



**Department of Business and Management**

**Chair of Legal Issues in Marketing**

**Is Big Better, or Is Better Better? Analyzing the Impact of Private Equity  
in Healthcare through the lens of Law and Economics**

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*To my family*

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**Abstract.** “Robbers rob banks because, as the saying goes, that is where the money is”. For the same reason, private equity (PE) investments have surged in the health care industry which, at more than \$4 trillion in annual spending represents nearly a fifth of the U.S. economy. Likewise, as of the latest data, healthcare accounts for approximately one eighth of the European Union’s GDP, which translates to about 11-12% of total economic output across member states. In light of this, since the mid-2010s, various high profile consulting firms (e.g. Bain, Deloitte, McKinsey, PwC, etc.) have been advertising the growing interest in the health care sector of private equity investors. In fact, private equity investments in healthcare have increased significantly over the past decade, reflecting the sector's attractiveness due to its stable demand and high growth potential. In 2021 alone, in the US, PE investments in healthcare reached \$200 billion (equivalent to about 1.8% of health expenditures in high income countries), marking a substantial increase compared to prior years. On the other side of the pond, according to a report published by Bain & Company, PE investments within the European Union seem to plateau at €14 billion, after the peak was reached in 2022 at €25 Billion. Overall, it is estimated that PE firms have invested over \$1trillion (aggregate value of the companies) in health care in the past decade. At large, this influx of capital has brought modernization and financial stability to various healthcare providers, including hospitals, nursing homes, and specialty practices. However, alongside these benefits, PE investments have sparked a contentious debate about their broader implications. Critics argue that the profit-maximization strategies employed by PE firms often come at the expense of patient care, leading to reduced quality of services, staff layoffs, increased prices, and diminished patient choice. Hence, it could be stressed that these kind of strategies implemented by PE firms could have deleterious effect not only on patients (i.e. consumer welfare) but on the overall competition equilibrium. More specifically, PE firms typically acquire a good size asset (e.g. an hospital) that becomes their initial platform and then progressively add capacity through mergers or acquisitions of ancillary facilities catering to various specialities, such as dentistry or dermatology, making it easier to clear common competition policy filters. As a matter of evidence, private equity strategies have the potential to foster monopolistic behavior. With hindsight, notwithstanding the negative sides of this *querelle*, a critical question remains: do the perceived benefits of these strategies outweigh the associated costs? To mitigate the negative consequences of PE acquisitions, competition laws are designed to curb their effects. Yet, in practice, antitrust policies often appear self-contradictory, reflecting deeper uncertainties about their ultimate objectives. In light of this, there is no better way to introduce this thesis than with the following quote from Robert Bork’s seminal work, *The Antitrust Paradox*:

*"Antitrust policy cannot be made rational until we are able to give a firm answer to one question: What is the point of law, what are its goals? Everything follows from the answer we give."* (Bork, 1978, p. 50)

This statement underscores the instrumental nature of antitrust law (i.e. competition is not an end in itself but rather a means to achieve broader economic objectives) and highlights the difficult position regulators have to deal with when it comes to give answers. However, it is worth to stress that the lack of clear guidance by policy-makers could lead firms astray and make consumers worse off. Within the context of private equity involvement in the healthcare industry, this void is even more bold. In more specific terms, a merger between healthcare providers could streamline operations or provide economic resources for cutting-edge technologies but, at the same time, could lead to reduced access for patients in specific geographical areas, thereby forcing them to either change provider or bearing extra costs for

reaching another one. In light of this, it is blatant that what could be beneficial to some extent, could also prove to be detrimental. Thus, which is the point of law? Should it be focused on the efficiency-related improvements stemming from the large influx of capital or, rather, embark on a people-centered approach, preserving the consumer welfare no matter what? As my research will highlight, the answer lies in the middle.

Through a qualitative meta-analysis, this thesis will examine an extensive array of empirical and narrative findings concerning PE investments within the US and EU healthcare system to determine whether they genuinely exacerbate consumer welfare, thus shedding light on the dominant belief regarding this topic across the years. In doing so, it aims to identify a guiding, single principle that should shape competition law within the European and American health care industry. The thesis will conclude with policy recommendations to inform and support future decision-making by regulators and lawmakers.

## 1. Introduction

Policymakers and advocacy groups are ever more uneasy about the dramatic surge of private equity investments across various sectors, with healthcare emerging as a particular area of concern. As Nobel Prize winning economist Joseph Stiglitz put it, private equity funds' goal is to "take advantage of others through market power, through individual vulnerabilities, and through inside or unequal information."<sup>1</sup> These apprehensions began to surface around twenty years ago when PE firms started acquiring and flipping hospitals as well as skilled nursing facilities. As these firms have expanded into physician practices, the concerns have grown more urgent, particularly regarding PE's potential to negatively influence the quality and accessibility of patient care, clinical autonomy, and overall healthcare costs.

It is imperative to stress that private equity stands apart from other forms of healthcare investment in three significant ways. First, PE investors are typically non-clinical individuals or entities, lacking the ethical commitments and institutional responsibilities traditionally tied to the medical profession. Second, PE acquisitions are often structured through high levels of debt, commonly via leveraged buyouts (LBOs), where the assets of the target company are used as collateral for much of the purchase price. Third, private equity firms operate on shorter timelines than traditional corporate or venture capital investors, often aiming to significantly boost profitability and exit within a few years.

This emphasis on short-term financial gains frequently leads to practices that do not enhance patient outcomes. Rather than improving care, PE strategies often involve aggressive cost-cutting (especially through staff reductions), consolidating market power, exploiting billing inefficiencies, and extracting value through the so-called 'asset stripping'<sup>2</sup>. In doing so, PE firms tend to treat healthcare entities as tools for wealth generation, elevating investor returns above patient welfare and contributing to the broader trend of healthcare financialization.

Moreover, PE firms often take advantage of systemic weaknesses in the healthcare market, sparking widespread policy debate. For instance, a particularly troubling trend is the spike in healthcare bankruptcies tied to PE-backed entities over the past two years, which represents a

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<sup>1</sup> Joseph Stiglitz. 2019. "It's Time for Congress to Do Something about the Economic Mess That Private-Equity Giants Have Created," *Business Insider*. December 7.  
<https://www.businessinsider.com/joseph-stiglitz-private-equity-impact-us-economy-jobs-wages-2019-12>

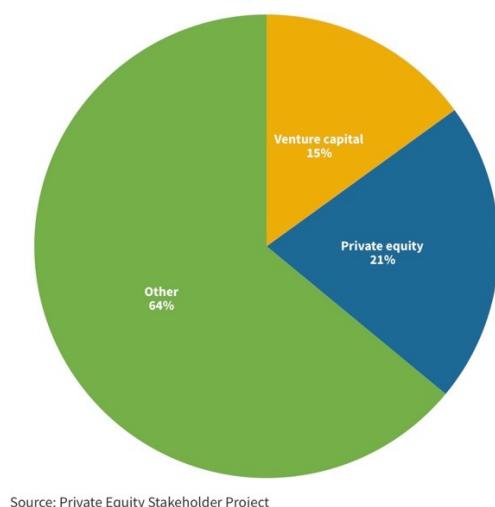
<sup>2</sup> "Asset stripping", in private equity, refers to a controversial strategy where a private equity firm buys a company, often struggling or undervalued, and then sells off its individual assets to generate profits. The goal is to extract value from the company by selling its assets separately at a higher price than if the company were sold as a whole.

risk projected to continue into 2025. While the COVID-19 pandemic put pressure on the entire healthcare system, heavily leveraged providers have proven especially vulnerable to financial collapse. As demonstrated in *Exhibit 1*, bankruptcies among PE-owned healthcare firms rose sharply in 2023.

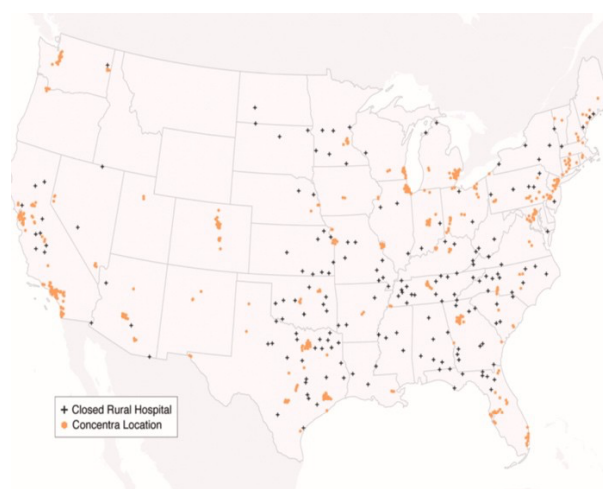
Noticeably, these financial failures can have direct consequences for care availability, especially if facilities are forced to shut down. The issue is particularly critical in rural regions (see *Exhibit 2*), where hospitals often serve as the sole provider in their communities. The closure of such institutions would eliminate essential health infrastructure, leaving residents with few or no alternatives for care. As such, the dual threat of bankruptcies and facility closures raises serious policy questions about equitable access to healthcare—especially in underserved and geographically isolated areas.

Hence, public policy analysts can use PE firms' investment activities as a sentinel to identify dysfunctional markets that are being mined for profit. As stated above, after initially targeting institutional entities such as hospitals and nursing homes about a decade ago, PE investors began to move into hospital-based physician-specialty markets such as emergency medicine and anesthesiology.

**Owner Type Breakdown**  
2023 healthcare bankruptcies



*Exhibit 1*



*Exhibit 2*

PE investors found they could capitalize on the potential of certain medical to significantly boost revenues through surprise out-of-network billing tactics.<sup>3</sup> More recently, their focus has expanded beyond hospital-based specialties that rely on such billing practices to include procedural fields such as gastroenterology, dermatology, ophthalmology, and orthopaedics, all of which represent areas that generate substantial income through high-margin in-office

<sup>3</sup> For an in-depth description of surprise medical billing and the consequential role of private equity investment, see Zach Cooper, Fiona Scott Morton & Nathan Shekita, *Surprise! Out-of-Network Billing for Emergency Care in the United States*.

procedures and ancillary services.<sup>4</sup> On top of that, PE firms have also begun acquiring primary care practices, where they can leverage risk-based and value-adjusted Medicare reimbursement models by aggressively coding <sup>5</sup> patient diagnoses to maximize payouts.<sup>6</sup> Furthermore, there is growing documentation of PE's increasing interest in sectors such as hospice care and behavioral health.<sup>7</sup> Although the specific strategies used to generate returns vary by healthcare niche, every playbook taps into one or more of a core set of public policy red flags: consolidation and attendant price increases; overutilization,<sup>8</sup> improper billing,<sup>9</sup> and upcoding; the shirking of unprofitable services or patients; interference with physicians' clinical decisions and independence; and compromised quality of patient care. The human consequences of these trends are severe, ranging from inflated medical expenses and aggressive debt collection tactics, to physicians experiencing ethical strain and burnout as they are pushed to prioritize financial outcomes over clinical judgment as well as—in more severe instances, a measurable decline in the quality of care patients receive. Notably, these patterns of PE activity in the healthcare industry directly relate to one of the most frequently examined topics in our 'Legal Issues' lectures: the monopoly model and its structural implications within a given market. As PE-backed firms consolidate practices and services, they reduce competition and gain leverage over pricing, contracting, and service delivery. As a result, this consolidation often leads to higher costs for patients, reduced provider choice, and restricted access to care, particularly in areas where alternative options are scarce or have been acquired. The consequential decline in consumer welfare is substantial (i.e. patients bear the burden of inflated medical bills, narrower networks, and care models that prioritize profitability over need). In this environment, healthcare shifts from a public good toward a commercial commodity, with patient outcomes and satisfaction subordinated to investor-driven strategies aimed at maximizing short-term returns. Hence, these monopolistic tendencies not only undermine market fairness but also pose serious challenges to health equity and systemic efficiency.

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<sup>4</sup> Erin Fuse Brown Et Al., Usc-Brookings Schaeffer Initiative For Health Pol'y, Private Equity Investment As a Dividing Rod For Market Failure: Policy Responses To Harmful Physician Practice Acquis 12-14 (2021).

<sup>5</sup> Upcoding” is a form of improper billing, where providers code higher levels of patient acuity than is justified or higher levels of service than were provided. It includes aggressively coding patient diagnoses or comorbidities to make an insured appear sicker to increase risk-adjusted payments from Medicare and other payers. It is also a form of fraud and abuse. See Michael Geruso & Timothy Layton, Upcoding: Evidence from Medicare on Squishy Risk Adjustment, 128 J. POL. ECON. 984, 985, 1021-24 (2020).

<sup>6</sup> *Ibid.*

<sup>7</sup> See, e.g., Joan M. Teno, Hospice Acquisitions by Profit-Driven Private Equity Firms, JAMA HEALTH F. e213745, at 1-2 (2021), <https://perma.cc/U2LX-28CC> (highlighting the potential repercussions of the recent influx of PE into hospice); Markian Hawryluk, Hospices Have Become Big Business for Private Equity Firms, Raising Concerns About End-of-Life Care, KFF HEALTH NEWS (July 29, 2022), <https://perma.cc/VD45-TQZW> (identifying and addressing the hindrances that PE has placed on hospice patients and the Medicare program).

<sup>8</sup> “Overutilization,” or overuse, encompasses excess volume or intensity of health care and inappropriate health care. It is considered to be a major contributor to high and rising health care costs in the United States. See Ezekiel J. Emanuel & Victor R. Fuchs, The Perfect Storm of Overutilization, 299 JAMA 2789, 2789-90 (2008).

<sup>9</sup> “Improper billing” is the act of billing a payer, such as Medicare or an insurer, for services not provided or more than is justified by the services provided. Improper billing is a form of health care fraud and abuse. See Paul E. Kalb, Health Care Fraud and Abuse, 282 JAMA 1163, 1165 (1999); CTRS. FOR MEDICARE & MEDICAID SERVS., U.S. DEP'T OF HEALTH & HUM. SERVS., NO. MLN4649244, MEDICARE FRAUD & ABUSE: PREVENT, DETECT, REPORT 11-13 (2021), <https://perma.cc/NPE9-ANEV>.



On the opposite end of the debate lies a lesser-acknowledged reality: many private equity investments in health care prove to be successful. The portrayal of PE and venture capital (VC) firms as predatory entities, which are often likened to vampires guarding the blood bank, has gained traction in public discourse. However, it's essential to adopt a more balanced and evidence-based perspective before recommending policy reforms. Indeed, in instances where profit-driven motives have led to patient harm—whether through medical errors, layoffs triggered by cost-reduction strategies, or non-payment to vendors—PE's role appears ethically problematic. Yet, in cases where PE provides much-needed capital to enhance care delivery or support innovation in medical products and services, the narrative becomes far more nuanced. In retrospect, these investments can yield net-positive results when they fund promising treatments, enable growth for emerging health care enterprises, or drive consolidation to create economies of scale, thus potentially allowing clinicians to devote more attention to patient care. Hence, the current focus on PE's connection with negative health care outcomes may risk overshadowing the beneficial impacts these firms can have, though it must be noted that robust empirical evidence supporting such benefits remains limited. Ultimately, the key issue is whether the documented clinical and financial downsides outweigh the potential or realized advantages of PE involvement in health care. Most recent studies and commentaries emphasize the troubling effects on patient health and financial burdens, while offering fewer insights into possible reforms that could safeguard both patient welfare and clinician well-being in the context of growing PE influence. Unsurprisingly, the PE sector has responded defensively, pointing to examples where their investments have stabilized at-risk health care facilities. However, their position is often undermined by the lack of rigorous, systematic data validating such claims—for instance, newer findings suggest that PE firms have tended to acquire more financially stable hospitals rather than those in distress.

This dynamic frequently results in polarized debates marked more by speculation than by data-driven inquiry, hampering collaborative efforts between academic and industry stakeholders to address and mitigate the harms associated with PE activity. Encouragingly, in the past five years, the body of literature employing advanced statistical methodologies to evaluate PE's role in health care has expanded considerably, with a significant number of studies published just within the last year. That said, these analyses often narrow their scope to specific segments, such as hospitals, specialty clinics, nursing homes, or hospice services and largely rely on data from public insurance programs like Medicare within the US, which capture only a subset of the total patient population.

What remains notably absent is a comprehensive body of research examining the wider implications of private equity ownership on the quality of care, operational efficiency of healthcare providers, and accessibility of services, which will be defined as the main healthcare goals in the following sections. In this light, a more thorough and integrated perspective is essential, that is one that captures the full spectrum of care delivery. Moreover, as LSE professor Per Strömberg points out in the vast majority of his papers, while a growing number of studies have explored PE's impact, the majority of this literature remains heavily focused on the U.S. context, leaving a critical gap in comparative research that examines how PE involvement unfolds across different regulatory and healthcare systems, particularly in the European Union. This thesis aims to address these gaps by adopting a holistic lens, conducting a meta-analysis of the most relevant academic and policy literature published in recent years to illuminate prevailing perceptions of PE's role in the healthcare sector. Specifically, three recurring themes (i.e. accessibility, equity in access, and efficiency) will serve as the core benchmarks for this study, providing a structured framework to assess whether PE involvement is diminishing patient welfare or encouraging monopolistic tendencies within the industry.

## 2. Methodology

As mentioned above, this research will rely on a systematic review of peer-reviewed and grey literature to examine the impact of private equity investments within the healthcare market and whether PE involvement enhances the delivery of healthcare services or leads to deleterious effects for both the patient and the market equilibrium, triggering monopolistic tendencies.

