geaghan, N. (1997). Private Finance Initiative: Accounting for the Private Finance Initiative. *Public Money and Management*, 17(3), 11-16.
- Hellowell, M., & Pollock, A. M. (2009). The private financing of NHS hospitals: politics, policy and practice. *Economic Affairs*, 29(1), 13-19.
- Hellowell, M., & Pollock, A. M. (2010). Do PPPs in social infrastructure enhance the public interest? Evidence from England's National Health Service. *Australian Journal of Public Administration*, 69, S23-S34.

- Hellowell, M., & Vecchi, V. (2012). An evaluation of the projected returns to investors on 10 PFI projects commissioned by the National Health Service. *Financial Accountability & Management*, 28(1), 77-100.
- Hiom, S. (2020). How coronavirus is impacting cancer services in the UK. *Cancer Research UK-Science blog*.
- HOUSE, O. L. (2010). Private finance projects and off balance sheet debt. *London, UK, House of Lords*.
- <https://www.bhf.org.uk/what-we-do/news-from-the-bhf/news-archive/2020/april/drop-in-heart-attack-patients-amidst-coronavirus-outbreak>
- Iacobucci, G. (2019). NHS chief admits that bed closures need to be reversed. *British Medical Journal*. DOI:10.1136/bmj.l4312. Available via: <https://www.bmj.com/content/365/bmj.l4312>
- Jones, R. (2009). Building smaller hospitals. *British Journal of Healthcare Management*, 15(10), 511-512.
- JPI Investigations Team. (2019, October 18). Taxpayers shell out billions for schools and hospitals as cost of private deals rises. Retrieved September, 2020, from <https://www.wakefieldexpress.co.uk/news/politics/taxpayers-shell-out-billions-schools-and-hospitals-cost-private-deals-rises-816488>
- Kaier, K., Mutters, N. T., & Frank, U. (2012). Bed occupancy rates and hospital-acquired infections—should beds be kept empty?. *Clinical microbiology and infection*, 18(10), 941-945.
- Keegan, A. D. (2010). Hospital bed occupancy: more than queuing for a bed. *Medical Journal of Australia*, 193(5), 291-293.
- Keough, K. (2020). ‘Corridor nursing seen as new norm in a number of hospitals,’ *Nursing Standard*. Available via: <https://rcni.com/nursing-standard/newsroom/news/corridor-nursing-new-normal-emergency-nurses-158181>
- Kirkwood, G., & Pollock, A. M. (2017). Patient choice and private provision decreased public provision and increased inequalities in Scotland: a case study of elective hip arthroplasty. *Journal of Public Health*, 39(3), 593-600. Available via: <https://academic.oup.com/jpubhealth/article/39/3/593/3002985?rss%3D1>
- Lawrence, F. (2001, July 23). Crisis-hit hospital finds that private finance for NHS comes at a price. Retrieved September 11, 2020, from <https://www.theguardian.com/society/2001/jul/23/hospitals.ppp>
- Leys, C., & Player, S. (2011). *The plot against the NHS* (Vol. 4). Pontypool: Merlin Press.
- Madsen, F., Ladelund, S., & Linneberg, A. (2014). High levels of bed occupancy associated with increased inpatient and thirty-day hospital mortality in Denmark. *Health Affairs*, 33(7), 1236-1244.

- McDonald, H. I., Tessier, E., White, J. M., Woodruff, M., Knowles, C., Bates, C., ... & Yarwood, J. (2020). Early impact of the coronavirus disease (COVID-19) pandemic and physical distancing measures on routine childhood vaccinations in England, January to April 2020. *Eurosurveillance*, 25(19), 2000848. Available via: <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7238742/>
- National Audit Office. (2008). Making changes in operational PFI projects.
- National Audit Office, Comptroller and Auditor General. (2018). *PFI and PF2*. HM Treasury. (HC718, session 2017-2019) Published 18 January 2018.
- National Audit Office., Comptroller and Auditor General. (2018a). Reducing emergency admissions. Department of Health and Social Care, NHS England. (HC833, session 2017- 2019). Published 2 March 2018.
