# For-Profit Hospitals Have Thrived Because of Generous Public Reimbursement Schemes, Not Greater Efficiency: A Multi-Country Case Study

International Journal of Health Services 2021, Vol. 51(1) 67–89 © The Author(s) 2020

Article reuse guidelines: sagepub.com/journals-permissions DOI: 10.1177/0020731420966976 journals.sagepub.com/home/joh



Patrick P. T. Jeurissen<sup>1,2</sup>, Florien M. Kruse<sup>1</sup>, Reinhard Busse<sup>3</sup>, David U. Himmelstein<sup>4,5</sup>, Elias Mossialos<sup>6</sup>, and Steffie Woolhandler<sup>4,5</sup>

#### **Abstract**

For-profit hospitals' market share has increased in many nations over recent decades. Previous studies suggest that their growth is not attributable to superior performance on access, quality of care, or efficiency. We analyzed other factors that we hypothesized may contribute to the increasing role of for-profit hospitals. We studied the historical development of the for-profit hospital sector across 4 nations with contrasting trends in for-profit hospital market share: the United States, the United Kingdom, Germany, and the Netherlands. We focused on 3 factors that we believed might help explain why the role of for-profits grew in some nations but not in others: (1) the treatment of for-profits by public reimbursement plans, (2) physicians' financial interests, and (3) the effect of the political environment. We conclude that access to subsidies and reimbursement under favorable terms from public health care payors is an important factor in the rise of for-profit hospitals. Arrangements that aligned financial incentives of physicians with the interests of for-profit hospitals were important in stimulating for-profit growth in an earlier era, but they play little role at present. Remarkably, the environment for for-profit ownership seems to have been largely immune to political shifts.

#### **Keywords**

for-profit hospitals, health policy, delivery of health care, private sector, comparative study, organization and administration

In recent decades, for-profit hospitals have gained market share throughout many developed nations. Conventional wisdom may attribute for-profit hospital success to greater efficiency. However, we argue that this claim is based on unfounded assumptions, and we analyze the growth and development of the for-profit hospital sector in 4 countries in order to explore alternative explanations.

# Hospital Ownership: Public, Nonprofit, and For-Profit

Many nations' health systems include a variety of hospital ownership types: for-profit, nonprofit, and public. Public hospitals are legally part of the government, either as state-owned organizations at arm's length or

<sup>1</sup>IQ Healthcare Scientific Institute for Quality of Healthcare, Radboud Institute for Health Sciences, Radboud University Medical Center, Nijmegen, the Netherlands

<sup>2</sup>Ministry of Health, Welfare and Sport, The Hague, the Netherlands <sup>3</sup>Department of Health Care Management, Berlin University of Technology, Berlin, Germany

<sup>4</sup>City University of New York at Hunter College, New York, New York, USA

<sup>5</sup>Harvard Medical School, Cambridge, Massachusetts, USA <sup>6</sup>Department of Health Policy, London School of Economics and Political Sciences, London, UK

\*P. P. T. J. and F. M. K. shared first authorship.

\*R. B., D. U. H., E. M., and S. W. contributed equally to this article.

## **Corresponding Author:**

Patrick P. T. Jeurissen, IQ Healthcare Scientific Institute for Quality of Healthcare, Radboud Institute for Health Sciences, Radboud University Medical Center, Nijmegen Geert Grooteplein Zuid 21, 6525 EZ Nijmegen, the Netherlands.

Email: patrick.jeurissen@radboudumc.nl

fully owned by regional or local governments.<sup>4</sup> Nonprofit hospitals must use any surpluses (or profits) to further their organizational purposes or missions, and they are barred from distributing surpluses to individuals who exercise control over them.<sup>5</sup> Conversely, forprofit hospital owners control their organizations and have the right to all "residual claims" (i.e., the profits) after all prior obligations have been paid.<sup>6</sup>

The for-profit hospital sector comes in many shapes and sizes, ranging from small, physician-owned institutions to large, publicly traded for-profit hospital chains. Increasingly, small, individual for-profit hospitals are being consolidated into (very) large investor-owned chains. Depending on country context and regulation, for-profits often specialize in lucrative areas of care, such as elective surgery, and are more likely to target private-pay (or privately insured) patients.

Kenneth Arrow, 10 a founding father of health economics, argued that fundamental information asymmetries in health care markets mandate reliance on trustworthy agents to compensate for market failures. He suggested that for-profit organizations cannot satisfy this standard because "[t]he very word, 'profit,' is a signal that denies the trust relations" (p.965). 10 Following this line of thought, one may believe that nonprofits, with a status signaling that their objectives are not to maximize profits, might therefore be best suited to act in the interest of patients. However, in another health economics classic, Pauly and Redisch<sup>11</sup> postulate that shrinkages in the U.S. proprietary hospital sector reflect powerful physician interests, because nonprofit hospitals operate as de facto doctors' facilities and are effectively for-profits in disguise, whereby physicians exercise authority over hospital assets in order to maximize their income without running financial risks.

Both Arrow's<sup>10</sup> and Pauly and Redisch's<sup>11</sup> analyses suggest that nonprofits would dominate the hospital sector. However, several countries on different continents have seen an expansion in the for-profit hospital market in recent years.<sup>12–15</sup> This growth in for-profit share of the hospital sector raises puzzling questions.

# Why Is It That For-Profit Hospitals Do Not Deliver Superior Performance?

Many economists hold that for-profit ownership is naturally more efficient because in theory, these institutions must continuously strive to outperform nonprofit or public organizations in order to maximize profit and satisfy their shareholders. However, empirical evidence contradicts this. Systematic reviews analyzing the relationship between hospital ownership and quality of care have either found mixed results 1,122 Reviews of favored nonprofit or public providers. Reviews of

hospital efficiency have arrived at the same conclusion: There are mixed results, but generally, for-profit providers do not outperform other ownership types. 9,21,23 For-profit hospitals tend to charge higher prices than public and nonprofit hospitals. 19,23,24 This, in part, may reflect their wider profit margins 25,26 and higher overhead and capital expenditures. 27–30 Despite higher costs to the payor, for-profit hospitals often outsource and are thus able to minimize the number of employed staff – particularly non-physician staff. 31 As a result, for-profit hospitals typically benefit from lower personnel costs.

Interpreting empirical findings on this topic requires the consideration of 3 important nuances. First, many systematic reviews on this subject have highlighted the complexities around drawing conclusions<sup>9,23,32-34</sup> when there is substantial variability within different ownership types.<sup>20</sup> Second, exogenous economic incentives might at times override provider missions and goals. For instance, spillover effects can impact and alter the motives of nonprofit organizations. Such spillovers might be beneficial or detrimental. For example, forprofit providers' entry in the market might push nonprofits to adopt similar structures and strategies.<sup>35,36</sup> Nonprofit hospitals may feel pressured to increase their efficiency or to focus on profitable services such as elective surgeries and minimize charity care. 25,37-41 Third, while some cross-sectional studies have found that forprofits are less efficient because they tend to acquire inefficient public and nonprofit organizations, other longitudinal studies suggest that for-profit entities streamline the public and nonprofit hospitals they acquire and thereby achieve greater efficiency. 26,33

## **Research Questions**

If, as the literature suggests, consistently superior performance on patient outcomes or economic efficiency does not explain the growth of for-profit hospitals, other factors must be explored.

# How Does Access to Capital and Payment for Services Vary by Hospital Ownership Type?

All hospitals require access to capital funds for investments into new or upgraded facilities that are essential for growth and even survival; however, they depend upon different sources for these capital funds. Forprofits can attract capital from investors who seek a share of the earnings (i.e., venture capital firms and the stock market) and can also raise funds through bank loans or by issuing bonds. Nonprofits can tap into philanthropic funds, receive government grants, issue (tax-exempt) bonds, and retain earnings from operating surpluses. On the whole, nonprofit organizations'

financing costs are lower.<sup>39</sup> However, in some circumstances, for-profits have an advantage: For example, a for-profit hospital with a high stock-price-to-earnings ratio may yield more by raising capital through stock sales rather than by borrowing.<sup>39,44,45</sup> In other words, the relative costs of different sources of capital fluctuate, and such fluctuation can turn the tables in defining which ownership type has a financing advantage. Furthermore, the growth of the for-profit sector may be hindered if government-regulated health financing plans limit or disfavor them.

# How Do Physician Incentives and Influence Vary Across Different Types of Hospital Ownership?

Physicians often exert considerable influence over hospital management<sup>46</sup> and a hospital's business prospects.<sup>47</sup> While many factors shape physician working conditions and job satisfaction, remuneration certainly plays a role. For-profit entities may offer physicians higher pay (e.g., in the form of an ownership stake in the firm),<sup>28</sup> but they may also reduce (non-)physician employee pay in order to maximize profits. This incentive structure is absent or may be weaker in nonprofit organizations. Employment in nonprofit organizations might be attractive to physicians because of commitments to social and altruistic goals. 5,48 For some physicians who recognize that (as Pauly and Redisch noted) nonprofit hospitals can be for-profits in disguise, the attraction of a nonprofit hospital might be linked to physicians' desires to maximize their incomes.11

# Does the Ruling Political Party Determine the Success of Different Hospital Ownership Types?

Political theory would predict that left-leaning government regimes are more likely to be anti-commercial and hence to implement public policies that disfavor forprofits. In contrast, theory predicts that right-leaning politicians are more apt to trust market forces in health care and to implement for-profit-friendly health policies.

#### **Structure of the Article**

In this article, we examine the role of these 3 factors in the for-profit hospital market. We consider: (a) public policies granting access to capital and payments for services, (b) physicians' stake in for-profit medical enterprises, and (c) the political milieu, and we compare these trends in for-profit market growth in 4 countries. Below, we outline the methods and data that inform our study; we then present an overview of the trends of for-profit market share across the 4 countries over time; following this, we delve deeper into our 4

case studies and demonstrate the similarities and differences across the for-profit hospital sector in these countries; finally, we discuss the lessons learned and policy implications of our findings and offer several conclusions.

### **Methods and Case Selection**

We conducted a historical case study of the growth and characteristics of the for-profit hospital sector and health care environment in 4 nations (Table 1). We included cases with substantial (Germany and the United States) as well as negligible (the Netherlands) for-profit sectors. Our cases cover the spectrum of health financing systems: mainly privately funded (United States), publicly funded (United Kingdom), and those funded by social insurance (Germany and the Netherlands). These 4 cases can also be stratified in such a way that they are relevant in answering our research questions. The United Kingdom and Germany both rely on public capital subsidies and regulation. These are centralized in the United Kingdom and decentralized in Germany. Hospital capital (and debt repayment) in both the United States and the Netherlands is largely funded by operating surpluses that hospitals generate internally from reimbursement fees paid by insurers for care provided. Hospital physicians are mainly paid salaries in both Germany and the United Kingdom. Until recently, these physicians in the United States were typically selfemployed; in the Netherlands, about half of hospital physicians are self-employed and half are salaried.<sup>49</sup> Political discussion on the appropriateness of for-profit hospitals has arisen in previous decades. It was prominent in the United Kingdom during the mid-1970s; in the United States during the 1980s (and again, regarding physician-owned specialty hospitals from the early 2000s onward); in Germany in the early 1990s; and in the Netherlands in the first 10 years after the 2006 health care market reform.

We collected data on the for-profit hospital sectors in 4 nations using official statistics, secondary sources, gray literature, and peer-reviewed studies.

## **Results**

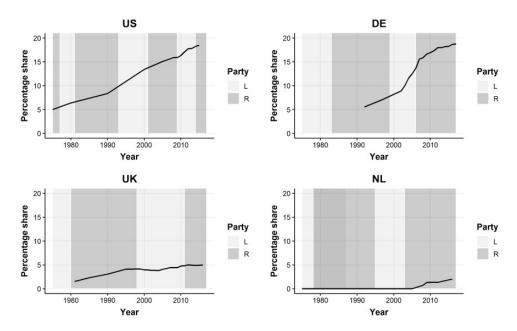
## For-Profit Hospital Market Share: Overview of Findings

Figure 1 displays trends in for-profit share of hospital beds in each nation and the political leanings of the governments over time. For-profit market share has grown rapidly in Germany and the United States, currently exceeding 15% in each of these nations. In the United Kingdom, growth has been more modest, and private hospital beds currently account for 5% of the total (U.K. figures are for all non-National Health

	U.S.	U.K.	Germany	Netherlands
Number of for-profit	1,645	195ª	720	I <sub>p</sub>
hospitals	(26.6%)	(11.1%)	(37.1%)	(1.4%)
(% of total)	[2015]	[2014]	[2017]	[2018]
[Year]	-	-		-
For-profit beds	173,758	8,730 <sup>c</sup>	93,189	257 <sup>b</sup>
(% of total)	(18.5%)	(5.0%)	(18.7%)	(0.7%)
[Year]	[2015]	[2018]	[2017]	[2018]
Health system	Private with public programs	National Health Service	Social-insurance	Social-insurance
Capital funding	Mainly operating surpluses	Public subsidies	Mainly public subsidies	Mainly operating surpluses
Physician employment status	Mainly self-employed until recently, currently mixed	Salary / self-employed (private sector)	Salary	Self-employed / salary
Explicit political debate	Effects of profit making (1980s), cherry picking by specialty	NHS pay-beds (1970s) and outsourcing to the	Privatization of hospitals in former German	Lifting ban on profit distribution (2008–2019)

**Table 1.** Characteristics of the Health Systems and Size of the For-Profit Hospital Sector in the United States, United Kingdom, Germany, and the Netherlands.