This section outlines the methodology employed to address the central research question: *“Does the growing scale of private equity in healthcare lead to better care, or merely bigger, more monopolistic systems?”* The study begins with the development of a theoretical framework through an extensive literature review, which lays the groundwork for the qualitative meta-analysis method used. This review critically examines the potential advantages and disadvantages of private equity involvement in the healthcare sector, allowing us to better understand which are the possible effects of PE involvement in this industry in greater detail. Building on this foundation, the second stage analyzes both empirical studies and narrative accounts, leading to the formulation of informed policy recommendations. Most importantly, each study’s conclusion will be further subdivided into three categories (i.e. (i) authors who favor PE involvement in the healthcare sector; (ii) authors who highlighted mixed conclusions; (iii) authors who stand against PE involvement). By doing so, I attempt to find the dominant belief about PE involvement in the healthcare industry thus offering a comprehensive lens through which I can assess the presence of this typology of investments within this specific sector. Finally, the discussion of empirical insights aims to offer a well-rounded and nuanced response to the main research question.

### 2.1. Theoretical framework

To better understand the upsides and downsides PE brings with its investments in the healthcare industry, a theoretical understanding based on a theoretical literature review is first required.

Through this framework, the theory of the research problem can thus be explored and understood. I consider this approach essential as it lays the foundation of the empirical literature review towards addressing the primary research question therefore achieving what this thesis’ objectives are.

To establish the theoretical foundation of this thesis, I begin by examining the functioning of the healthcare market in both the U.S. and the EU, thereby clarifying how private equity investments operate and the financial mechanisms they involve. Subsequently, given that this thesis seeks to assess whether the behavior of PE firms may resemble monopolistic practices with potentially harmful consequences for the broader public, I will analyze how monopolies function and their impact on consumer welfare, specifically within the healthcare sector. In this context, I will outline a set of shared objectives that healthcare providers are expected to uphold; failure to do so may indicate monopolistic tendencies, ultimately undermining consumer welfare—referred to hereafter as ‘patient welfare.’ Ultimately, as I will often refer to the concept of ‘efficiency’ throughout this thesis—being it one of the aforementioned

healthcare objectives, it is imperative to further examine its multiple and conflicting declinations within the context of competition policy.

## 2.2. Literature review

Understanding whether PE benefits patients or not, and to further comprehend whether private equity investments lay the foundation for monopolistic behaviors, a systematic review of the empirical literature will be conducted following the *PRISMA* statement<sup>10</sup> to answer the primary research question. In doing so, I will identify records through databases and other sources searching. Secondly, I will use a benchmark I found during a preliminary research (Christodoulou, T. (2021). *What are the pros and cons of Private Equity in healthcare?*. Erasmus School of Economics, Erasmus University Rotterdam.) to exclude papers that are not relevant to this thesis' topic.

According to the above-mentioned benchmark, inclusion criteria are (1) articles published after 2005, (2) written in English and (3) referred to either U.S. or EU. With regards to the first criterion, from the literature's preliminary search I conducted before coming up with a research project, I found that PE involvement in healthcare flourished as of 2005-2006, as most scholars began exploring this topic. Moreover, given the comparative nature of this thesis, the third criterion was selected to narrow the scope to a more defined geographical focus. This decision is further supported by the notable lack of research on private equity investments within the European Union, highlighting the need for a more regionally balanced analysis. On the other hand, exclusion criteria are the following: (1) studies that do not focus their attention on either EU or the U.S., (2) studies that do not examine PE investments in healthcare from healthcare goals and (3) studies written in languages other than English. With regard to the second criterion, priority was given to studies whose primary focus aligns with key healthcare objectives, as these will serve as benchmarks to assess whether this form of investment fosters monopolistic behavior.

The literature search will be conducted through searching in three relevant databases: PubMed, ScienceDirect, Google Scholar. Further search will be done to EU's databases for other relevant articles.

## 3. Theoretical Framework

The following section will outline the theoretical foundations underlying private equity investments in the healthcare sector, examining both the potential advantages and challenges associated with such involvement from an economic standpoint. This conceptual framework will be developed by (i) outlining the fundamental economic features of the healthcare market within the US and the EU, (ii) scrutinizing the role of the insurance sector particularly within the US as opposed to the European context (iii) exploring the nature and extent of PE participation in the industry, (iv) explaining the operational mechanisms of PE, (v) identifying the possible benefits and risks of PE investments in healthcare, (vi) establishing the core

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<sup>10</sup> PRISMA (Preferred Reporting Items for Systematic Reviews and Meta-Analyses) is a set of guidelines for reporting systematic reviews and meta-analyses. It provides a checklist and flow diagram to ensure transparent and complete reporting of the review process.

objectives that public healthcare systems strive to achieve, (vii) integrating the theoretical concepts regarding the monopoly model to assess how PE's presence may influence competition and patient outcomes and (viii) underscoring the conflict between different forms of 'efficiencies' in relation with the healthcare market.

### 3.1. The healthcare market

The healthcare sector encompasses a broad range of industries and services dedicated to maintaining and improving health. It includes medical providers such as hospitals, clinics, and physicians, as well as pharmaceutical companies, medical device manufacturers, health insurance providers, and public health organizations.<sup>11</sup> Thus, given its importance, the healthcare sector plays a pivotal role in each country's economy. To better explain, according to some estimates, the United States' national health expenditures reached approximately \$4.9 trillion throughout 2023, marking a 7.5% increase from the previous year and accounting for roughly 18% of the U.S. Gross Domestic Product (GDP).<sup>12</sup> Likewise, also the European Union total healthcare expenditure accounted for a large part of its GDP. More specifically, the total healthcare expenditure was €1,648 billion in 2023, representing 10.4% of its gross domestic product.<sup>13</sup>

Keeping in mind that the functioning of this sector has tremendous implications for the well-being of the population, many economic researchers have tried to define its industrial organization (IO). As Roger Van Den Bergh pointed out, "Industrial organisation (also termed 'industrial economics' in European countries) is a discipline (...) devoted to the application of explanations and predictions concerning economic results in real-life markets". In other terms, it is a field of microeconomics that focuses on individual, imperfectly competitive markets and seeks to understand the behavior of the firms that compose them and the resulting performance of those markets. The IO study examines operational factors that influence a firm's overall strategy and product positioning. It explores various aspects, including market power, product differentiation, and industrial policy, all of which impact a firm's operations. Noticeably, a seminal work by D. Dranove and M. Satterthwaite on IO in healthcare highlights the uniqueness of this specific market, therefore allowing us to have a better grasp on the singularity embedded in the healthcare industry.<sup>14</sup> In more specific terms, their research examines the market structure, competition, pricing, and quality of care, particularly in relation to asymmetric information, regulation, and provider incentives. According to their view, "Healthcare markets fail to satisfy the substantial list of requirements that must be met to be classified as perfectly competitive: large number of consumers and firms, free entry and exit, marketability of all goods and services including risk, symmetric information with zero search costs, and no increasing returns, externalities, or collusion". More specifically, they posit that

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<sup>11</sup> For the definition of the healthcare industry, see Investopedia. (n.d.). *Healthcare sector* from [https://www.investopedia.com/terms/h/health\\_care\\_sector.asp](https://www.investopedia.com/terms/h/health_care_sector.asp).

<sup>12</sup> Health Systems Facts. (2024, December 18). *U.S. healthcare spending hits \$4.9 trillion* from <https://healthsystemsfacts.org/2024/12/18/us-healthcare-spending-hits-4-9-trillion/>.

<sup>13</sup> Eurostat. (2023). *Healthcare expenditure statistics by function, provider, and financing scheme* from [https://ec.europa.eu/eurostat/statistics-explained/index.php/Healthcare\\_expenditure\\_statistics\\_by\\_function%2C\\_provider\\_and\\_financing\\_scheme](https://ec.europa.eu/eurostat/statistics-explained/index.php/Healthcare_expenditure_statistics_by_function%2C_provider_and_financing_scheme)

<sup>14</sup> Dranove, D., & Satterthwaite, M. A. (1992). *Monopolistic competition when price and quality are imperfectly observable*. The RAND Journal of Economics, 23(4), 518–534. <https://doi.org/10.2307/2555908>.

the most defining characteristics that set the healthcare market apart are (1) the lack of symmetric information, (2) the presence of substantial search costs, and (3) the limited marketability of risk.

To begin with, asymmetric information occurs when one party in a transaction has more or better information than the counterpart. In the context of healthcare industry, the latter phenomenon takes places when the patients, who does not possess the knowledge and ability to choose the best suitable treatment, confront with an healthcare provider who, by contrast, has this special medical knowledge. As a result, the patient depends on his healthcare provider's choice of treatment. In second place, according to the authors' viewpoint, what asymmetric information could potentially entail is what economists call the 'agency problem'. Simply put, the agency problem in healthcare arises when a principal (patient or insurer) relies on an agent (doctor, hospital, or healthcare provider) to act in their best interest, but the agent has incentives that may not align with the principal's well-being. For instance, the scholars examine four scenarios where this conflict is likely to be raised. First, in the doctor-patient relationship, physicians may engage in physician-induced demand, recommending unnecessary treatments due to financial incentives, as patients often lack the medical expertise to challenge their decisions. Similarly, another scenario that the authors define as 'the insurers' moral hazard, occurs when insured patients overconsume healthcare services because they do not bear the full cost, while providers may take advantage by offering excessive treatments, knowing insurers will cover them. Furthermore, another instance is the hospital-insurer conflict, where hospitals seek to maximize revenue through higher charges, while insurers aim to minimize costs, resulting in pricing disputes and inefficiencies. Lastly, in managed care and gatekeeping, like in the case of PE-owned facilities, insurers restrict access to specialists and expensive treatments to control expenses, sometimes leading doctors to under-treat patients due to cost containment pressures.

According to Dranove and Satterthwaite, substantial search costs exist in healthcare because patients face significant difficulties in finding and evaluating medical providers and treatment options. Unlike typical markets where consumers can easily compare prices and quality, healthcare presents unique challenges. At large, the presence of substantial search costs is a mere consequence of information asymmetry which leads the patient to not possess the necessary medical knowledge to assess a provider's competence and effectiveness of treatments. Additionally, healthcare quality is difficult to measure, as outcomes can vary based on individual conditions, making it hard for patients to compare providers based on objective criteria. The lack of price transparency further exacerbates search costs since medical services are often billed through complex insurance structures, making direct price comparisons nearly impossible

Lastly, the problem of inadequate risk management lays the foundation for another market failure called "the marketability of risk". According to Dranove and Satterthwaite, the marketability of risk in healthcare refers to the ability to transfer financial risks through insurance, but this process is hindered by adverse selection and moral hazard. In a nutshell, insurers struggle to price risk accurately, as healthier individuals may opt out of coverage while sicker individuals enroll, driving up costs. Additionally, insured patients may overconsume healthcare services since they do not bear the full cost. These inefficiencies limit the effective transfer of risk, often requiring government intervention through mandatory insurance, risk-adjusted payments, or public health programs to ensure broader access and market stability.

Having identified the above-mentioned economic frameworks within healthcare providers operate in, Dranove and Satterthwaite empirically study the evolution of IO of the healthcare market. Accordingly, they posit that this evolution has been shaped by the occurrence of three regimes which take place across different timelines.

The first regime marked the early stages of the healthcare system, where independent physicians provided medical services, and hospitals were expanding. Reimbursement followed a cost-based model, meaning hospitals were compensated according to their expenses. While this approach supported the growth of medical institutions, it created weak incentives for cost control, leading to rising expenditures.

Therefore, the second regime introduced government intervention to regulate prices and manage costs. With the establishment of the Prospective Payment System (PPS), hospitals were reimbursed based on a fixed fee per admission, determined by Diagnosis-Related Groups (DRGs). This reform aimed to contain costs by setting predetermined payments based on a patient's condition, discouraging unnecessary treatments.

Lastly, the third regime saw the rise of managed care and negotiated contracts between insurers and healthcare providers. Instead of standardized fees, prices became subject to negotiation, allowing insurers to offer patients tailored plans based on cost and quality preferences. Over time, this system attracted private investment, as it created a stable financial environment where reimbursement rates were predetermined, reducing uncertainty for investors. As a result, private equity firms began entering the healthcare sector, acquiring hospitals and medical practices to improve operational efficiency and enhance quality, which in turn allowed them to secure more favorable reimbursement rates. Hammering home the point, the bottom line is that the involvement of the private sector helped address funding gaps that arose due to financial constraints in public healthcare financing. Private capital flowed into the system through physician-led practices, hospital groups, and PE-backed acquisitions, ensuring liquidity where government funding or traditional bank loans were insufficient. This shift toward private investment has reshaped the healthcare landscape, creating new models of financial sustainability while raising debates about cost, access, and quality of care.

Interestingly, Gaynor et al. (2015) expanded on the third regime identified in Dranove's research, which now serves as the foundation for healthcare systems in the vast majority of Western economies.<sup>15</sup> Their work introduces a multistage model that examines interactions between firms and how these dynamics influence key variables affecting welfare, such as provider quality, pricing, treatment decisions, and insurance premiums. The model consists of four stages, each addressing a critical aspect of the healthcare market.

In the first stage, providers (i.e. hospitals and physicians) invest in improving the quality of care they offer. These investments are shaped by demand-side factors, including the availability of information for consumers and the level of choice patients have when selecting healthcare providers. The second stage involves negotiations between providers and insurers, where insurers determine their provider networks and negotiate reimbursement rates. These negotiations significantly impact healthcare costs and consumer welfare. In the third stage, insurers set premium prices, considering both their market positioning and the competitive landscape. Finally, in the fourth stage, consumers evaluate insurers' networks and select coverage, basing their decisions on factors like provider quality and treatment options. Their model is applied to the US health system, though it applies to other countries whose health policy allows patients to choose their insurers freely. Patients ultimately access healthcare services either within their insurer's network or out-of-network through out-of-pocket payments.

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<sup>15</sup> Gaynor, M., Ho, K., & Town, R. J. (2015). *The industrial organization of health-care markets*. Journal of Economic Literature, 53(2), 235–284. <https://doi.org/10.1257/jel.53.2.235>.

Each stage in this model reflects how key stakeholders interact and how these interactions shape healthcare quality and accessibility. Providers invest in higher-quality services to achieve better outcomes, which they leverage in negotiations with insurers. Insurers, in turn, aim to contract with providers offering the best balance of cost and quality, using these agreements to justify higher premiums. Patients then select insurers based on the quality and affordability of care they provide. However, Gaynor et al. (2015) argue that competition in healthcare does not follow traditional economic theory. Since prices are largely regulated by governments to keep healthcare affordable, competition occurs primarily in the realm of quality rather than price. Providers aim to deliver superior care at the lowest possible cost to attract insurers, who prioritize high-quality providers to offer better coverage options. Quality improvements that enhance patient outcomes, particularly survival rates, are seen as valuable and often justify the associated costs.

Hence, after analyzing both the economic scale and the industrial organization of the healthcare sector, it is evident that healthcare operates as a distinct and complex market, unlike more traditional competitive industries. First and foremost, it is composed of several interrelated subsectors. As mentioned earlier in this section, the provision of healthcare services stands as the central subsector, while the production and distribution of pharmaceuticals and biotechnological goods represent another vital component. Secondly, healthcare has a universal impact—it affects virtually everyone in society, including those who may never directly utilize its services. Moreover, a robust healthcare system is regarded as a fundamental pillar of societal well-being and is closely tied to a nation's economic development. As a matter of fact, this centrality explains the need for stringent regulation aimed at reducing disparities in access across different segments of the population. Thirdly, the healthcare market involves a diverse array of stakeholders, whose interests often diverge significantly (Dia Hassan, 2005). In first place, the most prominent stakeholder and end user is the patient, who expects effective treatment for a particular health condition. In most systems—especially in the U.S.—the financial burden of care is shared among key institutional stakeholders: insurance companies and governments. The former fund healthcare through policyholders' monthly premiums, while the latter do so via public taxation. However, any additional costs not covered by these mechanisms fall directly on patients in the form of out-of-pocket payments. As discussed in the introductory section, this structure often leads to inequities in access, disproportionately affecting low- and middle-income individuals who may be unable to afford these extra charges. In second place, healthcare providers represent another crucial stakeholder group. These include hospitals, emergency services, acute care facilities, rehabilitation centers, and nursing homes, all of which must balance the need to generate revenue with the imperative to deliver high-quality, patient-centered care. In many cases, such providers operate as not-for-profit entities within national health systems, relying primarily on taxpayer funds or social insurance contributions. Across much of the European Union, mixed financing models are common, blending public and private funding sources to uphold the principles of universal access while keeping healthcare affordable. Alongside these public and non-profit entities, private for-profit providers also play a role in supplementing national systems, earning revenue through insurance contracts or direct patient payments for privately delivered care.

### 3.2 The role of the insurance sector within the US

In line with the scope of this thesis and after an overview of the economics behind the healthcare industry, I deem of utmost relevance a better understanding of the processes underlying the US insurance system. More specifically, the bottom line and what it must be precisely understood is that in the United States, the structure of the health insurance system plays a decisive role in shaping the economic model of healthcare delivery. Unlike many European countries that operate under centralized or publicly funded healthcare frameworks, the U.S. system is dominated by private health insurance providers and characterized by a highly fragmented, market-oriented model. As a consequence, this system establishes the financial rules that govern provider payments and patient cost-sharing, creating both opportunities and vulnerabilities—many of which have been strategically exploited by private equity investors.