- National Audit Office. (2010). VFM Report (HC 68 2010-11): The performance and management of hospital PFI contracts.
- National Audit Office. (2015). The choice of finance for capital investment. London: HM Treasury.
- Newton, J. (2020, April 02). Britons reveal the 50 things that make them proud to be British from the NHS to David Attenborough. Retrieved July 10, 2020, from [https://www.dailymail.co.uk/travel/travel\\_news/article-8180151/Britons-reveal-50-things-make-proud-British-NHS-David-Attenborough.html](https://www.dailymail.co.uk/travel/travel_news/article-8180151/Britons-reveal-50-things-make-proud-British-NHS-David-Attenborough.html)
- NHS England (2020). Bed availability and occupancy data. Retrieved from <https://www.england.nhs.uk/statistics/statistical-work-areas/bed-availability-and-occupancy/bed-data-overnight/>.
- NHS England (2020). A&E attendances and Emergency admissions. Retrieved from. <https://www.england.nhs.uk/statistics/statistical-work-areas/ae-waiting-times-and-activity/>
- O’Dowd, A. (2018). Public will have to pay £220bn for PFI until 2040, NAO calculates. *Bmj*. doi:10.1136/bmj.k273
- OECD (2020), Hospital beds (indicator) Latest available data. doi: 10.1787/0191328e-en Available via: < <https://stats.oecd.org/index.aspx?queryid=30183>>
- Office for National Statistics (2019). ‘Living longer: is age 70 the new 65?’. Office for National Statistics website. Available via: <https://www.ons.gov.uk/peoplepopulationandcommunity/birthsdeathsandmarriages/ageing/articles/livinglongerisage70thenewage65/2019-11-19>



- Office for National Statistics (2020). 'England's population mid-year estimate'. Office for National Statistics website. Available via:  
<https://www.ons.gov.uk/peoplepopulationandcommunity/populationandmigration/populationestimates/timeseries/enpop/pop>
- Palmer, K. (2011). *Reconfiguring Hospital Services: Lessons from South East London*. King's Fund.
- Pollock, A. M. (2004). NHS plc: the privatisation of our health care. *BMJ*, 329, 862.
- Pollock, A. M., & Dunnigan, M. G. (2000). Beds in the NHS: the National Bed Inquiry exposes contradictions in government policy.
- Pollock, A. M., Dunnigan, M. G., Gaffney, D., Price, D., & Shaoul, J. (1999). Planning the "new" NHS: downsizing for the 21st century. *Bmj*, 319(7203), 179-184.
- Pollock, A.M., Price, D. (2013). PFI and the National Health Service in England. Queen Mary, University of London.
- Pollock, A. M., Shaoul, J., & Vickers, N. (2002). Private finance and "value for money" in NHS hospitals: a policy in search of a rationale? *Bmj*, 324(7347), 1205-1209.
- Poteliakhoff, E., & Thompson, J. (2011). Emergency bed use: what the numbers tell us. *London: The King's Fund*. Data briefing. Available via:  
<https://www.kingsfund.org.uk/sites/default/files/data-briefing-emergency-bed-use-what-the-numbers-tell-us-emmi-poteliakhoff-james-thompson-kings-fund-december-2011.pdf>
- Powell, M., & Miller, R. (2016). Seventy years of privatizing the British National Health Service?. *Social Policy & Administration*, 50(1), 99-118.
- Pownall, H. (2013). Neoliberalism, austerity and the Health and Social Care Act 2012: The Coalition Government's Programme for the NHS and its implications for the public sector workforce. *Industrial Law Journal*, 42(4), 422-433.