<sup>&</sup>lt;sup>c</sup>These figures reflect all beds in the independent acute medical care hospitals.



**Figure 1.** Trends in for-profit hospitals' share of total beds in each nation, and the political leanings of the ruling party during each period. Adulthors' calculations. Figures reflect inpatient (acute care) beds. The Dutch figures reflect the acquisition of three hospitals by a commercial firm, but because missing data on acquisition dates, the graph may be imprecise.

\*\*Sources: AHA (2017)\*\*, CDC (2017)\*\*, OECD (2019)\*\*, OHE (2011)\*\*, LaingBuisson (2017)\*\*, LaingBuisson (2019)\*\*, Statistisches Bundesamt (2018)\*\*, CIBG (2020)\*\*

Service [NHS] hospitals, including nonprofits such as Nuffield and London Clinic, which accounted for 12.9% of private hospital beds in 2018).<sup>51</sup> In the Netherlands, only a single hospital remained under forprofit ownership following the 2018 bankruptcy of 2 hospitals that had been acquired by commercial investors.

Because for-profit hospitals are generally smaller than nonprofit and public hospitals, their market share as measured by the number of hospitals is higher than their share of beds: These shares are 26.7% in the United States in 2018 (up from 17.9% in 2000) and 35.8% in Germany (up from 21.7% in 2000) (authors'

Sources: AHA, 50 LaingBuisson, 51 OECD, 52 Statistisches Bundesamt, 53 and CIBG. 54

<sup>&</sup>lt;sup>a</sup>These figures reflect all non-NHS hospitals and exclude day facility-only private hospitals.

<sup>&</sup>lt;sup>b</sup>Two hospitals owned by private investors that went bankrupt in 2018 are excluded from the table.

calculations; no comparable data are available for the United Kingdom). 50,53

Surprisingly, for-profit hospital growth rates in the United States and Germany appear largely unrelated to the political leanings of the governing party. For-profit growth in the United Kingdom coincided with the vogue for New Public Management (NPM) starting in the late 1980s. While it is difficult to define left- vs. right-leaning in the Dutch or German context because these governments are sometimes (i.e., Germany) or always (i.e., Netherlands) coalitions between parties, political milieu appeared to have little relation to for-profit hospital growth. The indicated political leanings of the Dutch government in Figure 1 are based on the largest party in the coalition in each period.

# The Early Roots of the For-Profit Hospital Sector

In the late 19th century, almshouses (United Kingdom), philanthropic institutions (United States), and religious providers (Netherlands and the United States) that had previously provided medical care to the destitute began to be replaced by modern hospitals with sophisticated operating theaters and diagnostic equipment that catered to patients of all economic backgrounds. 12 Most of these early hospitals were publicly or churchowned facilities located in city centers. In bigger cities, many hospitals limited admitting privileges to a small group of physicians, which stimulated the growth of physician-owned clinics that tended to target wealthier patients. However, the financial prospects of the emerging for-profit hospital sector were lackluster. They could neither tap into low-cost charitable or public sources of capital nor could they use cheap religious labor such as nuns, and public payments for care of the poor were meager.

The 1930s depression dealt a major blow to the forprofit hospital sector in many nations. While data is limited, we know that in Germany, proprietary hospitals' share of beds declined from 7.0% in 1931 to 5.9% in 1937. In the United Kingdom, 9.6% of all beds were in private nursing homes in 1921, declining to 7.2% in 1938. U.S. proprietary facilities accounted for 17.3% of hospital beds in 1928, but no more than 9.5% in 1940. 12

Shortly after World War II, many Western countries developed or cemented their welfare states, increased public expenditures on health care, and, in several cases, implemented universal health coverage. However, in most nations, the expanded public financing of health care afforded only a marginal role to for-profit hospitals, casting a shadow over this sector. The eclipse of for-profit hospitals that prevailed at the time of

Arrow's and Pauly and Redisch's<sup>11</sup> analyses led them to conclude that nonprofits would remain dominant in the health care sector. With the benefit of hindsight, it seems these eminent scholars miscalculated.

## The United States

Medicare and Medicaid Capital Payment Policies. In the United States, the proprietary hospital sector bottomed out in the early 1960s, and its renewed growth coincided with the start-up of Medicare (1965) and Medicaid (1966). This was no coincidence: Both programs created huge financial opportunities for hospitals, particularly for for-profits.

Medicare, which covered persons age 65 and over, paid hospitals for their operating costs, with a 2% add-on for future "capital improvements" and additional payments for existing capital costs (such as interest on debts and depreciation). 61 While the Hill-Burton program that provided massive federal grants for hospital construction starting in 1946 barred for-profit hospitals from participating,62,63 Medicare (and most state Medicaid programs, which cover some of the poor) offered for-profits extra payments that were unavailable to nonprofit or public facilities. This additional capital payment for return on investment was set at 1.5 times the rate of return earned by Medicare's Hospital Insurance Trust Fund. 12 This proviso, inserted at the insistence of the nursing home industry, virtually guaranteed for-profit facilities a "risk-free" investment return.61

Medicare's and Medicaid's capital payment policies spurred the rapid growth of hospital firms such as HCA (previously Hospital Corporation of America), which was founded in 1960 and by 1980 owned about 300 hospitals with 40,000 beds. Much of that growth came from acquisitions that were effectively subsidized by the public program, which (in addition to the generous payments discussed above) reimbursed for-profits for their interest payments on debts incurred to purchase additional hospitals. 64,65 Moreover, tax laws permitted owners of hospital buildings to claim accelerated depreciation over a 15-year period. These measures assured for-profit hospitals of ready and cheap access to funds for new investments. By the early 1980s, for-profit providers were receiving 40% of all capital reimbursements nationally, although they accounted for only 7.6% of total hospital expenses.<sup>64</sup> This favorable public reimbursement plan stimulated the creation of new hospitals and the consolidation of the for-profit sector (Table 2).

Market-Driven Health Care Reforms During the Reagan Administration. The Reagan Administration's (1981–1989) health policies were driven by its stated desire to reduce government spending and introduce market-

	Number of chain- owned hospitals	Percentage of total hospital beds	Number of stand-alone for-profit hospitals		
1975	378	5.2%	682		
1980	531	7.5%	NA		
1982	682	8.9 %	330		

Table 2. Growth of Investor-Owned Hospital Chains Around 1980 in the United States.

Source: Gray.64

based principles, an approach resembling the NPM ideology ascendant around the same time in the United Kingdom.

In 1982, the average profit margin of for-profit hospital chains was more than double that of the hospital sector as a whole, 9.2% versus 4.3%. 66 While advocates saw this as an indication of more effective management, 62 the growth of investor-owned hospital chains provoked increasing debate, leading the Institute of Medicine to undertake the first large-scale study of for-profit hospitals in 1986. 64 The Institute panel concluded, ambiguously, that for-profit ownership was having an important effect on the health system, but that the available evidence was insufficient to justify policies either opposing or supporting investor ownership. 64

The administration's political bent precluded taking any steps that directly challenged the existence of the for-profit hospital sector. However, starting in 1982, the generous capital reimbursements to for-profit providers were gradually phased out after the publication of highly critical reports by the U.S. General Accounting Office.<sup>67</sup> The return-on-equity payment rate was cut from 1.5 to 1.0 times the rate of return of the Hospital Insurance Trust, and the option to charge Medicare for acquisition costs was discontinued by the Deficit Reduction Act of 1984.<sup>68</sup>

In 1983, Medicare replaced cost-plus hospital reimbursement with a system based on diagnostic-relatedgroups (DRGs).<sup>69</sup> DRG proponents hoped the shift would stimulate efficiency and moderate hospital costs. Initially, the for-profit sector welcomed the new payment approach, anticipating that it would reward more efficient providers and hence be to its advantage. But things turned out differently. Reports of high hospital profit margins led Congress to repeatedly reduce annual payment rate increases, which cut profits.<sup>70</sup> Capital costs and return on equity payments were gradually folded into DRG payments, rather than being add-ons, as under Medicare's prior payment system. By 1992, forprofit hospitals were no longer receiving the extra payments they had enjoyed since 1966. Moreover, adverse publicity generated by the practice of patient dumping of critically ill uninsured patients<sup>71</sup> triggered passage of the 1986 Emergency Medical Treatment and Labor Act, which to this day requires emergency departments to stabilize urgently ill patients regardless of ability to pay,<sup>72</sup> crimping for-profits' ability to avoid unprofitable patients.

The for-profit hospital industry's exuberant expenditures on lobbying indicate the importance it has placed on political and regulatory decision making. In 1985, the industry accounted for 36% of all hospital lobbying expenses and 30% of hospitals' contributions to political candidates, while its trade association funded another 25% of contributions. Despite these contributions, for-profits encountered some new policy constraints, but kept on growing.

The Managed Care Era. Starting in the 1980s, traditional health insurance that paid virtually anything that any provider charged gradually gave way to managed care plans, which negotiated lower prices, imposed strict utilization management, and restricted provider networks. The price reductions, narrow networks, and utilization reviews reduced hospital utilization and left hospitals with excess capacity. The financial pressure on hospitals was intensified by the 1997 Balanced Budget Act, which initiated 3 years of meager Medicare payment rate increases. For-profit hospitals' revenues stalled, and the acquisition value per bed was halved.

For-profit hospital chains responded by reshaping themselves into locally dominant systems (i.e., oligopolies) with the muscle to extract higher prices from private payers. They also initiated grassroots (or "Astroturf") campaigns to loosen the restraints imposed by the Balanced Budget Act and contributed to the managed care backlash of the late 1990s; this pushed many private payers to shift to plans (such as preferred provider organizations) that had less restrictive networks (although they also typically came with higher copayments).<sup>77</sup>

Several other strategies have bolstered the for-profit hospital sector's resilience in the United States, despite less favorable reimbursement regulations and increasing penetration of managed care. For-profits have diversified through activities such as psychiatric inpatient care and have applied rigorous "turnaround management" to failing public and nonprofit hospitals they have acquired. Some firms have reaped profits by acquiring cash-strapped hospitals sitting on valuable real estate

and selling off the buildings. For-profit hospitals have also sometimes profited by manipulating complex rules: for example, purchasing publicly financed assets at below-market prices. Finally, several of the largest for-profit firms have engaged in outright fraud and abuse, including large-scale up-coding (portraying patients as sicker than they really are to maximize reimbursement). HCA, still the largest for-profit chain, paid \$840 million to settle charges of engaging in such inappropriate practices, while another for-profit hospital organization, Tenet, has paid millions in fines for overbilling Medicare for cardiac surgery. 80,81

Physician Incentives and Participation in the For-Profit Sector. Although an increasing proportion of U.S. physicians are employed by hospitals, <sup>82</sup> historically, most have been self-employed and affiliated with one or more hospitals. In earlier decades, for-profit hospitals offered physicians financial incentives, such as an equity stake in a local venture, to admit patients. <sup>12</sup> Starting in the 1980s, for-profit and other general hospitals faced increasing competition for lucrative patients from outpatient surgery centers and physician-owned specialty hospitals offering a limited range of services, such as orthopedic and cardiac surgery.

Specialty hospitals were particularly threatening for the existing general for-profit hospital industry because of their focus on high-revenue services and the rapid growth in their patient volumes. In December 2003, Congress imposed an 18-month moratorium banning new physician-owned specialty hospitals from billing Medicare. While the American Medical Association had, until 1984, discouraged physician ties to for-profit hospitals, in 2004 it opposed extending the moratorium – opposition that was overridden by hospital groups that lobbied intensively against specialty hospitals' "unfair" competition. In 2005, Congress re-imposed the moratorium<sup>83</sup>; however, it was lifted again in 2006.

At present, wages for non-physician hospital employees are generally lower at for-profit than at nonprofit hospitals, a reversal of the pattern in 1990. \*SIn contrast, for-profits often offer physicians lucrative arrangements in the form of incentive-based payments \*6" or a share of hospital profits. \*87

Recent Developments: The Affordable Care Act, the Trump Administration, and the COVID-19 Crisis. The most important effect of the 2010 Affordable Care Act (ACA) was a reduction in the uninsured rate from 15.5% in 2010 to 8.6% in 2016.<sup>88</sup> The decline of the number of uninsured benefited the for-profit sector by reducing bad debt and free care, although this has been offset by rising copayments that have led to increases in bad debts among persons with coverage.<sup>89</sup> The ACA also implemented accountable care organizations (ACOs) and so-called

value-based purchasing programs in Medicare, which have had mixed effects on hospital margins. Moreover, the vast majority of hospitals participating in ACOs are nonprofits. 90

In addition, the ACA cut the annual increase in Medicare's payment rates for hospitals, widening the gap between the rates paid by public versus private insurers<sup>91</sup> and increasing the incentives to recruit privately insured patients.<sup>92</sup> Of particular relevance to for-profit hospitals, Section 6001 of the ACA placed new restrictions on existing physician-owned specialty hospitals and reinstated a moratorium on payments to new ones. While several such hospitals rushed to open before the moratorium came into effect, their numbers subsequently fell, to the advantage of other for-profit hospitals.<sup>93</sup>

On the whole, it appears that nonprofit and public hospitals have borne the brunt of adverse financial consequences from the ACA, while for-profits have continued to prosper, as illustrated by their more favorable Medicare margins (Figure 2) and by the fact that the profit margins of the largest for-profit chains have remained relatively stable or increased.