At its core, health insurance in the U.S. is a legal contract that entitles patients to partial or full reimbursement for healthcare services in exchange for a premium. Insurance plans, whether offered through employers, purchased individually on marketplaces, or funded through public programs like Medicare and Medicaid, define the scope of services covered, the amount reimbursed, and the share of costs borne by the patient. These costs can take the form of premiums, deductibles, co-payments, and coinsurance. Importantly, insurance plans do not automatically cover care from all providers. Indeed, most plans restrict coverage to a defined network of contracted providers who agree to offer services at negotiated rates. These providers are considered "in-network," while those without contracts are labeled "out-of-network," and may charge significantly higher rates, often with less oversight and coverage limitations.

Noticeably, this distinction between in-network and out-of-network billing is a cornerstone of PE strategies in the U.S. healthcare provider market. As already mentioned in the introduction, private equity firms often invest in physician groups, emergency departments, behavioral health clinics, and ambulatory surgical centers that either operate partially or wholly outside of insurer networks. Hence, by remaining out-of-network, these providers can charge "list prices" that far exceed negotiated in-network rates, and bill patients or insurers the full amount—or, at minimum, a higher allowable rate. Although recent legislation like the *No Surprises Act*<sup>16</sup> has attempted to curb this practice in emergency settings, out-of-network billing remains a source of elevated reimbursement and, consequently, investor returns in many elective and specialist care domains.

Notwithstanding the fact that PE-backed providers also participate in insurance networks, they often use advanced billing systems and coding strategies to maximize reimbursements within the rules of in-network coverage. One of the most common tactics involves revenue cycle management and diagnostic coding optimization. For instance, in value-based or risk-adjusted payment models, such as Medicare Advantage, providers receive higher reimbursement for patients with multiple or more severe diagnoses. Consequentially, PE-owned primary care or specialty clinics invest in software and administrative infrastructure to ensure comprehensive diagnosis capture, thereby increasing per-patient payments without altering the underlying treatment plans. Interestingly, this approach is entirely legal but raises ethical questions about

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<sup>16</sup> The No Surprises Act, effective January 1, 2022, is a U.S. federal law that protects patients from unexpected medical bills, particularly from out-of-network providers in emergency situations or when patients receive care at in-network facilities without being aware that certain providers are out-of-network. It prohibits balance billing in many common scenarios and requires insurers to cover these services at in-network rates (Centers for Medicare & Medicaid Services, 2023).



over-coding and the inflation of healthcare costs without commensurate improvements in care quality.

The broader U.S. health insurance architecture also enables PE to engineer consolidation strategies that are lucrative under current reimbursement dynamics. Given that providers are reimbursed per service under most plans (fee-for-service), consolidating multiple independent practices under one corporate structure allows PE to benefit from economies of scale, standardize billing operations, and negotiate better rates with insurers by leveraging increased patient volume. For example, PE firms acquiring dermatology or gastroenterology practices can combine several locations, reduce overhead, and integrate IT systems that monitor reimbursement data in real time—improving efficiency and revenue capture. This strategy is further facilitated by the insurance industry’s structural complexity, which allows large provider groups to achieve greater bargaining power against insurers and command higher payments.

The underlying insurance model’s incentives also align with PE’s typical short- to medium-term investment horizon. In other words, since health insurance plans in the U.S. typically operate on an annual cycle—with potential changes in coverage, deductibles, and co-pays each year—PE firms can quickly assess and adapt to market trends, insurer policy shifts, and regulatory developments. In a nutshell, this agility allows them to identify arbitrage opportunities, for instance, by focusing on services newly classified as reimbursable, by leveraging surprise billing loopholes before they close, or by expanding into specialties with strong year-over-year reimbursement growth.

Another factor supporting PE activity in this space is the prevalence of employer-based insurance plans, which constitute the majority of private coverage in the U.S. Employers often purchase fully-insured plans from insurance carriers or operate self-insured plans, where they bear the financial risk but contract out administrative functions. In both cases, plan designs emphasize cost control and limited patient choice. PE-backed providers can exploit this structure by negotiating favorable in-network status with multiple employers or plan administrators, thereby gaining access to a broad patient base and predictable reimbursement streams. Additionally, because the complexity of billing and cost-sharing (including deductibles, coinsurance, and copays) often obscures true service costs from patients, providers can increase revenue without immediate consumer pushback, particularly in emergency or high-demand specialties.

In sharp contrast, the European Union offers a considerably less hospitable environment for the aggressive financial strategies often employed by private equity firms in the United States. This is primarily due to the more centralized and regulated nature of healthcare insurance systems across EU member states, which reduce the opportunities for revenue manipulation and cost arbitrage. Accordingly, in many EU countries, such as, Sweden, and Italy, healthcare is funded directly through general taxation, and services are delivered by publicly owned or heavily regulated institutions. Even in countries with social health insurance systems—like Germany, France, and the Netherlands—statutory insurers operate under strict regulatory oversight and must offer standardized benefit packages to all citizens, regardless of income or health status. Thus, provider payments are typically based on fixed national tariffs, prospective global budgets, or bundled payments tied to diagnosis-related groups (DRGs), which collectively limit the ability of any individual provider or hospital to unilaterally increase prices or upcode procedures to maximize revenue.

To reiterate, these structural characteristics serve as natural checks on many of the tactics used by PE firms in the U.S. to enhance margins. There is little room for out-of-network billing in systems where virtually all providers are incorporated into a single payer or uniform

reimbursement schedule. As a consequence, balance billing is often prohibited, and cost-sharing is minimal or absent, meaning patients are less likely to be exposed to unexpected charges—further limiting providers’ leverage. Furthermore, the predictability and transparency of pricing also make it harder for PE-owned providers to negotiate favorable payment rates or extract differential profits through aggressive revenue cycle management. Additionally, the lower reliance on fee-for-service reimbursement in many EU systems reduces the incentive to increase patient volume purely for financial reasons. Instead, incentives are more often aligned with quality indicators, patient outcomes, or long-term efficiency, areas that do not lend themselves as easily to short-term financial engineering.

Moreover, the political and cultural attitudes toward healthcare in the EU—where access is generally seen as a social right rather than a market commodity—create additional resistance to privatization or the perception of profit extraction in essential services. This has led to more stringent oversight of private sector involvement and public scrutiny of foreign or financial investor ownership in health-related assets. As a result, PE firms operating in the EU must adapt to a more constrained investment landscape, focusing on areas where demand exceeds public supply, such as private diagnostics, elderly care, or niche elective services. Even in these cases, returns are generally lower and take longer to materialize, explaining why PE investments across EU have maintained a rather stable trend.

### 3.3 The expansion of PE in the healthcare industry: a comparative overview

Having gained a clearer understanding of how the healthcare market is structured in both the U.S. and EU contexts, it is now essential to examine the historical development of private equity investments in the healthcare sector. Over the past two decades, private equity firms have become increasingly involved in both U.S. and EU healthcare ownership and management, representing a pivotal stakeholder in the evolving healthcare landscape. The economic environment has become more conducive to such investments, with Brunch et al. (2020) highlighting four key reasons for PE's growing interest.<sup>17</sup> First, demand for healthcare services has remained relatively stable through economic fluctuations. Second, the fragmentation of healthcare delivery markets, particularly within the US, presents opportunities for PE firms to consolidate operations by acquiring multiple hospitals or physician practices. Lastly, the aging population has driven a sharp increase in demand for healthcare services, further attracting private capital.

Private equity's large-scale entry into the U.S. healthcare sector can be traced back to the landmark 2006 leveraged buyout of Hospital Corporation of America (HCA) by Bain Capital, KKR, and Merrill Lynch. This deal—then the largest leveraged buyout in history—involved a combined equity contribution of \$3.6 billion, approximately \$16 billion in borrowed capital, and the assumption of \$11.7 billion in existing debt, bringing the total valuation of HCA to nearly \$33 billion. This transaction is often referred to as the "HCA playbook" and became a prototype for future PE-led strategies in healthcare services. Fascinatingly, it revealed the immense profitability that could be extracted from hospital operations by increasing revenue, aggressively managing costs, and exploiting regulatory nuances in the healthcare reimbursement system.

It is imperative to stress that one of the first major steps taken by the new HCA ownership was the recoding and optimization of its billing practices, particularly targeting Medicare and Medicaid reimbursements. Through a combination of more sophisticated administrative systems and favorable coding of diagnoses and procedures, HCA reportedly increased its adjusted quarterly earnings from \$75 million to \$100 million by 2009. This growth was not tied directly to increases in service volume or quality, but to better documentation, classification, and claims processing—highlighting the financial leverage inherent in mastering the intricacies of insurance billing.

At the same time, the firm pursued cost-saving strategies that sparked widespread ethical concerns. As a result, these included the closure or downsizing of unprofitable emergency departments, stricter patient admission protocols, and even policies that required uninsured patients to pay upfront before receiving non-emergency care. While such practices were framed as necessary for operational efficiency, critics argued they disproportionately impacted vulnerable populations and compromised the social mission of healthcare institutions. Consequentially, the U.S. Senate Finance Committee and the Department of Justice opened inquiries into some of these practices, and while the investigations did not lead to major penalties, they highlighted the tension between maximizing investor returns and safeguarding equitable access to care.

Additionally, HCA pioneered a staffing model designed around flexibility and cost-containment, often hiring clinicians on a part-time or per diem basis, or outsourcing ancillary services like radiology and anesthesiology to affiliated but separately managed entities. This allowed the company to adjust labor costs dynamically but also introduced variability in

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<sup>17</sup> Brunch, J. D., Gondi, S., Song, Z., & Emanuel, E. J. (2020). Evaluating trends in private equity ownership and impacts on health care delivery. *Health Affairs*, 39(6), 1045–1051. <https://doi.org/10.1377/hlthaff.2019.01279>

continuity of care. According to a RAND Corporation study conducted during this period, there was no clear evidence that HCA's quality metrics had drastically declined; however, the rate of potentially avoidable hospital admissions increased, along with the intensity and cost of care per episode. This suggested that the incentive structure under PE ownership may lead to a focus on maximizing billable events rather than minimizing unnecessary interventions.

At the more financial side of the spectrum, the HCA investment was a resounding success for its private equity sponsors. The company paid out over \$1 billion in dividends to its owners in 2010 alone, and in 2011 it returned to the public markets through an initial public offering (IPO). Bain Capital and KKR reportedly earned more than 3.5 times their initial investment, even as public debate over the financialization of healthcare continued to intensify.

The HCA case established a framework that would later be replicated across numerous provider segments. Key elements included targeting fragmented markets with potential for consolidation, improving coding and billing practices to increase reimbursements, cutting operational costs (especially labor), expanding high-margin service lines, and using debt strategically to amplify returns. This model was subsequently adopted in several other major transactions. For instance, in 2010, Cerberus Capital Management acquired Steward Health Care and converted it from a Catholic nonprofit system into a for-profit, PE-controlled hospital chain. Under Cerberus' ownership, Steward adopted many of the same financial tactics, including aggressive debt-financed growth, real estate monetization through sale-leaseback arrangements, and physician practice acquisitions.

Blackstone's 2011 acquisition of Vanguard Health Systems further signaled that private equity's interest in hospital chains was far from temporary. Vanguard, like Steward and HCA, pursued rapid growth through the acquisition of community hospitals, particularly in states with favorable reimbursement policies and expanding Medicaid coverage. The combined effect of these acquisitions was a wave of consolidation in the mid-sized hospital market, enabling PE-backed operators to negotiate better contracts with insurers, access greater capital, and scale administrative operations.

Over time, the influence of private equity expanded beyond hospitals into a wide range of provider groups, particularly in high-revenue specialties. Dermatology, gastroenterology, ophthalmology, cardiology, and women's health became focal points for "roll-up" strategies, where PE firms acquired numerous small or independent practices, merged them into larger regional or national groups, and introduced standardized processes, central billing systems, and cost controls. These specialties were attractive because they offered repeatable, reimbursable procedures with relatively low regulatory barriers and minimal reliance on emergency or high-risk care. In many cases, practice owners nearing retirement viewed PE as an attractive succession solution that allowed them to monetize their businesses while retaining partial operational roles.

By the early 2020s, PE firms had acquired stakes in more than 400 of the 5,000 hospitals in the United States and had significant exposure to thousands of physician groups, ambulatory surgical centers, and behavioral health facilities. While the total revenue managed under PE ownership remained modest—estimated at about 4% of all healthcare revenue—its influence was disproportionate in key verticals. PE-backed entities often held dominant local or regional positions in fields such as emergency medicine, radiology, and anesthesiology. In some metropolitan areas, patients were likely to encounter PE-owned providers at every stage of their care journey, from urgent care to outpatient surgery to post-acute rehabilitation.

Despite more than \$1 trillion invested in the healthcare sector over the past decade, private equity's growing role has provoked strong reactions from policymakers, academics, and patient advocacy groups. Proponents argue that PE introduces much-needed managerial expertise,

capital efficiency, and technological modernization into healthcare delivery. Critics contend that the investment horizon typical of private equity—usually three to seven years—creates a misalignment between financial goals and patient-centered care. Research suggests that while PE ownership does not always degrade clinical quality, it often increases costs through upcoding, service intensity, and vertical integration, thereby shifting the financial burden onto patients and payers.

Several high-profile controversies have added to the scrutiny. The case of Envision Healthcare, backed by KKR, illustrated the risks of debt-fueled expansion combined with out-of-network billing practices. Envision's physician staffing model led to frequent "surprise bills" for patients, which became one of the catalysts for the passage of the No Surprises Act in 2021. Similar concerns were raised in behavioral health, where PE-backed facilities were accused of prioritizing admissions and length of stay over evidence-based treatment protocols, sometimes resulting in allegations of fraud and abuse.

While private equity investment in healthcare has garnered considerable scrutiny in the United States, its expansion into Europe—particularly in the realm of primary care—has been comparatively underexamined. Yet, across several European countries, PE firms have made significant inroads into general practice, outpatient clinics, and ambulatory care, often capitalizing on gaps in public provision, inefficiencies in legacy systems, and regulatory ambiguities. Although the overall market penetration remains lower than in the U.S., the structural and ideological foundations of European healthcare systems make even small-scale incursions particularly sensitive and controversial.

In Germany, the liberalization of ambulatory care through reforms such as the 2004 introduction of medical care centers (Medizinische Versorgungszentren or MVZs) laid the groundwork for PE involvement. Originally envisioned as interdisciplinary group practices that would improve coordination and efficiency in outpatient services, MVZs were initially tied to hospitals or statutory health insurance associations. However, subsequent legal changes allowed non-physician investors to own MVZs, provided they were linked to a hospital. This opened a legal pathway for private equity firms to enter the market by acquiring small hospitals and establishing affiliated outpatient centers. By 2020, around 750 of Germany's 3,800 MVZs—nearly 20%—were controlled by private equity or investor-backed entities. These included multinational investment firms and health groups with diversified interests in diagnostics, dentistry, and ophthalmology. Despite regulatory constraints, these investors leveraged the growing physician shortage and increased patient demand for accessible outpatient care to justify consolidation and expansion.

The rise of investor-owned MVZs has triggered pushback from German medical associations, who argue that PE ownership introduces profit motives incompatible with patient-centered care. Critics also highlight the opaque ownership structures of many MVZs, which make it difficult to ascertain whether financial decisions are being prioritized over clinical ones. Legislative proposals have since emerged to tighten regulations, including potential limits on MVZs established by hospitals with no regional ties to their patient base, or caps on market share within specific districts. These debates underscore growing discomfort with the corporatization of frontline care, particularly in a healthcare system historically rooted in physician self-employment and decentralized practice.

In Ireland, the Health Service Executive (HSE), which is Ireland's national health authority, has increasingly relied on long-term public-private partnership models to develop and manage primary care infrastructure. Under these arrangements, private investors finance the construction and maintenance of primary care centers, leasing them back to the HSE under

contracts that can span up to 25 years. While this model was introduced to expedite the rollout of community-based care and reduce pressure on hospitals, concerns have emerged regarding its long-term cost-effectiveness and the influence of financial stakeholders on care delivery. Many of the property management firms involved in these deals are backed by international private equity, including funds based in the U.S. and UK. Critics argue that these long-term lease obligations create fiscal rigidity and divert public resources into investor returns rather than clinical services. Additionally, the opacity of lease arrangements and the concentration of ownership in a small number of firms has raised questions about market competition and governance.

In the United Kingdom, private equity involvement in general practice has sparked significant political and public backlash. The most high-profile case involves the acquisition of AT Medics, which is one of the UK's largest GP practice operators, by Operose Health, the UK subsidiary of U.S.-based Centene Corporation. This acquisition gave Centene control of over 50 general practices, serving more than half a million NHS patients across London and other urban centers. A 2022 investigation by the BBC's *Panorama* program revealed troubling practices within the Operose network, including the delegation of patient care to underqualified or unsupervised physician associates. These staff were reported to be managing cases beyond their clinical scope, often without adequate GP oversight, raising serious concerns about patient safety, quality assurance, and staffing protocols.

The controversy prompted parliamentary inquiries and public demonstrations, with critics accusing the government of allowing "privatization by stealth" of the National Health Service (NHS). Although general practices in the UK have long operated as independent contractors to the NHS, the shift toward corporate and investor-backed ownership marked a qualitative change. Unlike traditional GP partnerships, which reinvested profits locally and maintained clinical independence, PE-backed chains like Operose are driven by shareholder returns and efficiency targets, often accompanied by labor casualization and cost-reduction measures. The political sensitivity of NHS privatization has since led to increased scrutiny of such deals, with calls for more transparent ownership disclosure and tighter regulation of who may hold contracts to provide essential health services.