- Propper, C., Burgess, S., & Gossage, D. (2008). Competition and quality: evidence from the NHS internal market 1991–9. *The Economic Journal*, 118(525), 138-170. Available via:  
[https://academic.oup.com/ej/article/118/525/138/5088799?casa\\_token=W\\_VEDELRRh4AAAAA:c4a9uRne4EAYpm0qC8-J\\_0p-9k58Y14h3a\\_oykMuyOq38AOhTiN7qXYe6v25FFvGq1wIM\\_UVWaY2](https://academic.oup.com/ej/article/118/525/138/5088799?casa_token=W_VEDELRRh4AAAAA:c4a9uRne4EAYpm0qC8-J_0p-9k58Y14h3a_oykMuyOq38AOhTiN7qXYe6v25FFvGq1wIM_UVWaY2)
- Rivett, G. (2019). NHS Reform Timeline. Nuffield Trust Retrieved from  
<https://www.nuffieldtrust.org.uk/health-and-social-care-explained/nhs-reform-timeline/>
- Royal College of Emergency Medicine (2016). *Written evidence submitted on behalf of the Royal College of Emergency Medicine (WIP009)*. Available via:  
<http://data.parliament.uk/writtenevidence/committeeevidence.svc/evidencedocument/health-committee/winter-planning/written/35483.pdf>

- Ruane, S. (2016). Market reforms and privatisation in the English National Health Service/Mercado reforma y privatización en el Sistema Nacional de Salud inglés. *Cuadernos de Relaciones Laborales*, 34(2), 263-291.
- Sample I (2020) 'More than 2m operations cancelled as NHS fights Covid-19', The Guardian. Available via: <https://www.theguardian.com/society/2020/apr/26/more-than-two-million-operations-cancelled-as-nhs-fights-covid-19>
- Tallack C (2020) 'Understanding excess mortality: Comparing Covid-19s impact in the UK to other European Countries', briefing, Health Foundation. Available via: <https://www.health.org.uk/news-and-comment/charts-and-infographics/comparing-covid-19-impact-in-the-uk-to-european-countries>
- The Royal College of Emergency Medicine (2019). 'NHS in England needs over 4,000 extra beds this winter to avoid corridor care.' Available via: [https://www.rcem.ac.uk/RCEM/News/News\\_2019/NHS\\_in\\_England\\_needs\\_over\\_4000\\_extra\\_beds\\_this\\_winter.aspx#:~:text=The%20NHS%20in%20England%20will,treated%20in%20corridors%20this%20winter.&text=President%20of%20the%20Royal%20College,'corridor%20care'%20this%20winter.](https://www.rcem.ac.uk/RCEM/News/News_2019/NHS_in_England_needs_over_4000_extra_beds_this_winter.aspx#:~:text=The%20NHS%20in%20England%20will,treated%20in%20corridors%20this%20winter.&text=President%20of%20the%20Royal%20College,'corridor%20care'%20this%20winter.)
- Thomas, C. (2020). Resilient Health and Care: Learning the Lessons of COVID-19 in the English NHS. *Institute for Public Policy Research*. Available via: <https://www.ippr.org/files/2020-07/resilient-health-and-care-july20.pdf>
- Toms, S., Asenova, D., & Beck, M. (2009). Refinancing and the Profitability of UK PFI Projects. *Policy, finance & management for public-private partnerships*, 64-81.
- Treasury, H. M. (2019). Private Finance Initiative Projects and Private Finance 2 Projects 2017 Summary Data. *London: HM Treasury*.
- UK, House of Commons, Select Committee on Health. (2002). *FIRST REPORT: THE ROLE OF THE PRIVATE SECTOR IN THE NHS*. London: House of Commons.
- UK, Parliament, Public Accounts Committee. (2011). *Lessons from PFI and other projects* (Forty-Fourth Report). House of Commons. Retrieved September 2020, from <https://publications.parliament.uk/pa/cm201012/cmselect/cmpubacc/1201/120102.htm>.
- Walshe, K. (2010). Reorganisation of the NHS in England. *British Medical Journal*. Available via: <https://www.bmj.com/content/341/bmj.c3843>>
- Whitfield, D. (2017). PFI/PPP buyouts, bailouts, terminations and major problem contracts in UK. *European Services Strategy Unit Research Report*, 9.
- Yamey, G. (2000). Government inquiry finds inadequate beds provision. *BMJ: British Medical Journal*, 320(7233), 463.