Until the COVID-19 outbreak, for-profit hospitals have fared particularly well during the Trump administration. While the corporate tax cuts enacted in 2017 attenuated the tax exemption advantage of nonprofit hospitals, <sup>108</sup> they saved the largest for-profit chains an estimated \$800 million in 2018. <sup>109</sup> And since Trump assumed office, Medicare reimbursement rates have increased, benefiting both nonprofit and for-profit hospitals. <sup>110</sup>

Most recently, the COVID-19 pandemic has damaged the finances of for-profit hospitals<sup>111</sup> because, as one firm said in a statement, "Elective surgeries are the cornerstone of our hospital system's operating model – and the negative impact due to the cancellation of these procedures cannot be overstated."<sup>112</sup> At the time of this writing, the long-term repercussions of the pandemic on for-profit hospitals remain uncertain.

### The United Kingdom

For-Profit Hospitals in a Country With a National Health Service. The NHS, established in 1948, promised care "free at the point of delivery" to all. The Labour Government nationalized almost the entire hospital sector. Only some nonprofit hospitals remained outside the NHS at the time, and several private insurers, anticipating that demand for private insurance would persist, formed the British United Provident Association (BUPA), which, in 1949, covered 34,000 subscribers. <sup>12</sup> Until the 1970s, this so-called independent sector had modest growth. While hospitals outside the NHS originally comprised primarily nonprofits, this independent

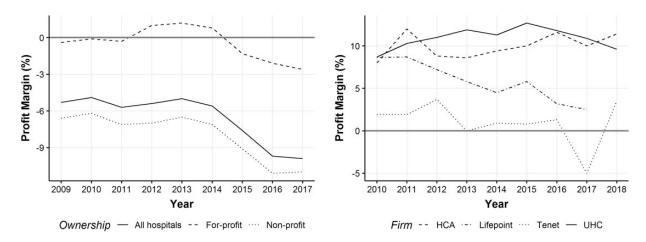


Figure 2. Trends in Medicare margins of all US hospitals (left panel) and the profit margins of the largest for-profit hospital firms (right panel).<sup>a</sup>

<sup>a</sup>Margins in the left graph are calculated as payments minus Medicare-allowable costs, divided by payments. "Overall Medicare margin is for acute inpatient, outpatient, hospital-based skilled nursing facility (including swing beds), hospital-based home health, and inpatient psychiatric and rehabilitation services, plus uncompensated care, graduate medical education, and electronic health record incentive payments" (p.85)<sup>94</sup> The margins in the right graph are calculated as Earnings Before Interest, Taxes, Depreciation and Amortization (EBITDA).

Sources: MedPAC (2017)<sup>94</sup>, MedPAC (2019)<sup>95</sup>, Bureau van Dijk (2020)<sup>96</sup>, HCA Healthcare (2015;2013;2010)<sup>97,98,99</sup>, Universal Health Services (2018;2015;2013;2010)<sup>100,101,102,103</sup>, Tenet Healthcare Corporation (2018; 2015;2013;2010)<sup>104,105,106,107</sup>

sector transitioned to mostly for-profit ownership over time.

To enlist senior specialists' (consultants') crucial support for the NHS, 113 the government allowed them to engage in some lucrative private practice within NHS hospitals, using so-called pay beds. Pay-bed payment rates were very high, although the number of patients who used them was small. 114 Nevertheless, these pay beds were very important for the income of consultants, and the NHS's founding father, Aneurin Bevan, famously described: "I stuffed their mouths full with gold". 115

Initially, pay-bed care was mainly financed through out-of-pocket payments. While the role of private insurance grew over time, 116 by as late as 1975, 40% of bills for private care in the NHS were still paid out-of-pocket. 117 When some nonprofit hospitals began to be incorporated into the NHS, the availability of private care was limited and private insurers were increasingly anxious to expand the supply of private providers for their clients. In 1957, BUPA, by far the largest private insurance company, donated a substantial sum to facilitate the emergence of the first private nonprofit hospital chain, known as the Nuffield Hospitals. By 1967, Nuffield was operating 13 hospitals, which grew to 26 in 1976. 118 It remains a nonprofit, but commercially influenced private hospital chain.

Commercial Conversions in the For-Profit Sector. During the 1970s, private hospital care triggered heated debate. In 1974, the Labour Government, supported by the unions,

tried to simultaneously limit the number of NHS pay beds and severely curtail the independent sector. 119 They harvested the opposite: a much more commercial independent hospital sector. The government's policies posed a direct threat to the income of NHS consultants who pursued private practice. Many consultants were outraged, and massive strikes loomed. A coalition of private insurers and private hospitals managed to gather the support of the British Medical Association (BMA) to block implementation of these policies. 120 The government compromised: The number of pay beds would be reduced, but less than had been previously planned, and the government promised less interference with the independent sector. However, an unintended consequence was that NHS consultants began to refer large numbers of their private patients to the independent sector.

Spurred by new opportunities, the independent hospital sector took on an increasingly for-profit character, as new for-profit providers stepped into the market. BUPA founded its own for-profit hospital subsidiary. U.S. hospital chains opted to enter the United Kingdom, which served as a pilot to test whether they could find success outside their home country. These groups invested heavily in new facilities and equipment.

The prospects of the young for-profit hospital sector greatly improved after Margaret Thatcher's rise to prime minister in 1979 and the ascendancy of NPM ideology in the NHS, which was fueled by the Griffiths report.<sup>121</sup> Retrenchment of the public sector was at the core of

this ideological project. NHS budgets were curtailed, causing large increases in waiting lists for elective surgery and making private alternatives more attractive. The government also encouraged public purchasers to consider the private sector in their tendering process, 122 opening up additional opportunities for consultants to earn money in the independent sector (also referred to as revised consultant contracts). As a result, in 1984, 85% of consultants engaged in some private practice - the highest figure since the NHS's founding. 123 Between 1979 and 1985, the number of private-sector beds increased from about 6,500 to 10,200, with for-profit hospitals accounting for half of the total. 124 However, the government's attempts to commission for-profit clinics to reduce NHS waiting lists proved unsuccessful. 125 One of the problems was that the marginal costs of using private facilities were higher on average. 125 These higher costs reflected: (a) very high private physician rates (according to Laing, up to 5 times higher than in other countries<sup>126</sup>) and (b) scale disadvantages because many of the private clinics were very small. 12 Private providers were able to demand high prices from private health insurers because of limited competition in the private sector and because patients perceived private care as a luxury product. 127

The Internal Market and the Purchaser-Provider Split. In 1991, local health authorities were given the responsibility of commissioning hospital care (under the so-called purchaser-provider split) and were allowed to purchase services from private for-profits under certain circumstances. Many NHS trusts reformed their pay beds into Private Patient Units in separate complexes that mimicked the more luxurious surroundings of the private sector. The private sector perceived this development as a threat to its business and argued that it constituted unfair competition. 128 While the purchaser-provider split did not substantially change the NHS provider markets - with public providers continuing to enjoy local monopolies and encounter little competition - the outdated capital (i.e., buildings and equipment) infrastructure of the NHS and increasing waiting lists nourished the continuing growth of the for-profit hospital industry.

In the late 1990s, Tony Blair's New Labour Government initiated massive investments in the NHS. Consultants were offered substantial pay raises if they agreed to work more NHS-hours. <sup>129</sup> By 2012, the proportion of consultants engaged in private practice had fallen to 53%, down from approximately 70% in 1993. <sup>130–132</sup> NHS consultants were also discouraged from relying on private earnings by the imposition of the "10% rule," which forbade those on full-time contracts from earning more than 10% of their income from private practice. <sup>131</sup> Gradually, the NHS became more appealing to private patients.

These changes also led the for-profit sector to gain interest in selling services to the NHS. In 2002, for-profit independent treatment centers took part in a £1.6 billion program to reduce NHS waiting lists<sup>133</sup> and in 2005, a second phase was launched with an estimated cost of £4 billion. <sup>134</sup> Most contracts were given to new foreign providers, which set up special clinics for this purpose. These non-British physicians were typically cheaper to employ and ensured compliance with a prohibition on drawing away NHS staff. <sup>135</sup> Established private providers observed this new competition with dismay.

The prospects of the new patient-choice policies were also problematic. Under these policies, patients could opt for any private provider willing to accept the NHS's payment rates. Consequently, private hospital groups increasingly felt pressured to either stay with their existing high-cost business model catering to private patients or to adopt new, low-cost business models for NHS patients. Private insurers also became more critical purchasers, trying to lower costs by stimulating the growth of hospital networks. However, this shift actually favored for-profit groups because of their larger scale and negotiation power. By 2007, the for-profit sector operated almost 75% of all private hospital beds, but overall growth had stalled. 12

The Decade of Austerity. The 2008 financial crisis led to austerity policies that had a negative impact on private care, as illustrated by the negative profit margins of BMI Healthcare, the largest private provider (Table 3). Spire and Ramsay – a global firm that today operates 480 hospitals worldwide, including in the United Kingdom – fared better over the long term (Table 3). These woes were largely attributable to the decline of private insurance, with enrollment falling steeply in the past decade. Private hospitals were only partly able to compensate for this decline by increasing services covered by low-margin public funding and a small number of self-pay patients.

The Conservative government's stringent austerity policies held health care expenditures flat over a 4-year period (2011-2012 to 2014-2015) while the government opened opportunities for private providers to deliver services paid for by the NHS. The white paper Equity and Excellence: Liberating the NHS mandated that patients be allowed to seek care from any provider of their choosing and that quality guidelines and prices be harmonized. 142 The Health and Social Act (2012) introduced Commissioning Groups - one of the most farreaching pieces of legislation in the history of the NHS. 143 Private providers were finally granted the right to bid for contracts to deliver NHS services and won one-third of all contracts (although 85% of the funds were still awarded to NHS providers). 144 With this increased access to NHS contracts, the private

Table 3. Profit Margins of the Largest U.K. Hospital Chains.

	2010	2011	2012	2013	2014	2015	2016	2017	2018
BMI Healthcare <sup>a</sup> Ramsay <sup>b</sup> Spire Healthcare <sup>c</sup>	-3.5%	-6.3%	-8.5%	-2.4% -6.8%	−1.7% 9.0% −0.8%	0.0% 9.7% 8.3%	-10.0% 10.4% 7.9%	-4.2% 10.4% 2.4%	1.9% 6.0% 0.9%

Sources: Bureau van Dijk, 96 Ramsay, 136-138 and Spire healthcare. 139-141

sector now derives 32% of its revenues from lower-margin public funding, up from 5% a decade ago. 51

Austerity measures also affected NHS consultants. Because of a pay freeze put in place in 2010 that applied to all NHS staff, total gross earnings fell by 2.6% between 2009 and 2015, and junior doctors and consultants alike had to tighten their belts. Moreover, the private sector's financial problems curtailed consultants' opportunities to supplement their incomes.

Brexit and the Future of For-Profit Hospitals in the United Kingdom. Although for-profit providers can now compete for NHS resources, popular suspicion about a post-Brexit "privatization of the NHS" persists. In addition, the BMA has become more critical of the private sector and highlights the risks associated with contracting private hospitals to deliver NHS care. <sup>146</sup> They and others have voiced concern about the lack of transparency of private hospitals. <sup>146,147</sup>

The question at present is what impact the Long-Term Plan for the NHS and the COVID-19 crisis will have on the private sector. The Long-Term Plan delegates greater autonomy to the United Kingdom's new leading integrated care systems – its version of ACOs<sup>148</sup> - to manage services. These systems may enjoy even greater latitude to contract out services to private partners. At the time of this writing, the COVID-19 outbreak hit the United Kingdom (especially England) hard in terms of excess mortality compared with other continental European countries. 149 The huge backlog in maintenance of NHS buildings - estimated to total £6.5 billion <sup>150</sup> – and the strain on the public budget caused by the medical catastrophe and impending recession may push the government to seek further support from the private sector. During the COVID-19 outbreak in spring 2020, the government has block-bought the private hospital capacity. 111

## Germany: Privatization of the Public Sector

In the early 20th century, affluent families usually received inpatient and outpatient hospital care at proprietary clinics. From 1931 onward, hospitals were required

to focus only on inpatient treatment, and most of their physicians were salaried.<sup>151</sup> However, in rural areas, due to shortages of local ambulatory specialist care, some proprietary staff hospitals continued to function as "open staff" facilities in which a combination of outpatient and inpatient care were still permitted.<sup>12</sup>

Short on Money After World War II. World War II destroyed the German hospital sector. West Germany became a federal republic, with powers vested in the states if not explicitly granted to the federal government. In health care, many powers were delegated to nongovernmental bodies, with self-regulation (including the allowance of mixed hospital ownership) serving as a guiding principle. Thus, although for-profit providers and their participation in health care delivery were legally uncontroversial, the for-profit hospital sector's market share declined until German reunification in 1989. 12

After World War II, the hospital sector was in a dire state and had to be completely rebuilt. However, capital was scarce, and public needs other than hospitals were prioritized. Hospitals incurred significant deficits annually, 152 which, in many cases, had to be covered by the states and the municipalities that owned them. The federal government and sickness funds that paid the hospitals focused on keeping contribution rates low. As a result, policies during the 1950s and 1960s largely prioritized public and nonprofit hospitals over for-profit hospitals. 152 For-profits could therefore not fall back on deficit funding from local governments, capital subsidies from the states, or endowments and free labor from the voluntary sector. Two niche markets survived: (a) one that offered profitable services and better amenities to well-off, privately insured patients whose insurers paid rates 1.5 to 2 times as high as those paid by sickness funds<sup>153</sup> and (b) one that provided access to inpatient facilities for ambulatory medical specialists in sparsely Bavaria. 154 populated rural areas, especially Nevertheless, by 1969 the proprietary hospitals' share of acute care beds had fallen to 4.3%, down from almost 8% in the late 1950s. 12

<sup>&</sup>lt;sup>a</sup>BMI Healthcare figures are based on Earnings Before Interest and Taxes (EBIT).