Additionally, Sweden provides another instructive example of how structural reform can unintentionally catalyze private equity expansion in primary care. In 2010, the country introduced the *Lagen om valfrihetssystem* (LOV), or "Act on System of Choice," allowing private providers to enter the publicly funded primary care market. Under LOV, municipalities were required to reimburse any qualified provider who met basic regulatory and service standards. The reform aimed to improve access and patient choice, particularly in underserved regions. However, it also opened the door for financial investors to scale private operations within the tax-funded system. Within a decade, private firms—many backed by Swedish or international private equity—controlled roughly one-third of Sweden's private primary care centers.

These firms, including Caphio (now part of Ramsay Santé, a French-Australian healthcare conglomerate) and Aleris (formerly owned by EQT, a Swedish private equity group), expanded rapidly through acquisitions, offering standardized services and often employing salaried GPs under performance-based contracts. Proponents argue that these organizations improved operational efficiency and reduced patient wait times. Yet, concerns have also emerged over rising healthcare costs, administrative burdens, and a two-tiered system where private providers preferentially establish clinics in affluent, urban areas. This has led to geographic disparities and criticism that the LOV reform enabled "cream-skimming"—where private providers target healthier, wealthier patients, leaving more complex cases to public clinics.

In the Netherlands, the introduction of market elements into the healthcare system through the 2006 Health Insurance Act similarly laid the foundation for private equity to enter general practice. While Dutch GPs remain self-employed and publicly reimbursed through mandatory health insurance schemes, PE firms have begun to invest in chains of general practices and multidisciplinary health centers, especially in urban areas. The for-profit model remains controversial in the Dutch context, where healthcare is broadly viewed as a public good, and patients expect personal, longitudinal relationships with their GPs. The growing role of investor-owned GP chains has raised questions about the commodification of care, potential disruptions to continuity, and the degree to which financial considerations may shape treatment decisions.

To reiterate, across all these countries, private equity's expansion into primary care reflects broader structural pressures on public health systems. Physician shortages, aging populations, fiscal constraints, and demand for convenience and efficiency have created space for new entrants to offer flexible, often technology-enabled care solutions. PE firms present themselves as partners capable of delivering capital, managerial expertise, and scalable platforms to modernize care delivery. However, the application of financial models built on rapid returns, aggressive consolidation, and cost optimization to the domain of primary care has raised deep ethical and political questions. Unlike specialty or elective services, primary care occupies a foundational role in patient health and system coordination, making it particularly sensitive to changes in ownership, staffing, and incentive structures.

### **3.4 The classic private equity investment model**

At its core, private equity represents a form of direct investment in capital assets, typically conducted through private, specialized firms that pool resources from institutional and high-net-worth investors. These PE firms raise investment funds with the purpose of acquiring ownership stakes in public or private companies, with the strategic goal of enhancing the company's value and later exiting the investment at a profit. The most prominent and widely used method of acquisition is the leveraged buyout (LBO), a financial strategy in which a PE-sponsored investment fund acquires an established and usually profitable company using a substantial proportion of debt financing. Typically, approximately 70 percent of the acquisition price is financed through borrowed capital, while the remaining 30 percent is funded through equity provided by the PE fund. For smaller companies with fewer tangible assets, this debt-to-equity ratio may be less pronounced. Crucially, it must be highlighted that it is the acquired company—not the private equity firm or the investment fund—that bears the responsibility of repaying the acquisition debt.

Within a PE fund, equity contributions come primarily from limited partners—such as pension funds, university endowments, sovereign wealth funds, and affluent individuals—who generally provide around 98 percent of the equity capital. The PE firm, via its general partners, typically contributes only a small percentage (typically 2 percent), though in some cases this contribution may reach 10 percent. The general partners are responsible for managing the fund, sourcing and executing deals, and implementing post-acquisition strategies. Once a target company—referred to as a portfolio company—is acquired, general partners from the PE firm often assume seats on the company's board of directors or appoint its members, thereby asserting significant governance control.

Immediately following acquisition, the PE firm collaborates with the company's existing or newly appointed CEO to craft a detailed strategic roadmap, commonly referred to as the "100-day plan." This plan outlines aggressive performance targets and cost-optimization strategies designed to increase cash flow and earnings before interest, taxes, depreciation, and amortization (EBITDA). In many cases, achieving these goals involves reducing labor costs through layoffs, wage reductions, or restructuring; indeed, CEOs unwilling to pursue such changes are often replaced by individuals aligned with the PE firm's vision. Notably, PE firms often maintain a network of executives who can be installed in key leadership roles across their portfolio, with loyalty primarily to the PE firm rather than the portfolio company.

In addition to exerting operational control, PE firms frequently enter into Management Services Agreements (MSAs) with their portfolio companies. These agreements mandate that the portfolio company pay annual monitoring fees directly to the PE firm for ongoing advisory and oversight services. Moreover, the company is usually required to cover all transaction-related costs incurred during the acquisition process, including the PE firm's internal labor and due diligence expenses. These payments are not subject to negotiation in the conventional sense, as the PE firm and portfolio company are not independent parties in a standard arm's-length transaction. According to industry estimates, approximately 58 percent of PE firms require portfolio companies to pay monitoring fees, while nearly 86 percent impose transaction fees. These fees function as a source of consistent revenue for the PE firm, separate from the capital gains it may earn upon exit.

The high debt levels used to finance the acquisition play a critical role in amplifying returns for the PE firm. Because the majority of the purchase price is financed through leverage, any increase in the value of the portfolio company disproportionately benefits the relatively small equity stake held by the PE fund. Upon a successful exit—usually targeted within three to five years—the PE firm is entitled to 20 percent of the total gains, a compensation structure known as "carried interest." Given that the firm may have only contributed 2 percent of the fund's equity and that equity accounted for only 30 percent of the acquisition, its true exposure to risk may be as low as 0.6 percent of the total purchase price. The resulting asymmetry between risk and reward is a textbook example of moral hazard, wherein PE firms engage in high-risk behavior using capital provided by others, often to the detriment of the acquired firm's long-term stability.

In contrast to this model, publicly traded companies operate under significantly different governance and regulatory conditions. Public companies are expected to maintain their status as going concerns, generating shareholder value over the long term. Their CEOs are typically appointed by independent boards with a track record of industry experience, and their operations are subject to extensive transparency requirements under securities laws. Public companies cannot load subsidiaries with excessive debt, extract dividends through highly leveraged structures, or impose management fees on internal divisions. When they engage in sale-leaseback transactions or divestments, proceeds are usually reinvested in the business rather than used to enrich controlling shareholders. Thus, while private equity firms are permitted to operate with minimal disclosure and accountability to public regulators, their publicly listed counterparts are held to far higher standards of oversight and fiduciary responsibility. Hence, it could be highlighted that these structural differences translate into divergent operational philosophies and performance metrics. More specifically, whereas public companies are constrained by regulatory compliance and long-term investor expectations, PE-owned firms are driven by aggressive short- to medium-term value extraction. Simply put, the limited downside exposure of the PE firm itself, coupled with the high leverage imposed on the portfolio company, incentivizes risk-taking with potentially adverse effects for employees, customers, suppliers, and even creditors. Because the PE fund and firm are not liable for the



portfolio company's debt obligations, they may remain indifferent to the company's financial distress or eventual bankruptcy, provided that sufficient value can be extracted during the holding period.

Furthermore, in preparation for the acquisition, PE firms typically rely on optimistic assumptions regarding future industry growth, pricing trends, and operational efficiencies. However, their lack of deep sector-specific expertise can result in flawed forecasting, particularly in sectors such as healthcare, where demand, regulation, and quality are in constant flux. An unforeseen economic downturn, the emergence of a disruptive competitor, or an unfavorable regulatory change may render a highly leveraged portfolio company unable to meet its debt obligations. In such cases, the risk borne by the company's workforce and local economy is disproportionate to that borne by the financial sponsor. Noticeably, the systemic consequences of such collapses are not merely theoretical; they have occurred across a variety of industries, including retail, manufacturing, and healthcare services.

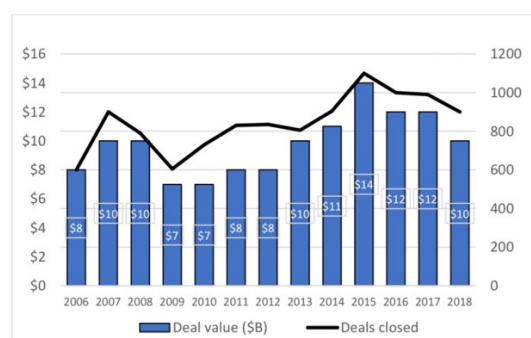
Moreover, it is worth to stress that as Appelbaum & Batt (2020) pointed out in their pivotal study, the high prices paid for portfolio companies not only expose these firms to increased risk during periods of economic downturn but also weaken the ability of private equity funds to exit these investments with a profit. Recent academic research shows that the median PE fund launched since 2005 has not outperformed the public stock market. In response to this challenge, PE firms have increasingly turned to a "buy and build" strategy. This approach involves combining the initial portfolio company, now referred to as the "platform company," with smaller competitors that can be purchased for significantly less than ten times EBITDA. By acquiring these lower-cost companies, firms are able to reduce the average acquisition multiple for the overall business, which enhances the likelihood of achieving a profitable exit. Interestingly, this growing trend has been well documented in data from PitchBook, which reports that the share of add-on acquisitions among all buyout activities increased from 56.5 percent in 2009 to an estimated 68 percent in 2019. According to PitchBook, nearly 30 percent of companies backed by PE now complete at least one add-on acquisition, compared to fewer than 20 percent in the early 2000s. Furthermore, more than 25 percent of these add-ons are made by platform companies that have completed at least five such deals. These smaller acquisitions, which are less expensive than full-scale buyouts, allow firms to reduce the overall cost of acquisition and to generate higher returns when the expanded business is sold or goes public. Compared to waiting for the original company to grow organically, this method tends to be more profitable and better aligned with the short investment horizons typical of PE funds, which often plan to exit within three to five years.

In line with the scope of this research, while it is commonly argued that the main purpose of the buy and build model is to reduce acquisition costs, it could turn out to be also an effective means of consolidating ownership and increasing market power at a national level, fostering a monopolistic behavior. This can be accomplished without triggering antitrust investigations, which in turn enables PE-owned companies to raise prices and improve profitability. For instance, in the U.S. context, the current federal threshold requiring companies to notify the Federal Trade Commission (FTC) about mergers was initially set at 50 million dollars in 1976. Adjusted for economic growth, it reached 126.4 million dollars by February 28, 2024. In relation to this, a report from Abacus Finance that draws on PitchBook data analyzed the number of add-on acquisitions involving companies valued at under 50 million dollars between 2006 and 2018. The number peaked in 2015 at over 1,100 deals and, although slightly lower in the years that followed, continues to remain high. As illustrated in Exhibit 3, PE-backed companies have acquired thousands of smaller firms in this sub-50 million dollar segment of

the lower middle market, substantially increasing the market reach and dominance of the original platform companies in specific product categories or geographic regions.

### Exhibit 3

**FIGURE 1.2**  
Add-on Activity in US Lower Middle Market Across All Industries



As explored in greater detail in section 3.1, the healthcare sector is a significantly complex market. As a result, it turns out to be particularly suited to this strategy. Simply put, the market is fragmented and constantly evolving due to technological changes, which provides ideal conditions for platform companies to acquire smaller firms, scale their operations, and establish dominance in targeted healthcare segments. As a consequence, M&A activity in healthcare is among the highest of any sector in the economy. This has led many analysts to worry about the growth of monopoly power in certain segments, and some recent studies whose results will be explained in the following sections, have shown that it has led to higher healthcare costs for patients in certain consolidated markets. Notwithstanding the fact that each transaction is small enough to avoid mandatory reporting to the FTC within the U.S., the cumulative effect of these deals can lead to significant consolidation and market influence, thus giving birth to monopolies. Hence, understanding these mechanisms allows for a more nuanced assessment of private equity's potential role in healthcare. On one hand, PE can provide much-needed liquidity and managerial expertise to under-resourced or poorly run practices, particularly in environments where public funding is constrained or inefficient. For example, practices facing declining reimbursement, outdated infrastructure, or fragmented operations may benefit from a PE partner capable of investing in modernization and administrative streamlining. On the other hand, the debt-centric, fee-extractive nature of the PE model can impose burdens that undermine clinical integrity and organizational stability as well as lay the foundation for strategies that could set out monopolies.

### 3.5 The allure of PE investments and the risks associated

At a time when physician-owned practices in particular are buckling under the pressures of economic instability and competition with larger hospitals, private equity may be seen as a tempting life boat to grow their practice or secure fast monetary gain.<sup>18</sup> PE managers believe that arrangements with health care businesses could potentially produce a large number of benefits. In particular, they can ‘nurture failing or underperforming companies and set them up for faster growth’.<sup>19</sup> Hence, struggling companies can thereby become thriving businesses that create more jobs and increase shareholders’ dividends. In more detail, data regarding private equity investments in health care can paint a convincing picture of success. According to one study, private-equity owned hospitals had higher scores on several measures of financial performance.<sup>20</sup> With an established toolkit of management expertise and professional networks, PE has the potential of streamlining operations therefore increasing efficiency while cutting down costs. In fact, PE firms have usually a network of ‘suppliers, vendors and partners’ that they can more easily reach than an independent practice could.<sup>21</sup> Moreover, private equity has found success in implementing new technology to improve operational efficiency. Because of this, health care technology is an area of growing investment interest for private equity, and a draw for providers with obsolete technology systems. Within the US, for example, LifeStance, a behavioral health company, is currently ‘one of the nation’s largest providers of virtual and in-person outpatient mental healthcare’ across the country.<sup>22</sup> On the EU side, an illustrative example of private equity investment in the European healthcare technology sector is the 2021 merger of French software companies Medisys and Cityzen, facilitated by the Kempen European Private Equity Fund in collaboration with Activa Capital and the companies’ original founders. This strategic consolidation aimed to create a leading software supplier for the healthcare industry in France, serving approximately 11,000 clients across both public and private care markets. The newly formed entity employed around 450 full-time staff, including over 90 software specialists, and reported a combined turnover of approximately €45 million in 2020. The merger was designed to enhance synergy, improve service quality, and deliver superior software solutions to healthcare professionals, thereby increasing efficiency and effectiveness in patient care.<sup>23</sup>

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<sup>18</sup> See generally AM. HOSP. ASS’N, EVOLVING PHYSICIAN-PRACTICE OWNERSHIP MODELS 1, 5–7 (2020), [https://www.aha.org/system/files/media/file/2020/02/Market\\_Insights\\_MD\\_Ownership\\_Models.pdf](https://www.aha.org/system/files/media/file/2020/02/Market_Insights_MD_Ownership_Models.pdf) (placing side-by-side private equity health care acquisitions’ advantageous economies of scale with physician-owned practices’ need for improvements to compete with hospital systems).

<sup>19</sup> See ‘Everything is Private Equity’ (Bloomberg, Business Week)

<sup>20</sup> Anaeze C. Offodile II, Marcelo Cerullo, Mohini Bindal, Jose Alejandro Rauh-Hain & Vivian Ho, Private Equity Investments in Healthcare: An Overview of Hospital and Health System Leveraged Buyouts, 2003–17, 40 HEALTH AFFS. 719, 723 (2021).

<sup>21</sup> See Gary M. Kirsh & Deepak A. Kapoor, Private Equity and Urology: An Emerging Model for Independent Practice, 48 UROLOGIC CLINICS N. AM. 233, 234 (2021).

<sup>22</sup> How Cardinal Helped the Country’s Largest Mental Health Care Provider Scale Digital Marketing to 500+ Locations., CARDINAL DIGIT. MKTG., <https://www.cardinaldigitalmarketing.com/healthcare-case-study/behavioral-health-digital-marketing-ppc-seo/> (last visited Apr.3, 2023).

While private equity investment in healthcare has introduced new capital, managerial efficiencies, and in some cases operational innovation, it has also raised serious concerns regarding the integrity, accessibility, and equity of care delivery. Healthcare, unlike many other sectors of the economy, carries profound social responsibilities, including the ethical obligation to prioritize patient well-being, safeguard public health, and ensure universal access to essential services. The increasing presence of profit-driven investors in such a sensitive and high-stakes environment introduces tensions that cannot be overlooked, particularly when investment strategies prioritize financial returns over patient outcomes. Accordingly, a growing body of literature has documented how the operational strategies implemented by PE firms after acquiring healthcare providers can lead to significant changes in care delivery patterns. Gondi and Song (2019) argue that the core objective of PE (i.e. achieving above-market returns for investors) can conflict with the mission of healthcare providers, especially when this pursuit incentivizes behavior that compromises clinical quality. One of the mechanisms through which this occurs is through the manipulation of referral patterns. After acquisition, healthcare practices under PE ownership often adopt internal referral systems that prioritize keeping patients within the network of owned practices, even when external referral might be in the patient's best interest. This form of vertical integration may result in treatment decisions being guided less by clinical necessity or patient preference and more by financial imperatives. As a result, referrals may be directed toward in-house specialists or diagnostic services primarily to capture revenue rather than to ensure the most appropriate care pathway.

Compounding these concerns is the issue of outsourcing. In many cases, services not available in-house due to infrastructural or clinical limitations are outsourced to unaffiliated physicians or external providers. However, this often occurs without proper integration or continuity of care, raising concerns about fragmentation, miscommunication, and patient safety. Moreover, PE-owned practices may deprioritize low-margin services—such as primary care for uninsured or low-income patients, chronic disease management, or preventive interventions—in favor of more lucrative procedures and specialties. This practice of selectively allocating resources based on profitability metrics, rather than public health need, undermines the foundational principles of equitable healthcare access and delivery.

Hence, from a qualitative standpoint, the cumulative effect of these practices can degrade the quality of service delivery. Increased utilization, shortened consultation times, high patient throughput targets, and reduced emphasis on non-billable activities such as counseling or follow-ups all create a clinical environment where care may become transactional rather than holistic. Over time, this approach can erode trust in the provider-patient relationship and diminish patient satisfaction and health outcomes, even if performance indicators such as revenue or throughput improve.

Another significant area of concern is billing practices. Bruch et al. (2020) observe that PE acquisitions are frequently followed by sharp increases in patient charges. While some of this may be attributable to improvements in billing efficiency or coding accuracy, the magnitude and timing of these increases suggest that they are often strategic, rather than incidental. Higher prices, they argue, reflect a recalibration of the provider's financial model to align with the return expectations of fund managers. In many cases, these markups are not accompanied by corresponding improvements in service quality or outcomes, raising ethical questions about the fairness and transparency of patient billing under PE ownership. Furthermore, cost-cutting measures—such as reduced staffing levels, substitution of physicians with mid-level providers,

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<sup>23</sup> See <https://www.privateequitywire.co.uk/kempen-european-private-equity-fund-invests-french-healthcare-software-company/>

or deferral of necessary capital expenditures—can exacerbate the risks to patient safety and long-term service quality.

Relatedly, the erosion of physician autonomy has emerged as a recurrent theme in critiques of PE-backed healthcare. Gilreath et al. (2019)<sup>24</sup> underscore that under PE ownership, clinical decision-making may become subordinate to financial directives issued by non-clinical executives or fund managers. Physicians employed by PE firms may be subject to performance incentives that favor volume over value, or discouraged from recommending treatments that fall outside a predefined revenue-generating model. This shift has raised alarm among professional associations and practitioners who argue that the sanctity of the doctor-patient relationship is at risk. As Bennett (2020)<sup>25</sup> notes, it is legitimate to question whether physicians working under PE-backed firms can maintain an unwavering commitment to patient welfare in the face of conflicting financial pressures. Lundy (2019)<sup>26</sup> echoes these sentiments, advising medical professionals to exercise extreme caution in entering partnerships with private equity firms and to consider both the reputational and clinical consequences of ceding partial or full control to financially motivated investors.

The impact of private equity investment also extends to the geographic distribution of care. C. Henry and J. Loomis (2024) highlight that the typical PE strategy of consolidating fragmented markets through “roll-up” acquisitions can lead to the closure or marginalization of independent practices that are unable to compete with the scale and pricing power of investor-backed groups. This trend may particularly affect rural or underserved areas, where provider shortages already compromise access to care. Once a PE-backed chain achieves dominance in a given region, it may exert monopolistic control over local healthcare markets, narrowing choices for patients and payers alike. In such scenarios, prices may rise not because of higher costs or improved quality, but simply due to diminished competition.

These consolidation dynamics raise further concerns regarding the long-term resilience of healthcare systems. In markets where one or two PE-backed firms control a significant share of providers, payers—including public insurance systems—may find themselves with limited bargaining power. This dynamic is especially problematic in the context of essential services, where patients cannot easily “shop around” and where delays in care can have life-threatening consequences. The leverage afforded to dominant provider groups enables them to dictate pricing and contractual terms, increasing costs system-wide. Unlike traditional nonprofit or mission-driven healthcare systems, PE firms are not accountable to local constituencies, and their investment horizon—typically three to seven years—creates incentives for value extraction rather than sustained community investment.

Taken together, these concerns point to a central conclusion: while PE investment in healthcare may bring operational efficiencies and financial capital, it also has the potential to transform care delivery in ways that prioritize profit over patients. The pursuit of scale and dominance through roll-up strategies may, over time, contribute to the formation of healthcare monopolies—entities that control significant market share, limit competition, and wield disproportionate influence over clinical, financial, and regulatory decision-making. In a sector

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<sup>24</sup> Gilreath, M., Morris, S., & Brill, J. V. (2019). Physician practice management and private equity: Market forces drive change. *Clinical Gastroenterology and Hepatology*, 17(10), 1924–1928. <https://doi.org/10.1016/j.cgh.2019.05.001>

<sup>25</sup> Bennett, J. (2020). The impact of private equity on physician autonomy. *Journal of Health Economics*, 39(3), 245–252.

<sup>26</sup> Lundy, D. W. (2019). A day at the office: Private practice and private equity. *Clinical Orthopaedics and Related Research*, 477(5), 955–957. <https://doi.org/10.1097/CORR.0000000000000758>

as socially critical as healthcare, such concentration of power poses inherent risks to quality, affordability, and equity. As private equity continues to expand its footprint in healthcare, the broader implications of these market dynamics warrant careful, ongoing examination.

### 3.6 The public healthcare goals

My thesis aims to evaluate the impact of private equity investments on the healthcare industry, particularly in relation to public healthcare objectives and broader societal moral standards, ultimately seeking to identify patterns that may point to emerging monopolistic behavior. To establish a robust analytical foundation, it is first essential to define the goals of public healthcare systems, as these will provide the evaluative lens through which the potential benefits and drawbacks of PE involvement will be assessed.

Historically, the principal aim of healthcare systems has been to improve population health. This mission emerged in the 19th century with a focus on basic sanitation and expanded alongside the development of Western welfare states. As healthcare systems matured, a broader set of goals evolved to support this mission. Accordingly, the World Health Organization (WHO), in its early 2000s *World Health Report*, outlined six foundational components of effective healthcare systems: accessibility and responsiveness, quality, outcomes, accountability and transparency, fairness and equity, and efficiency. To further conceptualize these objectives, Murray and Frenk (2000) classified healthcare goals into two categories: intrinsic and instrumental.<sup>27</sup> Intrinsic goals are those considered valuable in and of themselves, even in the absence of progress on other fronts. According to this framework, the three primary intrinsic goals of a healthcare system are: improving health, enhancing responsiveness to population expectations, and ensuring fairness in financial contribution. With regards to the first goal, “improving health” refers to both raising average health outcomes and narrowing health disparities. Moreover, “responsiveness” entails respecting individual dignity, ensuring confidentiality, supporting autonomy in medical decisions, and delivering timely and patient-centered care. Lastly, “fairness” in financial contribution emphasizes equitable cost-sharing, ensuring that lower-income households are protected from financial hardship due to medical expenses.

In 2000, the global community reaffirmed the centrality of health as a cornerstone of human development through the United Nations’ Millennium Development Goals (MDGs). Among the eight goals, three directly addressed health outcomes: reducing child mortality, improving maternal health, and combating infectious diseases such as HIV/AIDS and malaria. These objectives established a foundational global health agenda focused on pressing communicable diseases and reproductive health. However, as health challenges evolved and became more complex, the international response also shifted accordingly. In 2015, the introduction of the Sustainable Development Goals (SDGs)<sup>28</sup> marked a significant transition toward a more inclusive and holistic approach. Of particular relevance to this thesis is SDG 3—“Ensure healthy lives and promote well-being for all at all ages”—which reflects a more

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<sup>27</sup> Murray, C. J. L., & Frenk, J. (2000). A framework for assessing the performance of health systems. *Bulletin of the World Health Organization*, 78(6), 717–731. [Repository Gheli+4](#)

<sup>28</sup> United Nations. (2015). *Transforming our world: The 2030 Agenda for Sustainable Development*. <https://sdgs.un.org/2030agenda>

comprehensive health agenda that extends beyond disease-specific interventions. Within this goal, Target 3.8 plays a pivotal role by emphasizing the achievement of universal health coverage (UHC), including equitable access to quality essential healthcare services, access to safe, effective, and affordable medicines and vaccines, and protection from financial hardship caused by health expenditures. In parallel with these global developments, the Organization for Economic Co-operation and Development (OECD) has played a leading role in assessing and improving health system performance. Its original Health System Performance Assessment (HSPA) framework <sup>29</sup>, introduced in the early 2000s, centered on three fundamental goals: improving the health status of the population, enhancing system responsiveness to public expectations, and ensuring fairness in financial contributions. This framework guided OECD countries in shaping evidence-based reforms and monitoring system-level performance across diverse healthcare models. Fast forward to the present day and in response to new global challenges, which include aging populations, climate change, the digitalization of healthcare, rising cost pressures, and the structural disruptions caused by the COVID-19 pandemic, the OECD updated its HSPA framework in 2024 <sup>30</sup> (see *Exhibit 3*). Interestingly, the revised version introduces five interdependent pillars that aim to reflect the changing priorities and expectations surrounding health system performance: people-centredness, resilience, environmental sustainability, efficiency, and equity. Firstly, people-centredness refers to the need to organize care around the values, preferences, and specific needs of individuals. It promotes personalized healthcare delivery, shared decision-making, and active patient engagement in preventive and treatment strategies. Secondly, resilience highlights a system's capacity to anticipate, absorb, and recover from shocks, such as pandemics or economic downturns, and underlines the importance of adaptive infrastructure and preparedness planning. Thirdly, environmental sustainability, a relatively new addition to performance metrics, calls attention to the health sector's environmental footprint and supports measures aimed at reducing emissions, energy consumption, and waste generation across healthcare operations. Fourth, efficiency remains a crucial objective, referring to the capacity to deliver the best possible outcomes using available resources wisely, while minimizing waste and unnecessary interventions. Lastly, equity underscores the moral and practical imperative to ensure that healthcare access and quality are fairly distributed across the population, irrespective of socio-economic status, ethnicity, or geographic location.

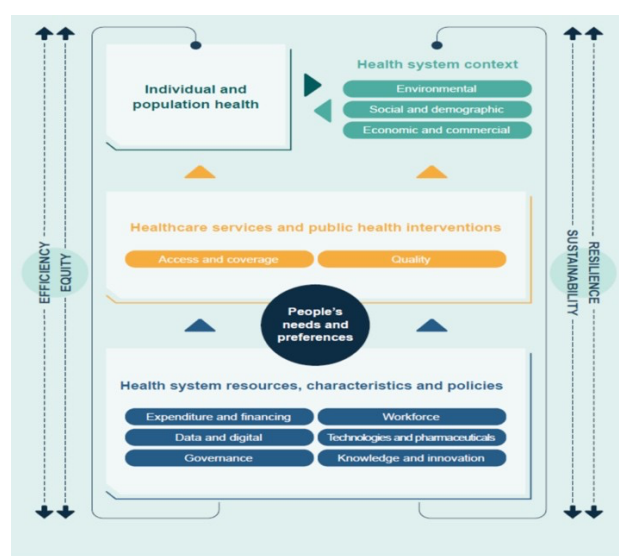
Though being analytically distinct, these five dimensions are deeply interrelated. Improvements in one area often have implications for others, requiring trade-offs and careful policy calibration. For instance, a pursuit of greater efficiency must not erode equitable access, while investments in resilience must be pursued in ways that align with environmental sustainability goals. The updated framework therefore not only provides a diagnostic tool for evaluating health system performance but also serves as a guiding structure for navigating future reforms in a way that is both ethically grounded and practically responsive to evolving societal needs.

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<sup>29</sup> Organization for Economic Co-operation and Development. (2004). *Towards high-performing health systems: Policy studies*. OECD Publishing. <https://doi.org/10.1787/9789264016016-en>

<sup>30</sup> Organization for Economic Co-operation and Development. (2024). *Health system performance assessment: A framework for policy analysis*. OECD Publishing. <https://www.oecd.org/health/health-system-performance-assessment.htm>.

Exhibit 3



For the purpose of this thesis, I distill these five OECD pillars into three operational benchmarks that are most relevant for evaluating the impact of PE investment on healthcare delivery: equality in access to services, the quality of those services, and their affordability for patients. These three dimensions are selected not only because they are central to ethical and policy discussions but also because they effectively synthesize the OECD’s broader framework into a focused, practical lens for this analysis. To begin with, equity directly maps onto universal access whereas quality reflects people-centredness and resilience. Lastly, affordability corresponds to both financial fairness and system efficiency. Regarding the third dimension, affordability will be interpreted through the lens of efficiency—understood as the optimal combination of inputs (such as labor, technology, and infrastructure) required to deliver high-quality care in a cost-effective manner for both the system and the patient. Taken together, these benchmarks provide a concise yet comprehensive basis for assessing whether PE investment is enhancing or undermining the core values of public healthcare.

Ultimately, these public healthcare objectives, which are rooted in international standards and contemporary best practices, converge on the overarching aim of promoting good health at both individual and population levels. In this thesis, they serve as the guiding reference points for analyzing PE’s impact on wellbeing standards and monopolistic behaviors and for shaping policy recommendations aimed at ensuring that market-based investment strategies do not compromise fundamental healthcare goals.



### 3.7 The concept of monopoly as related to the healthcare industry

Having established the core objectives that a healthcare system must fulfill, it is now important to examine the concept of monopoly and how it operates within the analytical framework set forth in this thesis. As Roger Van den Bergh (2007) explains, monopoly must be distinguished from perfect competition primarily in terms of market structure and the absence of competitive constraints. While perfect competition is characterized by a large number of sellers acting as price takers, selling homogeneous products in a market with perfect information and zero transaction costs, monopoly involves a single firm supplying the entire market without actual or potential competition. Crucially, the monopolist possesses price-setting power: unlike in a competitive market where prices align with marginal cost, the monopolist sets prices above marginal cost, leading to a reduction in output and, ultimately, an inefficient allocation of resources. This inefficiency has two major welfare implications. First, part of the consumer surplus is transformed into producer surplus, generating monopoly rents—a redistribution of income that may be socially and politically undesirable. Second, and more damaging, is the deadweight loss or ‘allocation effect’ of monopoly, whereby consumers purchase less of the good or service than they would under competitive pricing, thus lowering overall societal welfare (Van den Bergh, 2007, pp. 91–92).

These insights from monopoly theory provide a useful conceptual lens for evaluating private equity’s growing role in healthcare, particularly as PE-led consolidation strategies increasingly reshape provider markets. In the context of this thesis, three operational benchmarks represented by universal access, efficiency, and quality serve as thresholds for assessing whether a healthcare delivery model exhibits monopolistic tendencies. First, universal access may be jeopardized when PE-backed entities dominate regional healthcare markets and, motivated by profitability rather than public service obligations, limit services in low-income or rural areas. As a result, this mirrors the deadweight loss described by Van den Bergh: a portion of the population is excluded from the market not because of lack of need, but due to price or service availability distortions created by market concentration. Second, efficiency (in all its declinations) may initially improve through consolidation, but over time monopolistic dominance can diminish incentives to innovate or respond to patient needs, resulting in bloated administrative structures or underinvestment in service quality. Lastly, quality of care may be compromised when provider networks cut costs, standardize treatments, or prioritize high-margin services, all of which may align with PE’s profit motives but fail to reflect patients’ clinical needs.

In this light, the monopolistic potential of PE in healthcare cannot be evaluated solely through traditional antitrust metrics such as pricing or market share. Instead, it must be examined in terms of how consolidated provider power affects access to services, operational efficiency, and clinical quality, which are dimensions that lie at the heart of both public health policy and economic welfare theory. As Van den Bergh’s framework illustrates, market concentration without adequate checks not only distorts prices but also harms allocative efficiency and equity which form the bedrock for core objectives in any healthcare system that seeks to promote societal well-being.

### 3.8 Different concepts of efficiency

As the term efficiency will recur throughout this thesis and serve as a key benchmark for assessing the implications of private equity in the healthcare sector, it is necessary at the very outset to clarify what is meant by this concept. Notably, unlike common usage, efficiency in economics and competition law is not a singular or uniform notion. Rather, it encompasses multiple interpretations, each associated with different evaluative criteria and policy outcomes.

The most widely cited form and often yardstick for competition policies is “allocative efficiency”, which refers to a state in which resources are distributed in accordance with consumer preferences. In more specific terms, this occurs when goods and services are produced at levels where the price equals the marginal cost, ensuring that no additional reallocation could improve one individual's welfare without reducing that of another. Notably, allocative efficiency is often used as the foundation of standard price theory and underpins many traditional competition law assessments, especially those concerned with consumer welfare. However, this is only one dimension of the broader efficiency discourse. Indeed, a second form is represented by “productive efficiency”, which concerns the optimal use of inputs in the production process. Simply put, a system is considered productively efficient when it produces the maximum output from a given set of resources, or alternatively, when it achieves a given level of output at the lowest possible cost. This concept is particularly relevant in managerial and operational contexts, where improvements in scale, cost control, and organisational structure can yield significant gains. Lastly, the third form, dynamic efficiency, introduces a temporal spectrum. In more specific terms, it refers to the ability of a system to innovate and adapt over time, generating new products, services, and methods that contribute to long term improvements in welfare. This form of efficiency is essential in sectors where innovation is critical, such as healthcare, where medical technologies and treatment protocols evolve rapidly.

The various interpretations of efficiency are often treated as complementary within economic theory, but in practice they frequently come into conflict, especially in complex and socially embedded sectors such as healthcare. According to this, private equity investment in healthcare illustrates these tensions in a particularly stark way. On one hand, PE firms often improve productive efficiency by reducing operational costs, standardising administrative processes, and achieving economies of scale through consolidation. Indeed, these measures may enhance financial performance and streamline service delivery. However, such gains are frequently achieved at the expense of allocative efficiency, as market consolidation allows firms to exercise greater pricing power, restrict competition, and reduce consumer choice. In fact, services may become less accessible, particularly in low-income or rural areas, even as internal operations become more cost-effective. Moreover, the pursuit of dynamic efficiency, such as investment in new technologies or clinical innovations, is also used to justify PE strategies, yet this too can conflict with allocative goals. Innovation may be directed toward high-margin specialties rather than areas of greatest medical need, further reinforcing disparities in access. Furthermore, dynamic efficiency is speculative and difficult to measure, often serving as a rhetorical justification for market concentration rather than a guaranteed outcome.