<sup>&</sup>lt;sup>b</sup>Figures are based on EBITDA of Ramsay's hospitals in the United Kingdom.

<sup>&</sup>lt;sup>c</sup>Figures are based on EBITDA.

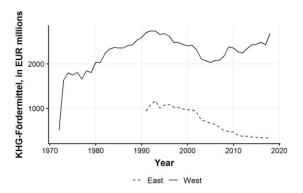
Dual Funding: Capital Versus Current Costs. The pressing financial situation of the hospital sector was finally addressed in 1972. The Hospital Finance Act (HFA) (which required a change in the constitution) initiated systematic planning of hospital infrastructure, with the federal government assuming responsibility to co-fund hospital investments. The HFA introduced dual funding, whereby the states (Länder) and federal government were jointly responsible for funding capital investments. The amounts invested were based on state planning and calculations of operating costs by sickness funds.

While the HFA greatly augmented hospital funding, it prevented for-profit hospitals from receiving capital subsidies for about the first 10 years of its existence. These entities were excluded from hospital planning. Moreover, private physicians in for-profits were not permitted to charge sickness funds higher rates for their services than other providers. Sickness funds could only contract with for-profit hospitals under limited conditions and were not required to contract with physicians who were not listed in state hospital plans. Thus, for-profit hospitals either had to operate with a lower cost base than their peers or had to rely on private patients.

Most states were unable to meet demands for public capital and soon shortages became evident, the so-called *Investitionsstau*. Additionally, in 1984 – a year after a right-leaning party came into power – the federal government stopped contributing to hospital capital investment and reduced hospital investment budgets. At this point, rules were changed to permit states to incorporate for-profit providers in their hospital plans. Additionally, hospital operating payment plans increasingly included funding for small investments. Many municipalities struggling to support heavily indebted public hospitals debated privatizing them; in 1984, the city of Hürth, unwilling to continue meeting its hospital's annual deficit, was the first to turn to privatization.

Reunification and the Boom in For-Profit Hospital Care. In 1989, German reunification triggered a for-profit hospital boom. Reunified Germany had to cope with large numbers of neglected public hospitals in the eastern part of the country and privatization seemed an appealing solution. For-profit hospitals were according prominent roles in most of the new states. <sup>157</sup> Corporate tax reductions also improved the investment climate. <sup>47</sup>

In 1989, Rhön-Klinikum was the first hospital group to be listed on the public stock exchange. Other hospital chains soon emerged, including Fresenius/Helios and Asklepios. Such publicly traded hospital groups were well-positioned to take over and consolidate struggling hospitals in Eastern Germany. They paid very low (or no) acquisition costs, while taxpayers were providing



**Figure 3.** Total annual hospital capital funding (Krankenhausfinanzierungsgesetz) 1970–2020.

Source: Arbeitsgemeinschaft der Obersten Landesgesundheitsbehörden. 160

relatively generous capital funding (Figure 3). By 2001, the privatization of hospitals to for-profit status was 22% in Thuringia, 20% in Saxony, 16% in Mecklenburg, 12% in Berlin, and 11% in Brandenburg, with only Saxony-Anhalt lagging somewhat behind. 12

The financial situation of the hospitals in West Germany stagnated, partly because huge state investments were being made to improve living standards in East Germany (e.g., infrastructure investments). <sup>161</sup> This eventually triggered privatization in the West as well. For-profit hospital market share in Hesse and Schleswig-Holstein grew to over 20%. However, in densely populated North Rhine-Westphalia, which had many private nonprofit hospitals, for-profit market share remained under 5% in 2007. <sup>12</sup>

Physicians were generally amenable to for-profit hospital conversions, in part because they typically offered more favorable terms of employment. However, since 2008, physicians in public hospitals have received larger salary increases). However, while labor agreements set private-sector wage scales that vary from hospital to hospital. At present, physician pay is generally lower in for-profit hospitals (Table 4), although Helios is an exception. The income of physician executives in for-profit hospitals, however, is often tied to the financial performance of the hospital and in some cases may be significantly higher than the amounts called for in the labor agreements.

Hospital payment reforms introduced in the 1992 Health Care Structure Act and the 1997 Hospital Restructuring Act gradually weakened the dual funding structure and paved the way toward a DRG-like prospective payment system. Although the principle of the dual funding structure remained intact, these acts introduced fixed budgets and spending caps to curb costs. In other words, these reforms put the hospital sector under

Table 4. Monthly Gross Pay Scales (in Euros) for Medical Specialists According to Number of Years of Service, 2019.

	I-3 years	4–6 years	7–8 years	9-10 years	II-I2 years	13 years
Public hospitals	5,956	6,455	6,894	7,149	7,399	7,649
Rhön Klinikum	5,579	6,040	6,514	6,745	7,031	7,188
Asklepios	6,025	6,530	6,965	7,230	7,475	7,625
Helios <sup>a</sup>	6,123-6,305	6,634–6,938	7,182–7,486	7,546–7,608	7,729–7,791	7,791

Sources: Vereinigung der kommunalen Arbeitgeberverbände, Helios, Asklepios, Rhön Klinikum. 168–171

Table 5. Profit Margins Largest Chains in Germany.<sup>a</sup>

	2010	2011	2012	2013	2014	2015	2016	2017	2018
Asklepios Kliniken Helios Kliniken (Krefeld, Schwerin,	5.7% 5.8%	5.3% 3.6%	6.2% 4.0%	5.3% 3.5%	6.7% 6.6%	6.6% 8.4%	7.7% 11.1%	8.6% 9.6%	11.6%
Duisburg, Hildesheim, München)								7.076	
Sana Kliniken AG	3.7%	3.7%	3.1%	3.2%	3.7%	4.0%	4.9%		4.7%

Source: Bureau van Dijk.96

financial pressure. Whereas between 1988 and 1992, state subsidies covered almost all capital investments, between 1993 and 1997 this fell, with almost 40% of hospital capital investments coming from sources other than state subsidies. The As for-profit hospitals received lower levels of state capital subsidies than public hospitals, they were less affected and, therefore, gained a certain comparative advantage. The Associated State Capital State

Merkel's Legacy on For-Profit Hospital Growth in Germany. Angela Merkel's chancellorship has produced no major reforms in the health care sector, 175 but incremental policy changes during her tenure may have had profound long-term effects. First, the 2015 Health Care Strengthening Act, which aimed to foster integration among providers and to integrate care models, weakened the separation between inpatient and outpatient care and allowed hospitals to provide some ambulatory care. 176,177 This legislative change opened up a new market for the for-profit sector. Second, the 2016 Hospital Structure Reform Act called for quality-based hospital planning and pay-for-performance plans and aspired to reduce capacity, consolidate care into fewer facilities, and control inpatient utilization. As a result, the Fixkostendegressionsabschlag (FDA) now fines hospitals that increase the volume of care they deliver. Some predict that this legislation may incentivize hospitals to provide more lucrative services and avoid provision of less profitable ones.<sup>178</sup>

The hospital sector has prospered under Merkel's regime, with the profit margins of all hospitals rising by approximately 1 to 3 percentage points (authors' own calculations). <sup>178–180</sup> Yet, the profit margin of the

for-profit sector as a whole remains significantly higher than that of the other ownership types. <sup>178–180</sup> Profit margins of the largest for-profit hospitals chains depict a similar pattern, with relatively stable profit margins over the years (Table 5).

At present, Germany has a large and prosperous forprofit hospital sector, and the financial environment remains favorable for for-profit hospitals. However, the competition authority has recently raised concerns about the high level of concentration in the private hospital market, making it more difficult for for-profit chains to continue to expand domestically. Partly for this reason, Fresenius – the largest German hospital firm, operating under the hospital brand name Helios – took over Quirónsalud to expand in Spain and thus become the largest hospital chain in Europe.

# The Netherlands: A Counterfactual Case to For-Profit Hospital Growth

Why the For-Profit Hospital Industry Did Not Kick Off in the Netherlands. Dutch for-profit hospitals have never flourished. Nonprofit hospitals have had a strong foothold in the health care system since the 1850s because of the reliance in Dutch society on religious communities (rather than government) to provide social services – so-called pillarization. For a long time, nonprofit hospitals were also open staff, which discouraged physicians from building their own, competing facilities. Thus, the drivers of proprietary hospitals in the United States, the United Kingdom and Germany (lack of physician access and lack of amenities and services for the well-off) were

<sup>&</sup>lt;sup>a</sup>Helios is the only one with where pay scales rise with each year of experience rather than every 2 to 3 years, hence the range in the cells.

<sup>&</sup>lt;sup>a</sup>Figures are based on EBIT. Helios is the biggest German chain, but figures only reflect the profit margins of the 5 mentioned hospitals between brackets.

not prominent in the Netherlands, and nonprofit hospitals gradually became the dominant providers.

After World War II, hospitals wanting to make new capital investments were required to obtain a certificate of need from the local municipality, but the local government bore no responsibility for funding the investment. Instead, the social insurance plan was required to include reimbursement for approved capital expenditures (but not return on equity) in each hospital's perdiem rates, making hospital capital investments virtually risk-free and obviating the need for hospitals to accumulate cash for down payments. <sup>12</sup> As a result, a construction boom followed, but with little demand for private capital to fund hospital investments <sup>182</sup> and little profit incentive for investors, <sup>183</sup> conditions were not favorable for the growth of for-profit hospitals.

Legal Prohibition of For-Profit Hospital Ownership. The 1971 Hospital Facilities Act (HFA) was a response to the burst of construction and fears that costs would escalate. The act centralized hospital planning (by removing municipalities' right to approve new hospital investments) and provided a mechanism to enforce costcontainment policies. The HFA also prohibited for-profit hospitals from receiving certificates of need or reimbursements from the social insurance plan. 184 This legal restriction was the final door to close on the prospects of for-profits (although theoretically, it remained possible for for-profits to purchase existing nonprofit hospitals and offer services to privately insured patients). Private insurers, which covered the wealthiest 30% of the market, were strongly embedded in the corporatist decision-making structures of Dutch health care and, unlike in the United Kingdom and Germany, did not push for the development of private hospitals.

Managed Competition, But Without For-Profit Hospitals. Managed competition theory profoundly influenced Dutch health policy. The 2006 Health Insurance Act was the flagship effort to create an entirely private health care system, based on the principles of regulated competition, with hospitals paid through DRGs.

Under the reform, private insurers could compete for customers – although they were prohibited from distributing profits to owners or shareholders – and were given increasing latitude to negotiate prices with providers; in 2012, prices for 70% of inpatient DRGs were subject to negotiation. With managed competition being the new policy paradigm, for-profit hospital ownership was seen by many, including the High Court, <sup>184</sup> as the logical next step. Moreover, the 2005 Health Care Institutions Admission Act, the successor to the HFA, had simplified regulations and reduced the government's role in hospital planning, which seemingly opened the

way to lift the ban on for-profit hospitals. Indeed, the government stated that it was prepared to lift the ban by 2012 and that hospitals would be permitted to become private companies as long as they did not pay any dividends to investors until the ban was formally lifted. <sup>184</sup> Twelve hospitals converted to private ownership status, although not all sought to become for-profits (authors' calculations using annual reports). In 2008, the remaining certificate of need regulations and capital reimbursement plans were phased out. Hospitals were then free to (re)develop property. However, under prospective payments, they became exposed to investment risks. <sup>187</sup>

In anticipation of the lifting of the ban on hospitals operating in a for-profit mode, private investors acquired 3 hospitals: MC (medical center) Slotervaart, MC Ijsselmeerziekenhuizen, and Red Cross Hospital. In the case of the Ijsselmeerziekenhuizen, the government donated approximately €20 million to save it (2008). 188 The 2 MC hospitals eventually ran into severe financial problems and by late 2018 were bankrupt; MC Slotervaart had to close its doors permanently in 2019, and the other hospital was merged with a local nonprofit. 189 An independent committee investigating the causes of the bankruptcy cited, among other factors, the medical staff's suspicion that shareholders extracted money from the hospital through rent paid to an affiliated real estate firm. These suspicions fueled a toxic relationship between the medical staff and the shareholders/ board of directors and made it difficult to reorganize the hospital. 190 The Red Cross hospital remains in a stronger financial position<sup>191</sup> and is currently the only surviving investor-owned hospital.