To reiterate, these interpretations lead to conflicting declaration of efficiency as concept and, most importantly, competition goal. That said, throughout this thesis, the term efficiency will be used with these distinctions and conflicts in mind. When assessing the role of private equity in healthcare markets, it is important to recognise which type of efficiency is being advanced, by whom, and with what consequences. Most importantly, arguments in favour of efficiency

must be evaluated not only in terms of their internal logic but also in terms of the specific form of efficiency they promote. What appears as a gain in one dimension may represent a loss in another. Therefore, any use of the term efficiency in the subsequent analysis should be understood as referring to a plural and context dependent concept, the meaning of which must be interpreted with careful attention to the trade offs and priorities it entails.

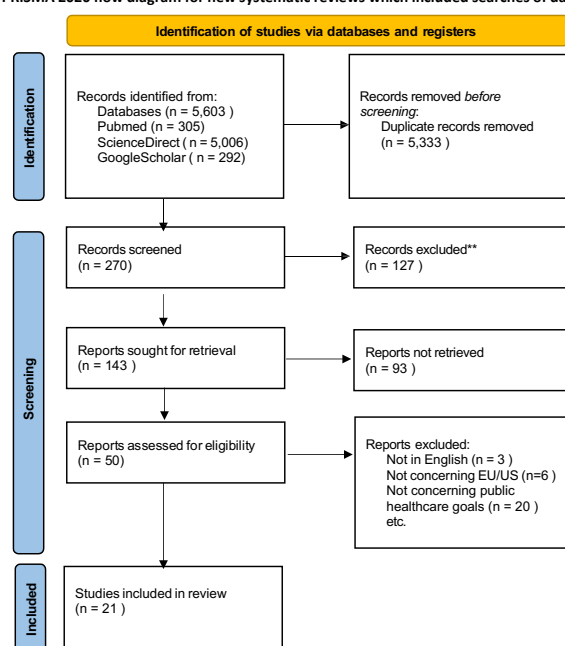
## 4 Results of the literature review

This section highlights the results and analysis of the empirical studies review. In the first subsection, studies' characteristics are described and therefore analyzed on heterogeneity. Afterwards, in the following subsection, eligible studies are categorized by four parameters (by country, by type of healthcare provider, by healthcare goal and by the conclusions carried out by the study). Finally, in the last subsection, the results are summarized.

### 4.1 Study characteristics and heterogeneity

This study was conducted by identifying the literature records using the PRISMA method. I made use of a plethora of search databases, such as PubMed, ScienceDirect and Google Scholar. The findings of the search are depicted on the flowchart below.

PRISMA 2020 flow diagram for new systematic reviews which included searches of databases, registers and other sources



\*Consider, if feasible to do so, reporting the number of records identified from each database or register searched (rather than the total number across all databases/registers).

\*\*If automation tools were used, indicate how many records were excluded by a human and how many were excluded by automation tools.

Source: Page MJ, et al. BMJ 2021;372:n71. doi: 10.1136/bmj.n71.

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From a total of 5,603 records, I removed 5,333 as they were irrelevant to this thesis after a title screening. For this research, I used keywords reported in Appendix A. As the research strings generated very broad results, I committed advanced research by combining the search strings. Finally, a total of 50 studies were assessed for eligibility based on the full text. At this stage, I made use of the inclusion/exclusion criteria to check eligibility. Accordingly, 3 articles have been excluded because they were written in a language other than English whereas 20 were

excluded because neither they did not refer to public healthcare goals. Lastly, 6 studies were deemed irrelevant because their focus was on geographies other than the US or EU healthcare context. At last, from the database search, 21 studies were included in this qualitative meta-analysis.

The included articles showed heterogeneity in terms of (1) the type of healthcare provider (nursing homes, acute care hospitals, short-term general hospitals, and different speciality practices); (2) the country (EU State Member or USA); (3) the type of the study (narrative or empirical, explanatory or descriptive); (4) the period of each study (although the great majority was conducted from 2005 onwards); (5) the indicators that were used for the empirical analysis (subdivided into two categories: financial performance indicators and quality indicators). As per the third dimension of heterogeneity arised from the literature review, empirical studies rely on statistical analysis of specific datasets, offering objective and replicable results. In contrast, narrative reviews provide a critical synthesis of existing literature without standardized methods of data selection, making them more susceptible to author bias in the choice and interpretation of sources. From a methodological standpoint, empirical studies are generally favored for their robustness. Nonetheless, narrative reviews can still offer valuable insights, especially when used to complement empirical findings. In this study, nine articles were identified as narrative reviews, as presented in the table below. Their conclusions are incorporated to support and enhance the findings drawn from empirical research.

It is imperative to stress that financial performance indicators are particularly relevant to this study as they assess the efficiency of healthcare providers, which is one of the core goals outlined in the theoretical framework of this thesis. Quality, another key public healthcare objective, is also central to this investigation and is considered an intrinsic goal. A third major goal, identified through the literature and aligned with the United Nations Sustainable Development Goals, is universal access to healthcare. Together, these three parameters—efficiency, quality, and universal access—constitute the evaluative lens through which this thesis examines the broader impact of private equity investment in the healthcare sector. Importantly, they also serve as critical indicators for identifying the emergence of monopolistic tendencies within provider markets. When any of these dimensions is significantly compromised—when efficiency gains plateau or reverse due to lack of competition, when quality declines under cost-cutting pressures, or when access becomes geographically or socioeconomically restricted—it may suggest that consolidation strategies are producing market conditions consistent with monopoly behavior. By evaluating PE influence through these benchmarks, this study aims to move beyond traditional antitrust metrics and instead assess how financialization and concentrated ownership structures may alter the foundational goals of healthcare delivery. Thus, the intersection of private equity strategies with these three public healthcare objectives provides a meaningful basis for diagnosing the potential emergence of monopolistic dynamics in contemporary healthcare systems.

## 4.2 Results by category of studies

Table 1 shows the descriptive analysis of the articles that were reviewed in this thesis.

Table 1

no	Study and Country		Study type	Period of Analysis	Healthcare field	Healthcare Goal			Result of the Analysis		
	Author	Country				Quality	Efficiency	Equitable Access	For	Against	Mixed
1	C. Henry	USA	Empirical	2023	UGCs			✓		✓	
2	N. Lietz; Z. Song	USA	Narrative	2024	Private Hospitals	✓	✓	✓			✓
3	N. Beaulieu	USA	Empirical	2020	Private Hospitals	✓				✓	
4	Appelbaum & Batt	USA	Empirical	2020	Private Hospitals	✓				✓	
5	A. Gupta	USA	Empirical	2021	Nursing Homes	✓	✓			✓	
6	Winabal et al.	EU	Empirical	2010-2011	Nursing homes	✓	✓				✓
7	Eren (2016)	EU	Narrative	2016	Private Hospitals			✓		✓	
8	Bouddiouan	EU	Master Thesis	2008	for-profit hospitals	✓	✓		✓		
9	Bruch et al. (2020)	USA	Empirical	2005-2013	Acute Care Hospitals	✓	✓		✓		
10	Galetta et al.	USA	Narrative	2019	Orthopedic practices	✓	✓		✓		
11	Bruch, Zeltzer & Song	USA	Empirical	2018	Acute Care Hospitals	✓					✓
12	B. Rechel; F. Tille	EU	Narrative	2023	Primary Care	✓	✓				✓
13	Huang & Bowblis	USA	Empirical	2005-2010	Nursing Homes	✓			✓		
14	Bos & Harrington	USA	Case Study	2000-2012	Nursing Homes	✓	✓				✓
15	Braun et al	USA	Empirical	2012-2017	Dermatology	✓	✓				✓
16	Kirsch & Kapoor	USA	Narrative	2020	Urology practices	✓	✓		✓		
17	Braun et al	USA	Empirical	2020	Nursing Homes	✓				✓	
18	L. Olson	USA	Narrative	2022	Private Practices and Hospitals	✓		✓		✓	
19	D. Brahmhatt & W. Schpero	USA	Narrative	2024	Private Hospitals	✓	✓				✓
20	L. Unruh	USA	Narrative	2025	Physician specialties	✓	✓	✓			✓
21	B. Goodair & A. Reeves	US & EU	Narrative	2024	Private Hospitals	✓	✓	✓		✓	

All articles were grouped and defined by country, the period of analysis, the type of the study, the healthcare field, the public healthcare goal they discussed, and the conclusion the authors reached for each of their studies (i.e. for, against, mixed).

### 4.2.1 Results by Country

As expected, given the dearth of knowledge about this topic within the European Union, I was able to find only 5 articles I deem relevant for the scope of this thesis (Winabal et al., 2010; Eren, 2016; Bouddiouan, 2008; B. Rechel; F. Tille, 2023; B. Goodair & A. Reeves, 2024) whose main topic was about PE investments in the European healthcare system. On the other hand, the vast majority of the studies (16) was related to the US healthcare industry (C. Henry, 2023; N. Lietz; Z. Song, 2024; E. Appelbaum, 2020; T. Beaulieu, 2020; A. Gupta, 2021; Bruch et al., 2020; Galetta et al.; Bruch, Zeltzer & Song, 2018; Huang & Bowblis, 2010; Bos & Harrington, 2012; Braun et al, 2017; Kirsch & Kapoor, 2020; Braun et al, 2020; L. Olson, 2022; D. Brahmhatt & W. Schpero, 2024; L. Unruh, 2025).

### 4.2.2 Results by type of healthcare provider

I tried to gather as many studies from a broader sample of a large number of different healthcare practices. In doing so, I will attempt to generalize my results. Out of the eligible studies included in my analysis, five focused specifically on the nursing home (NH) sector (Braun et al., 2020; Winblad et al., 2017; Huang & Bowblis, 2019; Bos & Harrington, 2017; Gupta et al., 2020). Within the broader healthcare landscape, the NH industry is one of the most heavily targeted by private equity investors, particularly in the United States. This high level of investment helps explain why it is also the most extensively studied subsector. As noted by Gupta et al. (2020), a key advantage of examining nursing homes lies in the availability of robust, data-driven metrics for assessing overall facility quality—something largely absent in other healthcare fields. Furthermore, the sector holds strong profit potential due to demographic trends such as a growing elderly population.

Three studies in our dataset pertain to private medical practices. One of these address dermatology (Braun et al., 2021), one looks at PE involvement in urology (Kirsch & Kapoor, 2020), and the last one focuses on orthopedic practices, with an emphasis on spine surgery (Galetta et al., 2019).

Lastly, twelve of the twenty-one articles examine hospitals. One articles explores Urgent Care Centres (UGCs) (C. Henry, 2023). Two explore acute care facilities (Bruch et al., 2020; Bruch, Zeltzer & Song, 2020), seven looks broadly at PE investment in the private hospital sector (Eren, 2016; E. Appelbaum, 2020; N. Lietz; Z. Song, 2024; T. Beaulieu, 2020; L. Olson, 2022; D. Brahmhatt & W. Schpero, 2024; L. Unruh, 2025; B. Goodair & A. Reeves, 2024) and one discusses for-profit hospitals, some of which are owned by PE firms (Bouddiouan, 2008). Lastly, it is imperative to highlight that, apart from scientific papers, I found the compelling evidences provided by the seminal book written by L.K Olson of utmost relevance given the scope of this analysis.

From the findings, we can identify three primary categories of healthcare providers studied in the literature. Nursing homes emerge as the most frequently covered group. The second cluster includes various private practices, while the third consists of hospitals in general.

### 4.2.3 Results by healthcare goal

The theoretical framework of this study identifies three key public objectives in healthcare. The first is quality of care, which reflects the public's expectation for high standards in medical services. Most of the selected articles focus on this dimension of care delivery (Bruch et al., 2020; Galetta et al., 2019; Bruch, Zeltzer & Song, 2020; Braun et al., 2020; Winblad et al., 2017; Kirsch & Kapoor, 2020; Huang & Bowblis, 2019; Bos & Harrington, 2017; Braun et al., 2021; Bouddiouan, 2008; Gupta et al., 2020; N. Lietz & Song, 2024; A. Estache, 2023; E. Brown, 2024; B. Rechel & F. Tille, 2023; L. Olson, 2022; D. Brahmbhatt & W. Schpero, 2024; L. Unruh, 2025 ).

The second goal is efficiency, which encompasses the healthcare system's economic performance and resource management. Thirteen out of the twenty-one articles approach the topic from a financial or cost-efficiency perspective (Bruch et al., 2020; Galetta et al., 2019; Winblad et al., 2017; Kirsch & Kapoor, 2020; Bos & Harrington, 2017; Braun et al., 2021; Bouddiouan, 2008; C. Henry, 2023; N. Lietz & Z. Song, 2024; E. Brown, 2024; B. Rechel & F. Tille, 2023; L. Olson, 2022; L. Unruh, 2025 ). As it might be already evident, a large number of these articles address both quality and efficiency simultaneously.

The third fundamental objective is access to healthcare, which is a cornerstone of public health policy and one of the United Nations' Sustainable Development Goals (Agenda 2030). Ensuring universal access is critical, as it directly impacts the achievement of other global health targets. Despite its importance, this goal receives the least attention in our sample—only four articles explicitly explore access-related issues (Eren, 2016; C. Henry, 2023; L. Unruh, 2025; B. Goodair & A. Reeves, 2024 ).

### 4.2.4 Results by each studies' reached conclusion

This classification allows us to determine how many studies support, oppose, or present mixed views on private equity involvement in the healthcare sector. Studies with inconclusive or balanced findings are grouped under a separate “mixed” category. In cases where authors do not clearly express a stance, I assign the study to one of the three categories—supportive, critical, or mixed—based on its alignment with the theoretical framework. As previously noted, empirical analyses will be the primary focus of discussion, while other study types, such as narrative reviews, will be used to enrich the overall analysis. The outcomes of this classification are presented in Table 2.

Table 2

<b>Table 2: Results by conclusions</b>		
Studies in favor of PE	Studies against PE	Studies with mixed results
Bouddiouan (2008)	Braun et al. (2020)	N. Lietz; Z. Song (2024)
Bruch et al. (2020)	Eren (2016)	Winabal et al. (2011)
Kirsch & Kapoor (2020)	A. Gupta (2021)	Bruch, Zeltzer & Song (2018)
Huang & Bowblis (2019)	N. Beaulieu (2020)	B. Rechel; F. Tille (2023)



Galetta et al. (2019)	C. Henry (2024)	Bos & Harrington (2012)
	Appelbaum & Batt (2020)	Braun et al (2021)
	L. Olson (2022)	L. Unruh (2025)
	Goodair & Reeves (2024)	D. Brahmabhatt (2024)

### 4.3 Results of the literature review

In this subsection, I will shed light on the results of each study and category. The results will be presented, firstly, with regards to each study's outcome (i.e. for, against, mixed) and, secondly, according to the type of healthcare provider. This selection will allow us to better understand and compare the results and reduce the rate of heterogeneity of our sample as the great majority of the studies have more comparable characteristics for these two criteria.

#### 4.3.1 Studies that favor PE investments in the healthcare industry

According to table 2, five studies are in favor of PE involvement in the healthcare sector (Bouddiouan, 2008; Bruch et al., 2020; Kirsch & Kapoor, 2020; Huang & Bowblis, 2019; Galetta et al., 2019). Each study focuses on a different type of hospital, making further categorization of the results unfeasible. The studies supporting private equity involvement in healthcare primarily assess the issue from a quality outcomes perspective. Additionally, four of these studies (Bruch et al. (2020), Galetta et al. (2019), Kirsch & Kapoor (2020), and Bouddiouan (2008)) also evaluate the economic performance of PE-owned healthcare providers, suggesting the model's financial effectiveness. While three of the studies are not peer-reviewed and may carry a risk of author selection bias, they still contribute valuable insights. Except for Bouddiouan (2008), which examines the German and UK healthcare systems, all studies are based on the U.S. context.

Bruch et al. (2020) analyzed the effects of private equity acquisitions on acute care hospitals in the United States between 2005 and 2017. Their study found that PE ownership correlated with improved financial metrics, including higher annual net income, increased hospital charges, elevated charge-to-cost ratios, and a higher case mix index (a proxy for quality based on Medicare discharges). In terms of care quality post-acquisition, the study observed notable improvements in process-related quality measures at PE-owned hospitals compared to non-PE hospitals. However, the authors could not definitively determine whether these improvements stemmed from actual enhancements in care or from better compliance with quality metrics—possibly influenced by pay-for-performance incentives.

Galetta et al. (2019) approached the issue from a different yet still relevant angle. In their narrative review, they outlined the two main reimbursement systems in the U.S. healthcare sector. The first, known as the fee-for-service model, has been a major contributor to the escalating costs of healthcare over the years. Simply put, this system is volume-based, with

insurers compensating providers for each individual procedure, thereby encouraging excessive use of resources and, in some instances, exposing patients to superfluous or even unnecessary treatments. On the other hand, the second system, called bundled payments, presents a more holistic and outcome-oriented method, where a single, adjusted payment covers all treatments and ancillary services (e.g., diagnostic scans, rehab, etc.) tied to an episode of care, including any complications. According to the authors, this model enables private equity to cut costs without sacrificing quality. These cost savings come as a result of incentivizing providers to improve health outcomes, shorten hospital stays, and adopt team-based care strategies. Furthermore, the authors stress that, under the right conditions—namely, strategic management actions like streamlining inefficient cost structures through consolidation—private equity can serve both clinical and public interests. This alignment encourages providers and insurers to deliver high-quality, affordable care in an evolving healthcare system. In this scenario, all parties benefit: PE firms increase profits by lowering expenses through reduced patient stays; providers maintain quality to meet performance targets; and the general public gains access to more affordable care.

Kirsch and Kapoor (2020) examined PE's role in consolidating the urology sector. They emphasized that independent urologists often struggle to compete in a market increasingly dominated by large healthcare platforms. However, PE partnerships can offer significant benefits, including access to capital, expansion of services, and integration of new technologies. Additionally, PE firms can provide managerial expertise and access to broader networks of suppliers and partners. The authors suggest that these advantages not only support financial goals but can also contribute to reducing healthcare costs for payers—benefiting patients indirectly.

In their empirical study, Huang and Bowlblis (2019) investigated the impact of PE ownership on care quality in for-profit nursing homes, using 17 indicators to assess outcomes for long-stay residents. Their analysis found no consistent quality differences between PE-owned and non-PE-owned facilities. Contrary to widespread concerns, their findings suggest that PE ownership does not inherently diminish care quality, providing a counterpoint to the belief that profit motives might harm vulnerable populations.

Bouddiouan (2008), in her master's thesis at Erasmus University Rotterdam, expanded the scope by exploring PE involvement in healthcare in Germany and the UK, with reflections on implications for the Dutch system. Although her work is not peer-reviewed, it was vetted academically through university protocols. She found that, despite data limitations, equity investment did not negatively affect most performance indicators in the studied markets. However, she argued that public equity hospitals demonstrated more consistent outcomes compared to those under PE ownership. She warned that performance volatility—linked to aggressive debt structures and frequent ownership changes—could undermine public objectives. To mitigate potential risks from market and contractual failures, she recommended stronger government regulation of PE involvement in healthcare.

### **4.3.1.1 Potential Explanation of the Positive Findings**

After reviewing the favorable outcomes reported in studies supporting private equity participation in healthcare, I now attempt to explore potential reasons behind these results.

One explanation for the improved financial outcomes highlighted by Bruch et al. (2020) and Kirsch & Kapoor (2020) could be the selection of patients based on the profitability of their care. New managerial approaches might prioritize “high-revenue” patients—those requiring extended inpatient stays, multiple diagnostics, or complex surgical procedures. This practice, however, could contribute to disparities in healthcare access. Additionally, better financial results might stem from measures like cutting operational expenses and raising patient charges. Furthermore, gains in net profit could also be linked to aggressive coding tactics, where enhanced diagnostic procedures result in more expensive DRG classifications.

Regarding quality improvements, a likely explanation is stricter compliance with regulatory standards or increased efforts to obtain quality incentives offered through pay-for-performance schemes. Post-acquisition, quality could rise as physicians benefit from PE firms’ administrative support, allowing them to maintain their clinical practices and concentrate on patient care. In essence, they are freed up to focus solely on medicine. Furthermore, another explanation could be the interest to build a strong reputation for higher returns may also result in improved quality and financial performance. For example, Kirsch & Kapoor (2020) suggest that PE involvement can support independent urology clinics in expanding and integrating best practices, boosting revenue, and enhancing competitiveness. Moreover, Huang & Bowlblis (2019) found no significant decline in care quality following private equity acquisitions of nursing homes. They proposed that this counterintuitive outcome might be due to the strategic selection behavior of PE firms. Rather than acquiring underperforming or financially distressed facilities—which might require substantial investment to improve operations and care quality—PE investors appear to target nursing homes that are already financially stable and operationally sound. This acquisition strategy minimizes turnaround risk and allows PE firms to extract value through operational efficiencies or financial restructuring without needing to overhaul clinical standards or staff practices. As a result, the continuity in pre-existing care processes and staffing structures may contribute to the maintenance of quality levels post-acquisition. Noticeably, this finding challenges some of the broader concerns about quality deterioration under PE ownership and highlights the importance of acquisition selection criteria in shaping post-deal outcomes in healthcare

### **4.3.2 Studies that are against PE involvement in the healthcare sector**

Eight studies turned out to be against private equity investments in the healthcare industry (Braun et al., 2020; Eren, 2016; A. Gupta, 2021; N. Beaulieu, 2020; C. Henry, 2024; E. Appelbaum & R. Batt, 2020; L. Olson, 2022; B. Goodair & Reeves, 2024). Among them, five studies take into account the impact of PE ownerships on the quality of the care delivery (Braun et al., 2020; Gupta et al., 2020; N. Beaulieu, 2020; E. Appelbaum & R. Batt, 2020; B. Goodair & Reeves, 2024) and four studies mention the third intrinsic public healthcare goal, the equitable access to healthcare (L. Olson, 2022; Eren, 2016; C. Henry, 2023; B. Goodair & Reeves, 2024). Furthermore, two studies refer to more than one EU member State (Eren, 2016; B. Goodair & Reeves, 2024). Lastly, one study takes into consideration urgent care centers (C.

Henry, 2024) whereas two studies consider for-profit nursing homes (A. Gupta, 2021; Braun et al., 2020). The remaining studies concern for-profit and private hospital on a more general note.

Braun et al. (2020) investigated the performance of nursing homes owned by private equity firms in the United States during the COVID-19 pandemic. Their findings indicated that PE-owned facilities showed similar outcomes to other ownership types (including for-profit, non-PE, nonprofit, and public homes) in terms of staffing levels, COVID-19 case rates, and resident mortality. Nonetheless, the study identified notable shortages in personal protective equipment (PPE), including items such as 95 masks, gowns, eye protection, gloves, and sanitizers. In conclusion, the authors suggested that these shortages could potentially be linked to cost-reduction practices commonly implemented by PE-owned institutions.

Gupta et al. (2020) examined the impact of private equity ownership on patient outcomes and healthcare spending in nursing homes. Through detailed empirical analysis, they discovered that residents in PE-owned facilities faced a roughly 10% higher risk of mortality, along with negative effects on other health indicators such as mobility and pain levels. Additionally, the study revealed a 19% increase in the average billing per patient stay. One possible explanation for the higher mortality rate, according to the authors, is a 50% greater likelihood of patients being administered antipsychotic medications in PE-owned homes—despite such treatments being generally discouraged in elderly patients due to their link with higher death rates. On an institutional level, the researchers observed reductions in nursing care hours per resident and worsening compliance with Medicare care standards, as reflected in increased deficiencies. These declines in staffing and regulatory adherence may be contributing factors to the observed rise in mortality, given the critical role staff levels play in maintaining care quality.

Beaulieu et al. (2020) carried out a pivotal study that investigates whether hospital mergers and acquisitions in the United States lead to measurable improvements in the quality of care. Amid increasing consolidation in the healthcare sector, it is often argued that mergers can enhance operational efficiency, streamline services, and ultimately raise the standard of care for patients. However, this study aims to test those assumptions through a data-driven analysis. The authors focused on a cohort of 246 hospitals that were acquired between 2009 and 2013 and compared them with 1,986 hospitals that did not undergo a change in ownership during the same time frame. Using a difference-in-differences methodology, the study examined how quality of care indicators evolved before and after acquisition, relative to the control group. The primary data sources included metrics from Medicare's Hospital Compare database, which evaluates hospitals based on patient experience, 30-day readmission and mortality rates, and adherence to clinical process measures.

The results revealed that mergers did not lead to improved quality of care as initially hypothesized. On the contrary, patient experience scores declined modestly in hospitals that were acquired. This decline, which was statistically significant, reflected a drop in patient satisfaction equivalent to moving from the 50th to the 41st percentile. In terms of clinical outcomes, such as 30-day readmission and mortality rates, the study found no significant differences between acquired and non-acquired hospitals, suggesting that consolidation did not translate into better health outcomes. Furthermore, while certain clinical-process measures did show improvement, much of that progress occurred prior to the mergers, indicating that it was unlikely a direct result of the acquisition itself.

In their 2020 report, Eileen Appelbaum and Rosemary Batt present a comprehensive analysis of the growing role of private equity firms in the U.S. healthcare sector. The report critically evaluates the effects of PE ownership on healthcare delivery, cost structures, and patient

outcomes, with particular attention to whether financial gains achieved by investors come at the expense of broader public health interests.

Appelbaum and Batt adopt a qualitative, case-based methodology. Rather than relying solely on statistical models, the authors synthesize data from industry reports, financial disclosures, policy documents, and investigative journalism, offering a multi-faceted examination of the PE model across different healthcare subsectors. Their focus includes hospitals, outpatient centers such as ambulatory surgery and urgent care facilities, physician staffing services—especially in emergency medicine—and revenue cycle management companies involved in billing and debt collection. By analyzing the structure and consequences of leveraged buyouts, the authors uncover systemic practices that shape patient and provider experiences under PE ownership. A central finding of the report is that the PE business model, as widely explained in the theoretical framework of this thesis, is driven by short investment horizons and expectations of high returns, frequently leading to increased financial pressure on the acquired healthcare entities. As a result, this pressure manifests through cost-cutting strategies such as reductions in staffing levels, closure of unprofitable units, and decreased investment in infrastructure or long-term innovation. Furthermore, the financialization of healthcare through practices like dividend recapitalizations and high management fees further extracts value from the clinical setting and redirects it to PE investors.

The report highlights particularly harmful effects in physician staffing services, where PE-owned firms often operate out-of-network to maximize reimbursement rates. This practice has contributed to the rise in “surprise medical billing,” in which patients receive unexpectedly high charges for services rendered during emergencies, often without the ability to choose their provider. The authors argue that such practices erode patient trust and contribute to the broader unaffordability of healthcare.

In the area of revenue cycle management, the report details how PE-owned firms pursue aggressive debt collection strategies, disproportionately affecting economically vulnerable patients. These practices often prioritize profitability over equitable access to care, leading to greater financial stress and potential avoidance of medical treatment due to cost concerns.

Appelbaum and Batt conclude that private equity investment in healthcare tends to benefit investors and executives while posing risks to patients, healthcare workers, and system stability. Interestingly, they stress that the extractive nature of PE’s financial strategies undermines care quality and public health outcomes.

In *Ethically Challenged*, Laura Katz Olson critically examines the increasing involvement of private equity firms in the U.S. healthcare sector. She argues that the PE business model, driven by the pursuit of outsized returns for investors, often leads to practices that prioritize financial gains over patient care and ethical standards.

Olson begins by demystifying the financial mechanisms of PE, explaining how firms acquire healthcare providers using leveraged buyouts, burdening these entities with significant debt. This debt pressure necessitates aggressive cost-cutting measures, which can compromise the quality of care. The book delves into various healthcare segments affected by PE ownership, including physician practices, dental clinics, home care, hospice services, substance abuse treatment centers, autism services, and emergency medical transport. In each case, Olson provides detailed accounts of how PE strategies—such as consolidating providers to form large chains, selling off real estate assets, and focusing on high-reimbursement services—can lead to negative outcomes for patients and healthcare workers. A significant concern highlighted is the phenomenon of “surprise billing,” particularly in emergency services like air ambulances, where patients receive exorbitant charges due to out-of-network providers. Olson notes that PE firms have capitalized on such loopholes, often at the expense of vulnerable populations. Throughout the book, Olson emphasizes that the detrimental effects observed are not isolated

incidents but are indicative of systemic issues inherent in the PE model. She underscores that the relentless focus on profitability can lead to understaffing, reduced investment in essential equipment, and a shift away from patient-centered care. In her conclusion, Olson asserts that the infiltration of PE into healthcare poses a significant threat to the integrity and accessibility of medical services in the U.S.

Eren (2016) carried out a study that differs from those previously discussed, focusing on private equity (PE) investments in Turkey's healthcare sector in light of the reforms implemented during the 2000s. Among his findings, one in particular aligns with the focus of our research. He contends that both the influx of PE investment and the 2007–2008 global financial crisis exacerbated disparities in access to healthcare. This aspect of public healthcare—equitable access—remains one of the least explored components of the SDG-3 goals, as highlighted in our theoretical framework. The author explains that following the reforms, PE firms were drawn to the healthcare industry and began exerting influence through the application of their financial strategies, which led to significant organizational shifts. A major contributor to the widening inequality, he notes, is the practice of extra-billing, which effectively limits access to care for individuals from lower- and middle-income groups.

In their study, C. Henry and J.M. Loomis (2024) conclude that private equity investment is fundamentally reshaping the landscape of healthcare in the United States by reframing healthcare provisioning as a site for financial speculation rather than a public good. Drawing on a feminist political economy perspective, the authors argue that PE's operational strategies—characterized by short-term profit motives, leveraged buyouts, and aggressive cost-cutting—are having tangible effects on both the geographies of care and the quality of services provided. Through the analysis of urgent care centers (UCCs) and telehealth, the authors demonstrate that while these models may appear to expand access to care, they often do so unevenly. UCCs tend to concentrate in suburban and urban markets where patients are more likely to be insured and able to pay, leaving rural and underserved communities with little to no increase in access. Similarly, telehealth—though promoted as a flexible, scalable solution—is reliant on assumptions about the availability of digital infrastructure, stable housing, and unpaid domestic labor, disproportionately burdening women and low-income households. The study highlights that care in PE-backed systems is increasingly siloed, standardized, and removed from holistic, coordinated healthcare delivery, with implications for both patients and healthcare workers. Importantly, the authors emphasize that the short-term, extractive nature of PE investment is misaligned with the long-term, intergenerational needs of public health systems, raising significant ethical, political, and practical concerns about the sustainability and equity of healthcare under financialized ownership.

In their comprehensive review, Goodair and Reeves examine the impact of healthcare privatisation—particularly through outsourcing services to private providers—on the quality of care in high-income countries over the past four decades. Analyzing studies from nations including the USA, UK, Germany, Italy, Canada, South Korea, Croatia, and Sweden, they find that privatisation often correlates with negative outcomes for patient care.

Key findings indicate that hospitals transitioning from public to private ownership tend to achieve higher profits primarily by reducing staff numbers and selectively admitting patients with better insurance coverage. This cost-cutting approach is associated with increased patient infection rates, higher treatable mortality rates, and overall declines in care quality. Notably, none of the reviewed studies reported unequivocally positive effects of privatisation on health outcomes.

While some instances, such as in Croatia, showed improvements in patient access through innovations like out-of-hours telephone consultations, these benefits were exceptions rather than the norm. The overarching conclusion is that the scientific evidence supporting further healthcare privatisation is weak, and such reforms may compromise the quality and equity of patient care.

#### **4.3.2.1 Potential explanation of the negative findings**

The overwhelmingly critical tone across the reviewed studies regarding private equity ownership in healthcare can be attributed to the fundamental incompatibility between the PE investment model and the ethical imperatives of healthcare delivery. On top of that, a plethora of core dynamics help explain the patterns observed.

First and foremost, the financial structure of PE buyouts inherently promotes short-termism. Indeed, PE firms typically acquire healthcare assets using leveraged buyouts, which saddle the acquired organizations with significant debt. This creates immediate financial pressure to service interest payments, often within a limited holding period of four to seven years. In such a compressed timeframe, the incentive structure favors rapid cost-cutting, fee extraction, and revenue maximization strategies. As evidenced in studies by Appelbaum and Batt (2020) and Olson (2022), these strategies include dividend recapitalizations, out-of-network billing, and reductions in staffing levels, all of which may compromise quality of care and patient safety.

Second, the transfer of operational logic from the financial sector to the healthcare sector is problematic. PE firms often apply business principles designed for scalable, commodified industries to institutions rooted in public service and human welfare. This includes the emphasis on standardization, fragmentation of services, and a preference for high-margin, low-risk procedures over complex or chronic care. C. Henry (2024), for instance, highlights how this logic leads to geographically selective expansions (e.g., urgent care centers concentrated in wealthier, insured neighborhoods) therefore exacerbating spatial inequities in access to care.

Third, staffing reductions and deterioration in regulatory compliance, as demonstrated in Gupta et al. (2020), reflect cost-cutting imperatives that directly undermine the human infrastructure necessary for delivering quality care. In clinical settings such as nursing homes, lower staff-to-patient ratios are associated with increased mortality, poorer mobility, and a greater likelihood of inappropriate medication use, as PE-backed facilities seek to maintain profitability while meeting minimal regulatory requirements.

Fourth, the opacity of PE structures and limited regulatory oversight enables practices that extract value with minimal accountability. As Olson (2022) points out, asset stripping, real estate sell-offs, and complex ownership chains obscure responsibility and make enforcement of care standards more difficult. To further deliver on this point, Beaulieu et al. (2020) also show that mergers and acquisitions, frequently associated with PE strategies, do not reliably improve clinical outcomes—indicating that the touted efficiency gains from consolidation are often illusory.

Fifth, the misalignment of values between healthcare and finance emerges as a recurring theme. Healthcare systems operate under a moral and social mandate to promote equitable access and

long-term population health. PE, by contrast, is governed by fiduciary duties to maximize returns for a small group of investors. Eren (2016) and Henry (2024) both highlight how this tension plays out in the exclusion of underserved populations and the increased reliance on out-of-pocket payments or extra-billing, effectively limiting care for lower-income individuals.