#### Is There a Future for For-Profit Hospitals in the Netherlands?.

The government's promise to lift the ban on for-profit hospitals' distribution of dividends was always controversial, and left-leaning parties that opposed lifting the ban were sometimes supported by the Christian Democrats. In 2013, the House of Representatives approved a law that was favorable toward for-profit hospitals, but that still imposed several restrictions: for example, no profits could be distributed for the first 3 years, hospitals would have to maintain solvency ratios of at least 20%, and the hospital would have to receive a positive rating from the Health Care Inspectorate. 192 However, in 2014, the Dutch Minister of Health, Edith Schippers, asked the Senate to delay voting on the law, <sup>193</sup> claiming it was not ready for implementation. Political considerations apparently contributed to the postponement; it has since come to light that the Senate would probably have voted against the law. 194

In 2017, the newly formed government promised to make a decision in 2018 on whether to proceed with the law, but subsequently again postponed this to 2019. <sup>195</sup> In October 2019, the Minister of Health encountered

Table 6. Solvency Rates for Dutch Hospitals (2007–2017).<sup>a</sup>

	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
Average solvency rates Median solvency rates	11.9% 12.1%				16.8% 18.1%	18.9% 19.6%		22.4% 22.5%		21.6% 22.4%	23.7% 24.4%

Source: CIBG.54

<sup>a</sup>Authors' calculations.

political obstacles because of the widely publicized defaults of the commercially owned hospitals, described above, and scandals regarding excessive profits in the home care sector. This was the straw that broke the camel's back; the government announced that it was taking the repeal of the ban on for-profit hospitals off the table. 197

For the foreseeable future, the Dutch hospital sector will remain exclusively private, not-for-profit. However, it is notable that the nonprofit hospitals have greatly improved their capitalization. Solvency ratios (assets/liabilities), which in 2002 were estimated to be 7%, <sup>198</sup> now average nearly 25% – an increase that has occurred mostly since the 2006 market reforms (Table 6). Because owners/managers of other types of health care providers have developed creative accounting tricks to circumvent the ban on distributing profits, <sup>199</sup> such high levels of solvency might well draw the attention of investors in the future.

#### **Discussion**

# Why the For-Profit Hospital Sector Has Thrived in Some Countries, but Not Others

After a period of decline during the first part of the 20th century, the for-profit hospital sector has grown rapidly in some, but not all, developed nations in recent decades. For-profit hospital market share rose steeply in Germany after reunification and somewhat less briskly in the United States since the 1960s. However, growth has been slow in the United Kingdom and almost nil in the Netherlands.

In the United States, public Medicare and Medicaid insurance programs implemented in the mid-1960s were favorable toward for-profit hospitals, offering them higher payments than nonprofits. Conversely, the United Kingdom's NHS sidelined for-profits in 1948, and both the Netherlands (1971) and Germany (1972) excluded for-profit hospitals from most sources of public funding. With the rise of neoliberalism and NPM in recent years, all 4 countries have moved to bolster the role of for-profits, albeit with varying effects.

What explains for-profits' divergent paths across these 4 countries? Neither our case studies nor previous research suggest that for-profit success is attributable to greater efficiency. Instead, our cross-national comparisons suggest that 3 other factors influence the likelihood of for-profit success (Table 7): (a) access to capital funding and reimbursement for services from government health care financing programs, together with the generosity of these reimbursements; (b) the extent to which physicians' financial interests coincide with for-profit interests; and (c) the political environment. The first of these factors, the specific, seemingly arcane details of the terms of for-profits' participation in public health care financing programs – especially access to capital funding – appears most important. Physicians' ability to realize financial benefit from for-profit hospitals was relevant in the early 20th century, but its importance has since waned. The political environment shapes key health care financing policies, but explicit decisions to ban or encourage for-profit ownership are often short-lived and of lesser importance.

# Public Payment Systems' Effects on For-Profit Development

Three aspects of public policies regarding provider payments appear important: (a) regulations that determine access to capital subsidies and return on investments, (b) whether for-profits are allowed to bill public programs for the care they deliver, and (c) the effects of systemwide cost-control policies.

After World War II, private funds for hospital investment were scarce in all 4 of the countries we analyzed. Governments stepped in to provide resources to expand hospital capacity through programs that largely or completely excluded for-profits. Unable to access substantial funding to build or modernize facilities, forprofit providers mainly focused on niche markets.

Except for the Netherlands and Germany, for-profits gained greater access to public funding in the 1960s and 1970s. From its inception in 1965 until about 1990, the U.S. Medicare program gave for-profits an explicit competitive advantage in the form of more generous capital payments than were available to nonprofit or public hospitals. Thereafter, the playing field was formally leveled. German for-profits gained formal (but only partial) access to the stream of public health care funds starting in the 1970s and 1980s. However, for-profits' privileged access to private capital funding through stock sales offered a decisive advantage in the early 1990s and

<b>Table 7.</b> Assessment of the Ir	pact of Factors That Affect	For-Profit Hospitals' Growth.
--------------------------------------	-----------------------------	-------------------------------

		United States	United Kingdom	Germany	The Netherlands
Public funding	Access to funding/reimbursement	4	3	4	5
· ·	for capital investments	Stimulated growth	Stimulated growth	Stimulated growth	Prohibited for-profits
	Access to and terms of	4	4	4	4
	reimbursement for service delivery from public programs	Stimulated growth	Shaped provision	Stimulated growth	Hindered growth
	Cost-control measures applied	4	5	4	3
	to broader hospital sector	Created acquisition targets	Mixed effects	Created acquisition targets	Created acquisition targets
Concordance with	Higher remuneration by	4	5	3	1
physicians' financial interests	for-profit hospitals	Mixed effects	Mixed effects	Mixed effects	Not applicable
Political environment	Supporting for-profit growth	3	3	5	4
		Little debated	Mixed effects	Privatizations encouraged	Vetoed at several point

<sup>&</sup>lt;sup>a</sup>I: very unimportant, 2: unimportant, 3: neutral, 4: important, 5: very important.

allowed them to take over many East German hospitals badly in need of funds for modernization. In the United Kingdom, the NHS has, since its founding, had a serious shortage of capital funds. Inadequate funding of the public sector created an opening for private providers to attract modest funding from investors. In contrast, the Netherlands banned hospitals from distributing profits to investors, effectively foreclosing the development of for-profit hospitals.

For-profit hospitals in the United States and Germany were granted immediate (United States) or delayed (Germany) access to reimbursement for service delivery from public programs. Conversely, for a long time, the for-profit sector in the United Kingdom relied primarily on private payments, and the sector's mode of provision – characterized by small-scale clinics offering superior amenities – was shaped by their role, which was limited mostly to providing supplementary services. The recent advent of outsourcing by the NHS has given forprofits access to public payments, although they have struggled to find a profitable business model. The outlier is, again, the Netherlands, where for-profit hospitals were, until 2006 reforms, not allowed to bill the social insurance plan. At present, for-profits may be reimbursed for services, but may not distribute profits to investors.

Several factors contributed to the apparent resilience of for-profit hospitals during periods when cost-containment policies squeeze the hospital sector. For-profits' ability to tap into private capital when public funding is in short supply may allow them to weather periods of austerity. Additionally, for-profits appear more willing and able to focus on profitable segments of the hospital market (e.g., cardiac and orthopedic surgery in the United States) and avoid unprofitable ones (e.g., care of the uninsured). For-profits are also often particularly skilled at exploiting legal (and occasionally

illegal) loopholes in payment policies (e.g., through upcoding). Finally, the enforcement of cost controls may open opportunities for investors to acquire struggling public and nonprofit hospitals at reduced prices, although in the United Kingdom, for-profits' increasing reliance on NHS funding has left them vulnerable to cuts in public funding.

# Physicians' Financial Interests and Their Alignment With the For-Profit Hospital Sector

Across all 4 countries, physicians' financial interests were influential in determining the early development of forprofit hospitals. The United Kingdom – where consultants sought a venue for private practice – was the clearest case. Similarly to the United Kingdom, U.S. forprofit business models depended on attracting (the patients of) self-employed physicians, which led some hospital firms to offer physicians stock or equity arrangements. In Germany, physicians in for-profit (and other) hospitals were generally salaried employees. To this day, nonprofit hospitals in the Netherlands are effectively physician cooperatives that pay specialists – a well-organized group with substantial bargaining power – generous salaries. <sup>11</sup>

In the United Kingdom and Germany, the financial benefits that for-profit hospitals accorded to physicians have somewhat diminished. The number of NHS consultants working in the independent sector in the United Kingdom has declined. In Germany, the wages of physicians in most for-profit hospitals are now lower than those in other hospitals, perhaps reflecting the consolidation of hospital ownership (and hence bargaining power) as a few large chains have come to dominate the market.<sup>200</sup> In the United States, the number of physician-owned hospitals appears to be declining, and more physicians have become employees of either

hospitals or practices owned by venture capital or private equity firms. <sup>201</sup> Based on our findings, we tentatively conclude that physicians' roles in stimulating the expansion of the for-profit hospital sector has diminished in recent years.

# Political Decisions and Their (Non-)Influence on For-Profit Market Growth

While political decisions can disrupt and influence the for-profit hospital landscape – particularly through reforms in hospital payment policy – the political color of the ruling party has had surprisingly little impact on the growth of the for-profit sector in the 4 countries we studied (Figure 1). The only explicit effort by left-leaning politicians to roll back for-profit hospital care, during the mid-1970s in the United Kingdom, failed miserably because of strong physician resistance. Instead, these efforts backfired and induced the commercial transformation of the independent sector. In the United States, the advent of Medicare and Medicaid, implemented by a Democratic president as part of a broad expansion of social programs, offered vast public subsidies to for-profit hospitals, accelerating their growth.

On the other hand, policies inspired by neoliberalism and NPM have had mixed effects on for-profit hospitals. In the United States, the turn to market-based policies starting with DRGs in the 1980s has not proven uniquely favorable to for-profits, in part because nonprofit hospitals have increasingly mimicked for-profit strategies. The fall of communism in Germany spurred the privatization of public hospitals in the East, which continued for more than 20 years. In the United Kingdom, the private sector benefited from the NPM ideological shift during Thatcher's reign. However, despite the neoliberal and NPM-inspired 2006 reform in the Netherlands, for-profit hospitals there have not advanced significantly.

Several factors may underlie the limited effects of political swings on for-profit hospital growth. The hospital sector is inherently rigid: Hospitals cannot be built nor acquire a patient base overnight. Once for-profits have gained substantial market share, their financial power confers political influence that enables them to safeguard their influence. And, relatedly, hospitals, as major employers, often wield strong influence in their local communities, helping hospitals ward off measures that might disrupt their business.

## **Conclusions and Policy Implications**

Our analysis highlights several factors that influence the size and success of the for-profit hospital sector. The seemingly technical details of how public reimbursement plans treat for-profit providers, particularly regulations related to accessing public capital funding and

reimbursement for private capital expenditures, have the greatest impact. Cost-containment measures and payment arrangements, which have squeezed some nonprofit and public hospitals in Germany and the United States, have also stimulated for-profit growth by providing openings for investors to acquire facilities at low costs. For-profit hospitals' early growth in the United States and in Germany was also abetted by physicians who stood to gain financially. However, the role of physicians in stimulating the expansion of the forprofit hospital sector has apparently waned in recent years, as more power has been ceded to investors. The commercialization of hospital care can be a heated political topic, with left- and right-leaning politicians often holding opposing views. However, the political environment, at least within the spectrum present in the nations we examined, had relatively little direct impact on the growth of the for-profit hospital industry, with the notable exceptions of the United Kingdom in the mid-1970s and Germany in the early 1990s.

## Policy Implications

Decisions regarding public reimbursement plans are critical determinants of the growth of the for-profit hospital sector. Such decisions influence short-term profitability and are often relatively stable and long-lasting. Hence, policy makers seeking to influence the composition of the hospital market should focus on the design of payment plans, particularly the details of capital funding and reimbursement. Intervening to reduce the capital costs for one ownership form relative to others may induce long-run changes in the composition of the hospital sector. Thus, our findings call for closer examination of how capital reimbursement plans "steer" the business of health. Finally, the for-profit hospital sector is quite sticky: Once it has grown, it tends not to shrink. This characteristic is particularly relevant in an era when many hospitals are under financial pressure. Privatizing financially distressed public or nonprofit hospitals is relatively "easy," but reversing privatization is often strenuous and costly.

### **Declaration of Conflicting Interests**

The authors declared no potential conflicts of interest with respect to the research, authorship, and/or publication of this article.

#### **Funding**

The authors received no financial support for the research, authorship, and/or publication of this article.

## **ORCID iD**

Florien M. Kruse (D) https://orcid.org/0000-0003-3850-9331

#### References

- Boycko M, Shleifer A, Vishny RW. A theory of privatisation. *Econ J.* 1996;106(435):309–319.
- Megginson WL, Nash RC, Vanrandenborgh M. The financial and operating performance of newly privatized firms – an international empirical-analysis. *J Financ*. 1994;49(2):403–452.
- 3. Kikeri S, Nellis J, Shirley M. *Privatization: The Lessons of Experience*. Washington, DC: The World Bank; 1992.
- 4. Saltman RB. Melting public-private boundaries in European health systems. *Eur J Public Health*. 2003;13(1):24–29.
- 5. Hansmann HB. The role of nonprofit enterprise. *Yale Law J.* 1980;89(5):835–901.
- 6. Furubotn EG, Pejovich S. Property rights and economic theory survey of recent literature. *J Econ Lit*. 1972;10(4):1137–1162.
- Burns LR, Goldsmith JC, Sen A. Horizontal and vertical integration of physicians: a tale of two tails. In: Annual Review of Health Care Management: Revisiting the Evolution of Health Systems Organization. Bingley, UK: Emerald Group Publishing Limited; 2014:39–117.
- 8. Farley D, Hogan C. Case-mix specialisation in the market for hospital services. *Health Serv Res.* 1990;25(5):757–783.
- Kruse FM, Stadhouders NW, Adang EM, Groenewoud S, Jeurissen PP. Do private hospitals outperform public hospitals regarding efficiency, accessibility, and quality of care in the European Union? A literature review. *Int J Health Plann Manage*. 2018;33(2):e434–e453.
- 10. Arrow KJ. Uncertainty and the welfare economics of medical care. *Am Econ Rev.* 1963;53(5):941–973.
- Pauly M, Redisch M. The not-for-profit hospital as a physicians' cooperative. Am Econ Rev. 1973;63(1):87–99.
- 12. Jeurissen PPT. For Profit-Hospitals. A Comparative and Longitudinal Study of the For-Profit Hospital Sector in Four Western Countries. Rotterdam, the Netherlands: Erasmus University Rotterdam; 2010.
- 13. Eurofound. *Delivering Hospital Services: A Greater Role for the Private Sector*? Luxembourg: Publications Office of the European Union; 2017.
- Sengupta A, Mukhopadhyaya I, Weerasinghe MC, Karki A. The rise of private medicine in South Asia. BMJ. 2017;357:j1482.
- 15. Collyer F, Harley K, Short S. Money and markets in Australia's healthcare system. In: Meagher G, Goodwin S, eds. Markets, Rights and Power in Australian Social Policy. Sydney, Australia: Sydney University Press; 2015.
- Enthoven AC. Health Plan: The Only Practical Solution to the Soaring Cost of Medical Care. Reading, MA: Addison-Wesley; 1980.
- Sloan FA. Not-for-profit ownership. In: Culyer AJ, Newhouse JP, eds. Handbook of Health Economics. Amsterdam, the Netherlands: Elsevier; 2000.
- 18. Harris JE. The internal organization of hospitals: some economic implications. *Bell J Econ.* 1977;8(2):467–482.
- Sloan FA, Picone GA, Taylor DH Jr, Chou S-Y. Hospital ownership and cost and quality of care: is there a dime's worth of difference? *J Health Econ*. 2001;20(1):1–21.

- 20. Eggleston K, Shen YC, Lau J, Schmid CH, Chan J. Hospital ownership and quality of care: what explains the different results in the literature? *Health Econ.* 2008;17(12):1345–1362.
- 21. Rosenau PV, Linder SH. Two decades of research comparing for-profit and nonprofit health provider performance in the United States. *Soc Sci Quart*. 2003;84(2):219–241.
- Devereaux PJ, Choi PT, Lacchetti C, et al. A systematic review and meta-analysis of studies comparing mortality rates of private for-profit and private not-for-profit hospitals. CMAJ. 2002;166(11):1399–1406.
- 23. Schlesinger M, Gray BH. How nonprofits matter in American medicine, and what to do about it. *Health Aff (Millwood)*. 2006;25(4): W287–W303.
- 24. Devereaux PJ, Heels-Ansdell D, Lacchetti C, et al. Payments for care at private for-profit and private not-for-profit hospitals: a systematic review and meta-analysis. *CMAJ*. 2004;170(12):1817–1824.
- Bai G, Anderson GF. A more detailed understanding of factors associated with hospital profitability. *Health Aff* (Millwood). 2016;35(5):889–897.
- Ramamonjiarivelo Z, Weech-Maldonado R, Hearld L, Pradhan R, Davlyatov GK. The privatization of public hospitals: its impact on financial performance. *Med Care Res Rev*. 2020;77(3):249–260.
- Carter RB, Massa LJ, Power ML. An examination of the efficiency of proprietary hospital versus nonprofit hospital ownership structures. *J Account Public Policy*. 1997;16:63–87.
- 28. Roomkin MJ, Weisbrod BA. Managerial compensation and incentives in for-profit and nonprofit hospital. *J Law Econ Organ*. 1999;15:750–781.
- 29. Wörz M. Erlöse Kosten Qualität: Macht die Krankenhausträgerschaft einen Unterschied? Eine vergleichende Untersuchung von Trägerunterschieden im akutstattionären Sektor in Deutschland und den Vereinigten Staaten von Amerika [Revenues, Costs, and Quality: Does Ownership Makes a Difference? A Comparative Study Towards Ownership Differences in General-Acute-Care in Germany and the USA]. Wiesbaden, Germany: VS Verlag; 2008.
- 30. Himmelstein DU, Jun M, Busse R, et al. A comparison of hospital administrative costs in eight nations: US costs exceed all others by far. *Health Aff (Millwood)*. 2014;33(9):1586–1594.
- 31. Heimeshoff M, Schreyögg J, Tiemann O. Employment effects on hospital privatization in Germany. *Eur J Health Econ.* 2014;15(7):747–757.
- Hollingsworth B. Non-parametric and parametric applications measuring efficiency in health care. *Health Care Manag Sci.* 2003;6(4):203–218. :1026255523228
- 33. Tiemann O, Schreyögg J, Busse R. Hospital ownership and efficiency: a review of studies with particular focus on Germany. *Health Policy*. 2012;104(2):163–171.
- 34. Sibbel R, Nagarajah B. Are privately owned hospitals more efficient? Results of a survey of the international literature. *Gesundheitswesen*. 2012;74(6):379–386.
- 35. Kessler DP, McClellan MB. The effects of hospital ownership on medical productivity. *Rand J Econ.* 2002;33:488–506.

- Horwitz JR, Nichols A. Hospital ownership and medical services: market mix, spillover effects, and nonprofit objectives. J Health Econ. 2009;28(5):924–937.
- 37. Horwitz JR, Nichols A. What do nonprots maximize? Hospital service provision and market ownership mix. *NBER Working Paper 13246*. Cambridge, MA: National Bureau of Economic Research; 2007.
- 38. Fox DM. Policy commercializing nonprofits in health: the history of a paradox from the 19th century to the ACA. *Milbank Q.* 2015;93(1):179–210.
- Reinhardt UE. The economics of for-profit and not-forprofit hospitals. Health Aff (Millwood). 2000;19(6):178–186.
- 40. Schneider H. Paying their way? Do nonprofit hospitals justify their favorable tax treatment? *Inquiry*. 2007;44(2):187–199.
- 41. Stevens R. "A poor sort of memory": voluntary hospitals and government before the depression. *Milbank Fund Q*. 1982;60(4):551–584.
- Robinson JC. Capital finance and ownership conversions in health care. *Health Aff (Millwood)*. 2000;19(1):56–71.
- 43. Ligon JA. The capital structure of hospitals and reimbursement policy. *O Rev Econ Financ*. 1997;37(1):59–77.
- 44. Claxton G, Feder J, Shactman D, Altman S. Public policy issues in nonprofit conversions: an overview. *Health Aff* (*Millwood*). 1997;16(2):9–28.
- 45. Gray BH. Conversion of HMOs and hospitals: what's at stake? *Health Aff (Millwood)*. 1997;16(2):29–47.
- Goldsmith JC, Kaufman N, Burns L. The tangled hospital-physician relationship. Health Aff (Millwood) Blog. https://doi.org/10.1377/hblog20160509.054793. Published 2016. Accessed October 7, 2020.
- 47. Böhlke N, Gerlinger T, Mosebach K, Schmucker R, Schulten T. Privatisierung von Krankenhäusern. Erfahrungen und Perspektiven aus Sicht der Beschäftigten [Privatization of hospitals. Experiences and perspectives from employees]. Hamburg, Germany: VSA; 2009.
- 48. Rose-Ackerman S. Altruism, nonprofits, and economic theory. *J Econ Lit*. 1996;34(2):701–728.
- 49. Statistics Netherlands (CBS). Medisch geschoolden; arbeidspositie, positie in de werkkring, naar beroep [Medically trained personnel; work position, position in the workplace, by occupation]. https://opendata.cbs.nl/statline/#/CBS/nl/dataset/81551NED/table?ts = 1530009304397. Published 2019. Accessed February 24, 2020.
- American Hospital Association (AHA). AHA annual survey database for these fiscal years: 2000, 2005, 2007-2015. Chicago, IL: AHA; 2017.
- 51. LaingBuisson. *UK Healthcare Market Review*. London, England: LaingBuisson; 2019.
- 52. OECD. OECD Health Statistics 2019. Health Care Resources. https://stats.oecd.org/Index.aspx?Th emeTreeId=9. Published 2019. Accessed January 23, 2020.
- Statistisches Bundesamt. Gesundheit: Grunddaten der Krankenhäuser [Health: Basic Data on Hospitals].
   Wiesbaden, Germany: Statistisches Bundesamt; 2018.
- 54. CIBG. *DigiMV* (2007-2018) Annual Financial Reports Health Care Providers. The Hague, the Netherlands: CIBG; 2020.

- 55. Centers for Disease Control and Prevention (CDC). Table 89. Hospitals, beds, and occupancy rates, by type of ownership and size of hospital: United States, selected years 1975–2015. Health, United States, 2017. https://www.cdc.gov/nchs/data/hus/2017/089.pdf. Published 2017. Accessed November 4, 2019.
- Hawe E, Yuen P, Baillie L. OHE Guide to UK Health and Health Care Statistics. London, England: Office of Health Economics (OHE); 2011.
- 57. LaingBuisson. *UK Healthcare Market Review* London, England: LaingBuisson; 2017.
- 58. Mayntz R, Rosewitz B. Ausdifferenzierung und Strukturwandel des deutschen Gesundheitssystem [Structural changes in German health care system]. In: Mayntz R, Rosewitz B, Schimank U, Stichweh R, eds. Differenzierung und Verselbständigung. Zur Entwicklung gesellschaftlicher Teilsysteme [Pluralism and privatization, on the development of social systems]. Frankfurt, Germany: Campus Verlag; 1988.
- 59. Abel-Smith B. *The Hospitals 1800–1948. A Study in Social Administration in England and Wales.* London, England: Heineman; 1964.
- 60. Navarro V. Why some countries have national-health insurance, others have national-health services, and the United-States has neither. Soc Sci Med. 1989;28(9):887–898.
- 61. Kinkead BM. Medicare payment and hospital capital: the evolution of policy. *Health Aff (Millwood)*. 1984;3(3):49–74.
- 62. Stevens R. *In Sickness and in Wealth. American Hospitals in the Twentieth Century.* Baltimore, MD: The Johns Hopkins University Press: 1999.
- 63. Chung AP, Gaynor M, Richards-Shubik S. Subsidies and structure: the lasting impact of the Hill-Burton Program on the hospital industry. *NBER Working Paper Series*. 2016:1–94.
- 64. Gray BH. For-Profit Enterprise in Health Care. Washington, DC: National Academy Press; 1986.
- 65. U.S. General Accounting Office. Hospital merger increased Medicare and Medicaid payments for capital costs. In: Report by the Comptroller General to the Honorable Willis D Gradison Jr, House of Representatives. Washington, DC: General Accounting Office: 1983.
- 66. Valvona J, Sloan FA. Hospital profitability and capital structure: a comparative analysis. *Health Serv Res.* 1988;23(3):343.
- 67. General Accounting Office. Hospital merger increased Medicare and Medicaid payments for capital costs, Report By The Comptroller General To The Honourable Willis D. Gradison, Jr. House of Representatives. Washington, DC: General Accounting Office; 1983.
- 68. General Accounting Office. Health: The Effects of Changes in Provider Ownership on Capital Cost. Washington, DC: General Accounting Office; 1984. Report number: 123697.
- 69. Scott SJ. The Medicare prospective payment system. *Am J Occup Ther*. 1984;38(5):330–334.

70. Oberlander J. *The Political Life of Medicare*. Chicago, IL: The University of Chicago Press; 2003.

- Himmelstein DU, Woolhandler S, Harnly M, et al. Patient transfers: medical practice as social triage. Am J Public Health. 1984;74(5):494–497.
- Kellermann AL, Martinez R. The ER, 50 years on. N Engl J Med. 2011;364(24):2278–2279.
- 73. Gray BH. The Profit Motive and Patient Care: The Changing Accountability of Doctors and Hospitals (Twentieth Century Fund Report). Cambridge, MA: Harvard University Press; 1991.
- Zwanziger J, Melnick GA. Can managed care plans control health care costs? *Health Aff (Millwood)*. 1996;15(2):185–199.
- 75. Cutler DM. *The Changing Hospital Industry, Comparing Not-for-Profit and For-Profit Institutions*. Chicago, IL: The University of Chicago Press; 2000.
- Silvers JB. The role of capital markets in restructuring health care. J Health Polit Policy Law. 2001;26(5):1019–1030.
- 77. Rodwin MA. Backlash as prelude to managing managed care. *J Health Polit Policy Law.* 1999;24(5):1115–1126.
- Silverman E, Skinner J. Medicare upcoding and hospital ownership. J Health Econ. 2004;23:369–389.
- U.S. Department of Justice. HCA The Health Care Company & Subsidiaries to Pay \$840 Million to Criminal Fines and Civil Damages and Penalties. Washington, DC: U.S. Department of Justice; 2000.
- Baser O, Fan ZH, Dimick JB, Staiger DO, Birkmeyer JD.
   Outlier payments for cardiac surgery and hospital quality. *Health Aff (Millwood)*. 2009;28(4):1154–1160.
- 81. Moynihan R. Another US healthcare giant is hit by scandal. *BMJ*. 2003;327(7424):1128–1128.
- 82. Kane CK. Updated Data on Physician Practice Arrangements: For the First Time, Fewer Physicians are Owners Than Employees. Chicago, IL: American Medical Association: 2019.
- 83. Iglehart JK. The emergence of physician-owned specialty hospitals. *N Engl J Med.* 2005:78–84.
- 84. United States Department of Health and Human Services. Final Report to the Congress and Strategic and Implementing Plan Required Under Section 5006 of the Deficit Reduction Act of 2005. Washington, DC: Department of Health and Human Services; 2006.
- 85. Johns Hopkins Nonprofit Economic Data Project. Published 2020. Accessed March 18, 2020
- Quentin W, Geissler A, Wittenbecher F, et al. Paying hospital specialists: experiences and lessons from eight high-income countries. *Health Policy*. 2018;122(5):473–484.
- Rodwin MA. Medical commerce, physician entrepreneurialism, and conflicts of interest. *Camb Q Healthc Ethic*. 2007;16(4):387–397.
- 88. US Census Bureau. Health Insurance Coverage in the United States: 2016. https://www2.census.gov/programs-surveys/demo/tables/health-insurance/time-series/acs/hic04\_acs.xls. Published 2017. Accessed February 9, 2020.
- 89. Rosko M, Goddard J, Al-Amin M, Tavakoli M. Predictors of hospital profitability: a panel study

- including the early years of the ACA. *J Health Care Finance*. 2018;44(3):1–23.
- 90. Colla CH, Lewis VA, Tierney E, Muhlestein DB. Hospitals participating in ACOs tend to be large and urban, allowing access to capital and data. *Health Aff* (*Millwood*). 2016;35(3):431–439.
- 91. American Hospital Association. *Trendwatch Chartbook* 2018. *Trends Affecting Hospitals and Health Systems*. Washington: American Hospital Association; 2018.
- 92. Ly DP, Cutler DM. Factors of US hospitals associated with improved profit margins: an observational study. *J Gen Intern Med.* 2018;33(7):1020–1027.
- 93. Plummer E, Wempe W. The Affordable Care Act's effects on the formation, expansion, and operation of physician-owned hospitals. *Health Aff (Millwood)*. 2016;35(8):1452–1460.
- 94. Medicare Payment Advisory Commission (MedPAC). Report to the Congress: Medicare Payment Policy. Washington, DC: MedPAC; 2017.
- 95. Medicare Payment Advisory Commission (MedPAC). Report to the Congress. Medicare Payment Policy. Washington, DC: MedPAC; 2019.
- 96. Bureau van Dijk. Orbis database. https://orbis.bvdinfo.com. Published 2020. Accessed February 10, 2020.
- 97. HCA Holdings Inc. *Annual Report to Shareholders*. Nashville, TN: HCA Healthcare; 2018.
- 98. HCA Holdings Inc. Annual Report to Shareholders. Nashville, TN: HCA Healthcare; 2013.
- HCA Holdings Inc. Annual Report to Shareholders. Nashville, TN: HCA Healthcare; 2011.
- 100. Universal Health Services (UHS) Inc. Annual Report. King of Prussia, PA: UHS; 2015.
- Universal Health Services (UHS) Inc. Annual Report. King of Prussia, PA: UHS; 2013.
- 102. Universal Health Services (UHS) Inc. Annual Report. King of Prussia, PA: UHS; 2010.
- 103. Universal Health Services (UHS) Inc. Annual Report. King of Prussia, PA: UHS; 2018.
- 104. Tenet Healthcare Corporation. *Financial Annual Report*. Dallas, TX: Tenet Healthcare Corporation; 2010.
- 105. Tenet Healthcare Corporation. *Financial Annual Report*. Dallas, TX: Tenet Healthcare Corporation; 2013.
- 106. Tenet Healthcare Corporation. Financial Annual Report. Dallas, TX: Tenet Healthcare Corporation; 2015.
- 107. Tenet Healthcare Corporation. *Financial Annual Report*. Dallas, TX: Tenet Healthcare Corporation; 2018.
- 108. Glied S. Implications of the 2017 tax cuts and jobs act for public health. *Am J Public Health*. 2018;108(6):734–736.
- 109. Moody's. Tax Overhaul Will Boost Cash Flow for Many For-Profit Hospitals. New York City, NY: Moody's Investors Service; 2018.
- Moody's. Healthcare Quarterly. New York City, NY: Moody's Investors Service; 2020.
- 111. Kruse FM, Jeurissen PPT. For-profit hospitals out of business? Financial sustainability during the COVID-19 epidemic emergency response. *Int J Health Policy Manag.* 2020;9(10):423–428.
- 112. Bebinger M. COVID-19 hits some health care workers with pay cuts and layoffs. https://www.npr.org/

- sections/health-shots/2020/04/02/826232423/covid-19-h its-some-health-care-workers-with-pay-cuts-and-layoffs? t=1589192047503. Published 2020. Accessed May 11, 2020
- 113. Guy M. Between 'going private' and 'NHS privatisation': patient choice, competition reforms and the relationship between the NHS and private healthcare in England. *Legal Stud.* 2019;39(3):479–498.
- 114. Jewkes J, Jewkes S. *The Genesis of the British National Health Service*. Oxford, England: Blackwell; 1961.
- 115. McSmith A. The birth of the NHS. *Independent*. https://www.independent.co.uk/life-style/health-and-families/features/the-birth-of-the-nhs-856091.html. Published 2008. Accessed October 7, 2020.
- 116. Vayda E. Private practice in the United Kingdom. *J Public Health Policy*. 1983;4(2):222–234.
- 117. Calnan M, Cant S, Grabe J. *Going Private, Why People Pay for Their Health Care*. Philadelphia, PA: Open University Press; 1993.
- 118. Lee M. Private and National Health Services. London, England: Policy Studies Institute; 1978.
- 119. Chandra J, Kakabadse A. *Privatisation and the NHS*. London, England: Gower; 1985.
- 120. Robb D, Brown P. BUPA 1968-198: A Continuing History. London, England: BUPA; 1984.
- 121. *Griffiths R. NHS Management Inquiry*. London, England: Department of Health and Social Security; 1983.
- 122. HM Government. Working for Patients (White Paper). London, England: HMSO; 1989.
- 123. Griffith B, Rayner G, Mohan J. Commercial Medicine in London. London, England: Greater London Council; 1985.
- 124. LaingBuisson. *Laing's Healthcare Market Review 2003–2004*. Suffolk, England: William Clowes Ltd; 2003.
- 125. National Audit Office. *The NHS and Independent Hospitals*. London, England: HM Stationary Office; 1989.
- 126. Laing W. *UK Private Specialists' Fees Is the Price Right*? Norwich, England: Norwich Union Healthcare; 1992.
- 127. LaingBuisson. *Laing's Healthcare Market Review 2010-2011*. London, England: LaingBuisson; 2011.
- 128. Ramsay S. Some UK hospitals have very private successes. *Lancet*. 1995;346(8972):431.
- 129. Hunter DJ. *The Health Debate*. Bristol, England: University of Bristol, The Policy Press; 2008.
- 130. National Audit Office. *Managing NHS Hospital Consultants*. London, England: Department of Health; 2013. Report number: HC 885. SESSION 2012–13.
- 131. House of Commons. *Health Third Report*. London, England: Health Committee Publications; 2000.
- 132. Commission on the Future of Health and Social Care in England. *The UK Private Health Market*. London, England: The King's Fund; 2014.
- 133. Pollock A. Independent sector treatment centres: evidence so far. *BMJ*. 2008;336:421–424.
- 134. House of Commons Health Committee. *Independent Sector Treatment Centres. Fourth Report of Session 2005–06.* London, England: The Stationery Office Limited; 2006.

- 135. Dash P. New providers in UK healthcare. *BMJ*. 2004;328:340–342.
- 136. Ramsay Health Care Limited. Annual Report 2019. Sydney, Australia: Ramsay Health Care Limited; 2019.
- 137. Ramsay Health Care Limited. *Annual Report 2017*. Sydney, Australia: Ramsay Health Care Limited; 2017.
- 138. Ramsay Health Care Limited. *Annual Report 2015*. Sydney, Australia: Ramsay Health Care Limited; 2015.
- 139. Spire Healthcare. *Annual Report*. London, England: Spire Healthcare Group; 2014.
- 140. Spire Healthcare. *Annual Report*. London, England: Spire Healthcare Group; 2016.
- 141. Spire Healthcare. *Annual Report*. London, England: Spire Healthcare Group; 2018.
- 142. HM Government. *The Coalition: Our Programme for Government*. London, England: Cabinet Office; 2010.
- 143. Ham C, Baird B, Gregory S, Jabbal J, Alderwick H. *The NHS Under the Coalition Government. Part One: NHS Reform.* London, England: The King's Fund; 2015.
- 144. Lacobucci G. A third of NHS contracts awarded since health act have gone to private sector. BMJ investigation shows. *BMJ*. 2014;349:1–6.
- 145. Appleby J. Pay in the NHS: who earns what? *BMJ*. 2015;351:h6250.
- 146. British Medical Association (BMA). *Privatisation and Independent Sector Provision in the NHS*. London, England: BMA; 2018.
- 147. Anderson M, Cherla A, Wharton G, Mossialos E. Improving transparency and performance of private hospitals. *BMJ*. 2020;368:m577.
- 148. NHS. *The NHS Long Term Plan*. London, England: NHS; 2019.
- 149. EuroMOMO. Graphs and maps. Z-scores by country. https://www.euromomo.eu/graphs-and-maps#z-scores-by-country. Published 2020. Accessed July 17, 2020.
- 150. National Audit Office. *Review of Capital Expenditure in the NHS*. London, England: Department of Health & Social Care; 2020.
- 151. Blümel M, Busse R. *The German Health Care System. International Health Care System Profiles.* New York, NY: Commonwealth Fund; 2015.
- 152. Simon M. Krankenhauspolitik in Der Bundesrepublik Deutschland. Historische Entwicklung und Probleme der politisches Steuerung stationärer Krankenversorgung [German Hospital Politics. Historic Development and Policy Issues in Inpatient Hospital Care]. Wiesbaden, Germany: Westdeutscher Verlag; 2000.
- Gehrt M. Kosten und gegenwärtige Deckung [Costs and current coverage]. Deutschen Städtetages. 1962;1963:77–92.
- 154. Breyer FD, Paffrath D, Preuß W, Smidt R. Die Krankenhauskostenfunktion, Der Einflußvon Diagnosenspektrum und Bettenauslastung auf die Kosten im Krankenhaus [Hospital Cost-Functions, the Impact of the Case-Mix and Utility-Rates on Hospital Costs]. Bonn, Germany: AOK Verlag; 1987.
- 155. Gerdelmann W. Mobilisierung von Wirtschaflichkeitsreserven im Krankenhaus [Capitalization of hospital assets]. *Arbeit und Socialpolitik*. 1994;48:47–52.

156. Klinger KG. Kapitalmarktorientierte Finanzierungskonzepte für stationäre Gesundheitsunternehmen [Capitalmarket oriented funding for health care companies]. Berlin, Germany: Berliner Wissenschafts-Verlag; 2005.

- 157. Klenk T. Ownership change and the rise of a for-profit hospital industry in Germany. *Policy Studies*. 2011;32(3):263–275.
- 158. Karl PA. Varianten der Privatisierung kommunaler Allgemeinkrankenhäuser [Models of Privatization of Public General Acute Care Hospitals]. Lohmar, Germany: Josef Eul Verlag; 1999.
- 159. Imdahl H. Krankenhausprivatisierung: Auch unter DRG-Bedingungen ein Erfolgsmodell? In: Die Privatisierung von Krankenhäusern. Ethische Perspektiven. Wiesbaden, Germany: VS Verlag für Sozialwissenschaften; 2010:59–76.
- 160. Arbeitsgemeinschaft der Obersten Landesgesundheitsbehörden. KHG-Fördermittel(gesamt) [Law on Hospital Financing Subsidies (Total)]. Berlin, Germany: DKG; 2020.
- 161. Sinn HW. Germany's economic unification: an assessment after ten years. Rev Int Econ. 2002;10(1):113–128.
- 162. Strohe C, Ludwig Meyer-Wyk C, Köhler T. Chancen und Risiken der Privatisierung öffentlicher Krankenhäuser (I) [Chances and risks of public hospital conversions I]. Das Krankenhaus (the Hospital). 2003;11: 882–888.
- 163. Augurzky B, Krolop S, Gülker R, et al. *Krankenhaus Rating Report 2009. Im Auge des Orkans [Hospital Rating Report 2009. In the Eye of the Hurricane]*. Essen, Germany: RWI; 2009.
- 164. Grimshaw D, Jaehrling K, van der Meer M, Mehaut P, Shimron N. Convergent and divergent country trends in coordinated wage setting and collective bargaining in the public hospitals sector. *Ind Relat J.* 2007;38(6):591–613.
- 165. Böhlke N, Greer I, Schulten T. World champions in hospital privatisation: the effects of neoliberal reform on German employees and patients. In: Lister J, ed. Europe's Health for Sale: The Heavy Cost of Privatization. London, England: Libri; 2011:9–28.
- 166. TV Arzte. TV Arzte alle Arzt Tarifverträge 2020 auf einen Blick. https://www.praktischarzt.de/arzt/tv-aerztetarifvertraege/. Published 2019. Accessed February 18, 2020.
- 167. Tiemann O, Schreyögg J. Effects of ownership on hospital efficiency in Germany. *BUR-Business Research*. 2009;2(2):115–145.
- 168. Tarifvertrag für Arzte der Rhon-Klinikum AG (TV-Arzte RKA) [Collective agreement for Rhon-Klinikum's physicians]. https://www.marburger-bund.de/sites/default/files/tarifvertraege/2019-02/19-01\_TV%C3%84rzte% 20RKA\_i-d-F-AenderungsTV\_6\_0.pdf. Published 2018. Accessed March 13, 2020.
- 169. Entgelttarifvertrag (TV-Ärzte entgelt Helios) [Collective wage agreement]. https://www.marburger-bund.de/sites/default/files/tarifvertraege/2019-05/TV-%C3%84rzte%20Entgelt%20Helios%20i.d.F.%206.%20%C3%84nderungsTV.pdf. Published 2019. Accessed March 13, 2020.

- 170. Änderungstarifvertrag (TV-Ärzte Vereinigung der kommunalen Arbeitgeberverbände) [Modified collective wage agreements]. https://www.marburger-bund.de/sites/default/files/tarifvertraege/2019-10/%C3%84TV-7\_TV-%C3%84rzte-VKA\_final%20%282%29.pdf. Published 2019. Accessed March 13, 2020
- 171. Entgelttarifvertrag (TV-Ärzte Entgelt Asklepios) [Collective wage agreement]. https://www.marburgerbund.de/sites/default/files/tarifvertraege/2019-11/%C3%84nd.TV%20Nr.%208%20TV-%C3%84rzte%20Entgelt%20Asklepios.pdf. Published 2016. Accessed March 13, 2020
- 172. Hahn F, Polei G. *Investitionsstau und knappe Fördermittel* was geschieht, wenn the Länder nicht mehr zahlen?
  [Capital shortages what happens if the states don't pay anymore?]. Das Krankenhaus [the Hospital]. 2000;3:188–195.
- 173. Pilny A. Explaining differentials in subsidy levels among hospital ownership types in Germany. *Health Econ*. 2017;26(5):566–581.
- 174. Busse R, Geissler A, Quentin W, Wiley M. Diagnosis-Related Groups in Europe Moving Towards Transparency, Efficiency and Quality in Hospitals. Maidenhead, England: Open University Press; 2011.
- 175. Bandelow NC, Hartmann A, Hornung J. Winter is coming but not yet. German health policy under the third Merkel chancellorship. *Ger Polit*. 2019;28(3):444–461.
- 176. Busse R, Blümel M. *Germany: Health System Review*. Copenhagen, Denmark: WHO Regional Office for Europe: 2014.
- 177. Milstein R, Blankart CR. The Health Care Strengthening Act: the next level of integrated care in Germany. *Health Policy*. 2016;120(5):445–451.
- 178. Augurzky B, Beivers A, Pilny A. *Krankenhäuser in privater Trägerschaft [Private hospitals]*. Essen, Germany: RWI; 2018.
- 179. Augurzky B, Pilny A, Wübker A. Krankenhäuser in privater Trägerschaft [Private hospitals]. Essen, Germany: RWI; 2015.
- 180. Augurzky B, Beivers A, Gülker R. *Krankenhäuser in privater Trägerschaft [Private hospitals]*. Essen, Germany: RWI; 2012.
- 181. Kifmann M. Competition policy for health care provision in Germany. *Health Policy*. 2017;121(2):119–125.
- 182. Wagner DJ. Tarievenbeleid. Enkele aspecten ten aanzien van de intramurale gezondheidszorg [Renumeration policy. Some issues regarding hospital services]. In: *Baay JH, ed. In het kader van de gezondheidszorg*. Lochem, the Netherlands: De Tijdstroom; 1978.
- 183. van Straaten HC. Eigen vermogen in de gezondheidszorg. Vervangingswaarde, rente over eigen vermogen, verliesfinanciering [Equity in health care. Capital budgetting, interest on equity, and the financing of losses]. In: de Wolff LJ, ed. De prijs voor gezondheid, het Centraal Orgaan Ziekenhuistarieven 1965–1982 [The Price for Health, the Agency for Hospital Renumeration 1965–1982]. Baarn, the Netherlands: Ambo; 1984.

- 184. Sijmons JG. Aanbodregulering en de Wet toelating zorginstellingen [Supply-Regulations and the Regulations for Certificate-of-Need Procedures]. The Hague, the Netherlands: SDU; 2006.
- 185. Maarse H, Jeurissen P, Ruwaard D. Results of the market-oriented reform in the Netherlands: a review. *Health Econ Policy Law.* 2016;11(2):161–178.
- 186. Plomp E. Winst in de zorg. Juridische aspecten van winstuitkering door zorginstellingen [Profit in healthcare. Legal aspects of profit distribution by healthcare institutions]. Dissertation. The Hague, the Netherlands: SDU; 2011.
- 187. Berden B, Houwen L, Stevens S. Inleiding: financierings-modellen en privaat kapitaal [Introduction: financing models and private capital]. In: Financiering van zorginstellingen. Met speciale aandacht voor de medischspecialistische zorg [Financing of Health Care Organisation. With Special Attention to the Medical Care Sector]. Deventer, the Netherlands: Vakmedianet; 2015.
- 188. Klink A. *Positionering algemene ziekenhuizen* [Letter From the Minister of Health, Welfare and Sport to the House of Representative. Positioning General Hospitals]. The Hague, the Netherlands: Tweede Kamer der Staten-Generaal; 2008. Report number: 27 295, nr. 126.
- 189. Bruins BJ. Faillissement MC Slotervaart en MC IJsselmeerziekenhuizen [Letter From the Minister of Health, Welfare and Sport to the House of Representative. Bankruptcies MC Slotervaart and MC IJsselmeerziekenhuizen]. The Hague, the Netherlands: Ministerie van Volksgezondheid Welzijn en Sport; 2018. Report number: 1438779-183328-PZO.
- 190. van Manen J, Meurs P, van Twist M. De aangekondigde ondergang. Onderzoek naar de faillissementen van het MC Slotervaart en de MC IJsselmeerziekenhuizen [The Announced Downfall. Research on the Bankruptcies of MC Slotervaart and MC IJsselmeer Hospitals]. The Hague, the Netherlands: Commissie onderzoek faillissementen ziekenhuizen; 2020.
- 191. BDO. BDO-Benchmark ziekenhuizen 2018. Zorginfarct dreigt 'Sector vereist radicaal nieuw businessmodel' [A Health Care Infarct Is Looming. 'The Sector Requires a Radically New Business Model']. The Hague, the Netherlands: BDO; 2018.
- 192. Eerste Kamer der Staten-Generaal. Wijziging van de Wet toelating zorginstellingen en enkele andere wetten teneinde investeringsmogelijkheden in medisch-specialistische zorg te bevorderen (Wet vergroten investeringsmogelijkheden in medisch-specialistische zorg) [Law to Increase Opportunities for Investors in the Medical Care Sector]. The Hague, the Netherlands: Eerste Kamer der Staten-Generaal; 2014. Report number: 33 168, A.
- 193. Schippers EI. Wijziging van de Wet toelating zorginstellingen en enkele andere wetten om het mogelijk te maken dat aanbieders van medisch-specialistische zorg, mits zij aan een aantal voorwaarden voldoen, winst uitkeren (voorwaarden voor winstuitkering aanbieders medisch-specialistische zorg). Brief van de minister van Volksgezondheid, Welzijn en Sport. [Letter From the Minister of Health, Welfare

- and Sport to the House of Representative. Conditions to Allocate Profits for Medical Care Providers]. The Hague, the Netherlands: Tweede Kamer der Staten-Generaal; 2014. Report number: 33 168, nr. 15.
- 194. Visser J. Schippers haalt wetsvoorstel winstuitkering terug [Schippers withdraws the legislation to lift the forprofit ban]. https://www.medischcontact.nl/nieuws/laatste-nieuws/artikel/schippers-haalt-wetsvoorstel-win stuitkering-terug.htm. Published 2014. Accessed October 7, 2020.
- 195. de Jong HM, Bruins BJ, Blokhuis P. Wijziging van de Wet toelating zorginstellingen en enkele andere wetten teneinde investeringsmogelijkheden in medisch-specialistische zorg te bevorderen (Wet vergroten investeringsmogelijkheden in medisch-specialistische zorg) [Letter From the Ministers and State Secretary of the Ministry of Health, Welfare and Sport to the House of Representatives]. The Hague, the Netherlands: Eerste Kamer der Staten-Generaal; 2018:33168, J.
- 196. de Jong HM. Fraudebestrijding in de zorg [Letter From the Minister of Health, Welfare and Sport: Combating Fraud in Health Care]. The Hague, the Netherlands: Tweede Kamer der Staten-Generaal; 2019:8 828, nr. 115.
- 197. Bruins BJ. Wijziging van de Wet toelating zorginstellingen en enkele andere wetten teneinde investeringsmogelijkheden in medisch-specialistische zorg te bevorderen (Wet vergroten investeringsmogelijkheden in medisch-specialistische zorg) [Letter of the Minister of Medical Care and Sport]. The Hague, the Netherlands: Eerste Kamer der Staten-Generaal; 2019. Report number: 33 168, P Herdruk.
- 198. Gupta Strategists. Het 'Kjeld Nuis'-effect voor ziekenhuizen: Empirische studie naar hoe ziekenhuizen in 4jaar van 'niks, 'solvabiliteitsgoud' halen [Empirical Study on How Hospitals Transformed From Zero to Gold Within 4 Years]. Amsterdam, the Netherlands: Gupta Strategists; 2018.
- 199. Het Financieele Dagblad. Winsttrucs zijn overal in de zorg [Tricks to generate profits are everywhere in the health care sector]. Amsterdam, the Netherlands: Het Financieele Dagblad; 2017.
- 200. Schmid A, Ulrich V. Consolidation and concentration in the German hospital market: the two sides of the coin. *Health Policy*. 2013;109(3):301–310.
- 201. Appelbaum E, Batt R. *Private Equity Buyouts in Healthcare: Who Wins, Who Loses?* New York, NY: Institute for New Economic Thinking; 2020.

## **Author Biographies**

Patrick P. T. Jeurissen is a professor of Sustainable Healthcare Systems at the Radboud University Medical Centre in Nijmegen (The Netherlands). He also works as a scientific advisor for the Dutch Ministry of Health, Welfare and Sport. He is also currently part of the steering committee of the health division of the OECD. He studied Public Administration at the Erasmus University Rotterdam and at Indiana University. In 2017, he obtained his PhD from

Erasmus University. Prior to his appointment at the Ministry of Health, Welfare and Sport, he worked for The Council of Public Health & Society (Raad voor Volksgezondheid en Zorg) and the Erasmus Medical Centre.

Florien M. Kruse holds a Master of Public Policy (MPP) degree from the Hertie School of Governance in Berlin. She is currently a PhD candidate at the Radboud University Medical Centre in Nijmegen, in the Netherlands. Her PhD project focuses on the added value and ethical considerations of business-oriented health care providers. Previously she has worked as a trainee at the European Foundation in Dublin, and as intern for the Pan American Health Organisation in Paramaribo (Surinam) and the Max Planck Institute for Demographic Research in Rostock (Germany).

Reinhard Busse is a distinguished professor and the Department Head for Healthcare Management in the Faculty of Economics and Management at Technische Universität Berlin, Germany. He is also Co-Director and Head of the Berlin hub of the European Observatory on Health Systems and Policies and he is Editor-in-Chief of the international peer-reviewed journal Health Policy. Reinhard Busse studied medicine Professor Marburg, Boston and London as well as Public Health in Hannover. Prior to his position at the TU Berlin in 2002, he was head of the Observatory hub in Madrid, a senior research fellow in the Department of Epidemiology, Social Medicine and Health Systems Research, a resident physician in the Department of Rheumatology, both at Hannover Medical School, and a researcher in the Planning Group for a Problem-based Medical Curriculum at the Free University of Berlin. In 1993, he earned a PhD in Medicine from Philipps University in Marburg.

**David U. Himmelstein** is a distinguished professor of public health at the City University of New York's Hunter College, a lecturer in medicine at Harvard

Medical School, and a staff physician at Montefiore Medical Center in the Bronx. He graduated from Columbia University's College of Physicians and Surgeons and completed an internal medicine residency at Highland Hospital in Oakland, California, and a fellowship in general internal medicine at Harvard. He practiced primary care internal medicine and served as the chief of social and community medicine at Cambridge Hospital/Harvard Medical School. He cofounded Physicians for a National Health Program, whose 23,000 members advocate for nonprofit, single-payer national health insurance.

Elias Mossialos is Brian Abel-Smith Professor of Health Policy, Deputy Head of Department of Health Policy and Director of LSE Health. He founded LSE Health in 1996. He is also the Co-Director of the European Observatory on Health Systems and Policies. He has served as an advisor to several agencies including WHO, the European Parliament, the European Commission, and Ministries of Health and Social Affairs of various countries. In 2010, he was awarded the Andrija Stampar Medal by the Association of Schools of Public Health in Europe (ASPHER), for contributions to European public health. He received the 2002 and 2007 Baxter Awards from the European Health Management Association for the best publication in health policy and management in Europe and a Commended Prize in the 2002 BMA Medical Book Competition.

Steffie Woolhandler is a distinguished professor at the City University of New York's Hunter College, a primary care doctor in the South Bronx, and a lecturer in medicine at Harvard Medical School, where she was formerly a professor of medicine. A native of Louisiana, she graduated from Louisiana State University Medical School in New Orleans and completed an internal medicine residency at Cambridge Hospital and a research fellowship in general internal medicine at Harvard. She cofounded Physicians for a National Health Program.