Lastly, regulatory arbitrage and exploitation of policy loopholes further explain the negative findings. Surprise billing, as emphasized by Appelbaum and Batt (2020) and Olson (2022), reveals how PE firms operate in grey zones of reimbursement policy, extracting high charges from vulnerable patients while avoiding traditional accountability mechanisms.

### **4.3.3 Studies with mixed results about PE involvement in the healthcare sector**

The authors of eight studies found no evidence of either negative or positive findings regarding private equity investments in healthcare practices but, rather, their position tends to be neutral due to the inconsistency of their results (N. Lietz & Z. Song, 2024, Winabal et al., 2011, Bruch, Zeltzer & Song, 2018, B. Rechel; F. Tille, 2023, Bos & Harrington, 2012, Braun et al., 2021; L. Unruh, 2025; D. Brahmabhatt, 2024). Each of these studies touches on aspects related to care quality and. Additionally, each of the studies examines the financial outcomes of PE-owned healthcare providers, particularly in terms of operational efficiency. Except for the study by Winblad et al. (2017), which investigates the Swedish healthcare system, all others focus on the U.S. context. Two of these studies analyze data from nursing homes (Winblad et al., 2017; Bos & Harrington, 2017). The others look at different settings: acute care hospitals (Bruch, Zeltzer & Song, 2020), dermatology clinics (Braun et al., 2021), and hospitals and care providers on a more general note (N. Lietz & Z. Song, 2024; B. Rechel; F. Tille, 2023).

Winblad et al. (2017) explored variations in care quality between public and private nursing homes in Sweden during 2010 and 2011. They note that Sweden's nursing home sector is primarily public and profit-driven, with private equity (PE) firms controlling roughly 11% of the market. Drawing from Donabedian's framework for assessing healthcare quality, the authors distinguished between structural and processual quality indicators. The Donabedian model serves as a conceptual tool to evaluate healthcare services by examining three main components: "structure," "process," and "outcomes." Structure refers to the setting in which care takes place—such as buildings, equipment, staff, and finances. Process includes the interactions between healthcare providers and patients during treatment. Outcomes relate to the impact of care on the health of individuals and communities (Donabedian, 1988). In their study, Winblad et al. applied 14 quality indicators—seven structural and seven process-based. Their findings suggest that ownership status does influence quality in Swedish nursing homes, though this effect differs depending on the indicator used. Regarding structural indicators, such as staffing levels and facilities, public homes scored better in two areas: number of employees per resident and access to private rooms with kitchens. On the other hand, private providers showed stronger results in several process-oriented indicators, including user involvement, updated care plans, and medication assessments. The study also reports no significant differences in structural or processual quality between for-profit and PE-owned nursing homes. The authors suggest that this mixed evidence may stem from competitive pressures on private providers, which encourage both cost reduction and efforts to display high-quality care. Moreover, they argue that private providers may prioritize improvements in less costly quality aspects. Finally,



they attribute some of the processual quality gains in private nursing homes to local government incentives encouraging screening routines for risks like falls and pressure ulcers, which ultimately result in fewer care deficiencies.

Lietz and Song (2024) adopts a comprehensive and critical approach to evaluate the role of private equity in the healthcare sector, combining a wide-ranging literature review with the analysis of recent large-scale empirical studies. The authors focus on both the clinical and financial outcomes of PE acquisitions and assess whether these investments enhance or hinder healthcare quality and efficiency. Methodologically, the paper synthesizes findings from peer-reviewed academic research, using comparative data from acquired and non-acquired healthcare providers over time. Many of the referenced studies utilize quasi-experimental designs, such as matched difference-in-differences models, and rely on extensive datasets from public payers like Medicare. For example, one study examined Medicare Part A claims from over four million patients, comparing adverse events across PE-acquired and non-PE hospitals, while another used hospital-level summary data to assess operational and financial changes. Across the studies reviewed, the authors observe that PE ownership is associated with improved financial performance, including increased operating margins, greater revenue per discharge, and restrained growth in operating costs. However, these financial gains often derive from strategies such as reducing staffing levels, shifting labor from higher-paid clinicians to lower-cost providers, and modifying billing practices—tactics that raise concerns about sustainability and alignment with patient-centered care. With respect to quality, the outcomes are mixed but frequently negative. Notably, the paper cites empirical evidence showing statistically significant increases in hospital-acquired conditions—such as falls and infections—following PE acquisitions, suggesting that cost-saving measures may compromise patient safety. The authors conclude that while PE investments may offer certain operational efficiencies, there is limited evidence that these translate into improved patient outcomes or systemic benefits. In fact, many of the efficiencies appear to benefit investors disproportionately, often at the expense of care quality. Thus, the authors advocate for further rigorous research to address this significant gap in the evidence base. They emphasize the need for comprehensive, data-driven studies that can more precisely evaluate the long-term effects of private equity ownership on patient outcomes, care quality, access, and system-wide costs.

Bos and Harrington (2017) examined the operations of a nursing home chain following its acquisition by a private equity firm, using a combination of qualitative and quantitative methods. Their study focused on three main areas: corporate strategy, financial performance, and resident well-being. As part of their strategic analysis, they looked into how staffing levels were managed post-acquisition; for financial performance, they assessed net income per patient day; and for resident well-being, they used deficiency rates as a proxy for care quality. To reinforce their qualitative findings, they conducted interviews with various stakeholders. The results revealed a significant decline in staffing levels, while net income per patient day improved in the years following the acquisition. However, deficiency rates remained aligned with the national average, indicating that care quality did not improve under PE ownership. The authors concluded that the study presents mixed outcomes, largely influenced by the specific strategies implemented by the PE firm and the operational context of the acquired company.

In a separate empirical analysis, Bruch, Zeltzer & Song (2020) identified no notable differences in economic outcomes between PE-owned acute care hospitals and their non-PE-owned counterparts in the United States during 2018. Regarding the qualitative aspects of their research, they observed that PE-owned hospitals were predominantly situated in rural regions

with lower median household incomes. Additionally, they reported that these hospitals employed fewer full-time staff per occupied bed and had marginally lower patient experience scores in comparison to the non-PE hospitals in their sample. Nevertheless, as quality-related issues were beyond the primary focus of their study, the authors were unable to determine whether these findings had any meaningful implications for care quality.

Braun et al. (2021) conducted a relevant study examining the influence of private equity ownership on dermatology practices, specifically focusing on pricing, utilization, expenditures, and patient volume. Their research tracked PE acquisitions of dermatology practices between 2012 and 2017. The study found that both the prices charged by dermatologists for standard visits and the number of patients seen per dermatologist increased slightly over time following PE acquisition. The authors suggest that these findings may indicate that PE-owned practices leverage their market presence to negotiate higher reimbursement rates from commercial insurers while also boosting patient volume, partly through greater reliance on advanced practice providers. In contrast, the study did not reveal any statistically significant differences between PE and non-PE practices in terms of total healthcare spending, the overall use of dermatology services per patient, or the frequency of high-volume, high-revenue procedures.

Bernd Rechel and colleagues explore the growing role of private equity in European primary care, with a balanced and cautious tone. Interestingly, their paper shed light on the increasing number of PE deals across Europe, especially in some countries more than others (i.e. UK and Germany). Noticeably, the authors do not take a clearly critical or supportive stance; instead, they adopt a neutral and evidence-oriented approach that underscores the need for further investigation and informed policymaking. While acknowledging that PE investment can bring certain benefits—such as enhanced operational efficiency, better resource allocation, and modernized management practices—the authors also recognize the risks that such investments might pose. These include potential reductions in care quality due to cost-cutting, the prioritization of profits over patients, and increased market consolidation that may limit access to care. Rather than offering definitive conclusions, the article emphasizes the lack of robust evidence regarding the long-term effects of PE ownership on healthcare outcomes. The authors call for systematic research and improved transparency to better understand how PE involvement influences care quality, staff working conditions, and health equity. They also stress the importance of regulatory oversight to ensure that financial interests are balanced with ethical and professional healthcare standards. In essence, the article provides a thoughtful and nuanced perspective, urging policymakers to remain vigilant but not reactive—highlighting the complexity of the issue and the need for more data before drawing firm conclusions.

Dhruv Brahmabhatt and W. Peter Schpero (2024) further explored the financial changes that occur in hospitals after they are acquired by private equity firms, highlighting a range of mixed results. Drawing on hospital-level financial data from 2005 to 2019, the authors analyze how asset composition shifts post-acquisition. They find that PE-acquired hospitals tend to decrease their investments in fixed assets—such as buildings and medical equipment—while increasing intangible assets and financial holdings, such as goodwill and cash reserves. These trends suggest a focus on financial restructuring rather than physical or clinical improvements. However, the effects are not uniformly negative or conclusive. The study finds no consistent evidence that these asset reallocations lead to declines in hospital revenues, profitability, or patient volumes. In other words, while PE ownership changes the financial structure of hospitals, it does not necessarily worsen—or improve—operational performance in the short term. This nuanced outcome highlights the complexity of PE's role in healthcare, where financial engineering may not directly translate into visible service quality issues, but may still

raise concerns about the long-term implications for infrastructure investment and care delivery. The authors emphasize the need for more research and regulatory oversight, especially given the increasing role of private equity in the healthcare sector.

L. Unruh (2025) provides a comprehensive review of the growing presence of private equity firms in the U.S. healthcare system and evaluates the mixed effects of this expansion across different healthcare domains. The paper outlines how PE firms have rapidly increased their investments in areas such as physician practices, behavioral health, nursing homes, and hospitals, often bringing with them aggressive financial strategies aimed at maximizing returns. On the one hand, PE ownership can inject much-needed capital, improve management efficiency, and expand access to certain services. However, Unruh highlights a range of negative consequences observed in the literature, including increased prices for patients, reduced staffing levels, and potential declines in care quality—particularly in long-term care settings like nursing homes.

The review stresses that impacts vary widely depending on the healthcare segment, local market dynamics, and regulatory environments. While some studies find little or no change in clinical outcomes post-acquisition, others report troubling trends, such as higher mortality rates or increased patient turnover. Moreover, PE firms' short investment horizons and debt-leveraged acquisitions raise concerns about long-term sustainability and accountability in patient-centered sectors. Unruh concludes that the evidence is far from uniform, and calls for improved data transparency, more rigorous regulation, and further empirical research to better understand how PE ownership shapes outcomes for patients, providers, and the healthcare system as a whole.

#### **4.3.3.1 Potential explanation for mixed findings**

The mixed or neutral findings across the six studies concerning private equity investments in healthcare can be attributed to a combination of methodological diversity, contextual variation, and the multifaceted nature of both financial and clinical performance indicators. One key explanation lies in the differences in study design and the operationalization of quality and efficiency. For instance, while Winblad et al. (2017) assess both structural and processual quality indicators based on Donabedian's framework, others like Bruch, Zeltzer, and Song (2020) rely primarily on staffing levels and patient experience scores, offering only a partial picture of care quality. Similarly, Lietz and Song (2024) synthesize findings from multiple studies, many of which use quasi-experimental methods and large administrative datasets, such as Medicare claims. Although these methods provide robust financial performance measures—such as operating margins or revenue per discharge—they often fail to capture nuanced, patient-centered aspects of quality care.

The context in which PE operates also contributes to the inconsistency in outcomes. Most of the reviewed studies are based in the United States, where healthcare markets tend to be more fragmented and profit-oriented. In contrast, the study by Winblad et al. (2017) in Sweden reflects a publicly dominated system with strong local government oversight and incentives. This context may buffer potential negative impacts of PE ownership, as evidenced by their

finding that private providers performed well on process-based quality indicators, possibly due to targeted local policies aimed at improving specific care routines. Thus, the regulatory and policy environment likely mediates the effects of PE ownership, complicating any direct comparisons across national contexts.

Temporal factors may also account for the lack of consistent results. Several studies evaluate outcomes shortly after acquisition, which may be too soon to observe meaningful changes in care quality. For example, Bos and Harrington (2017) note that while financial performance improved after a PE acquisition of a nursing home chain, care quality—as measured by deficiency rates—remained consistent with national averages, suggesting that either quality was maintained or that changes had yet to manifest. Moreover, the heterogeneity of PE firms themselves introduces another layer of complexity. As Rechel and Tille (2023) argue, PE strategies vary significantly; some investors may pursue sustainable operational improvements, while others prioritize rapid cost reductions to increase short-term returns. This diversity in strategic behavior undermines any assumption of uniformity in the impact of PE ownership.

Another explanation lies in how “efficiency” is defined and evaluated in light of the conflicting declinations mentioned in section 3.8. In more specific words, Lietz and Song (2024) highlight that financial efficiencies are often achieved through staffing reductions or substitution of higher-paid clinicians with lower-cost providers (productive efficiency) which are tactics—as will be seen in the BBC Panorama Investigation in the next sections—that may improve margins but simultaneously raise concerns about care quality and safety (allocative efficiency). Indeed, they cite empirical evidence of increased hospital-acquired conditions following PE acquisitions, suggesting that such strategies may compromise patient outcomes. Braun et al. (2021), while analyzing dermatology clinics, found that PE ownership was associated with increased pricing and patient volume but did not result in statistically significant changes in healthcare spending or procedure use per patient, therefore raising questions about the value such investments deliver to the broader healthcare system.

Taken together, these factors—ranging from methodological limitations and short observation periods to regulatory context and investor strategy—help explain why the studies reviewed report inconsistent or neutral findings regarding the impact of PE on care quality and efficiency. This reinforces the call made by multiple authors, including Rechel and Tille (2023) and Lietz and Song (2024), for more comprehensive, long-term, and context-sensitive research. Such efforts are essential to accurately assess the implications of private equity ownership in healthcare and to inform regulatory frameworks that prioritize both financial sustainability and patient-centered care.

#### **4.4. Results of the gray literature review**

To develop a more comprehensive understanding of the topic, I also explored gray literature. I conducted a Google search using the same set of keywords and excluded all articles involving scientific analyses. The remaining sources were assessed for relevance based on the same inclusion and exclusion criteria applied in the peer-reviewed review. Additionally, I considered it essential to select more recent articles to gain a more accurate understanding of the current healthcare landscape. As such, I limited my selection to studies published between 2022 and 2025. Notwithstanding the fact that these sources may reflect certain biases due to author

selection and subjective viewpoints, they were not treated as central to this research. Instead, they were used to enrich the discussion in light of the scarcity of contemporary literature on the topic. In doing so, this research seeks to enhance its relevance to present-day contexts

An undercover BBC Panorama investigation in 2022 <sup>31</sup> revealed that Operose Health, the UK's largest GP chain, owned by US healthcare giant Centene Corporation, was substituting general practitioners (GPs) with less qualified physician associates (PAs) without adequate supervision. This practice raised significant concerns about patient safety and the quality of care provided.

Operose Health, serving nearly 600,000 NHS patients, reportedly employed six times more PAs than the NHS average. These PAs, who undergo two years of postgraduate training compared to the decade-long training of GPs, were found to be managing a wide range of patient cases independently, often without clinical oversight. This situation was exacerbated by a shortage of eight doctors at one of the company's London practices.

The investigation also uncovered a backlog of thousands of medical documents awaiting review, with some remaining unread for up to six months. Administrative staff, lacking medical training, were tasked with determining the importance of these documents, sometimes relying on internet searches to make decisions.

Critics argue that Operose Health's approach prioritizes cost-cutting over patient care, potentially compromising safety. While the company maintains that its practices align with NHS guidelines and that most of its clinics are rated "good" or "outstanding" by regulators, the findings have sparked a broader debate about the increasing reliance on less qualified staff in primary care settings.

This case underscores the challenges faced by the NHS in balancing workforce shortages with the need to maintain high standards of patient care.

An investigation by *The Guardian*, journalists Sarah Marsh and Carmen Aguilar García <sup>32</sup>, revealed that private equity-backed firms are profiting significantly from operating Sexual Assault Referral Centres (SARCs) in England. More specifically, G4S and Mountain Healthcare Ltd, the latter owned by Literacy Capital, manage 26 of the 50 NHS- and police-funded SARCs. In the 2022–2023 financial year, these two companies received £16 million in public funds for their services. Notably, Mountain Healthcare has paid at least £15 million in dividends since its acquisition by Literacy Capital in 2018.

Critics, including charities and Members of Parliament, have expressed concern over the ethics of profiting from services designed to support victims of sexual assault. Labour MP Stella Creasy has called for an urgent review of these contracts, emphasizing the need to prioritize victims' needs over shareholder profits. The investigation also highlighted that the amount spent on these private contractors has increased by 81% over two years, correlating with inflation and a rise in patient numbers. Despite these concerns, NHS England maintains that its goal is to ensure the best possible care through a mix of NHS and independent providers.

In her opinion piece for *The Guardian*, journalist and policy expert Sonia Sodha raises urgent concerns about the growing role of private equity in the UK healthcare sector <sup>33</sup>. She argues

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<sup>31</sup> BBC News. (2022, June 13). *Panorama: GP patients put at risk by 'cheaper staff'*. <https://www.bbc.com/news/health-61785252>

<sup>32</sup> Marsh, S., & Aguilar García, C. (2024, March 13). *Private equity groups collecting millions to run UK government-funded sexual assault referral centres*. *The Guardian*. <https://www.theguardian.com/business/2024/mar/13/uk-private-equity-firms-sexual-assault-referral-centres>

<sup>33</sup> Sodha, S. (2024, March 13). *Investors are making a fortune from UK healthcare. Why is nobody holding private equity to account?* *The Guardian*. <https://www.theguardian.com/commentisfree/2024/mar/13/uk-healthcare-private-equity-cancer-treatment-services>

that PE firms are making substantial profits from services that are supposed to serve the public good—such as elderly care homes, children’s residential services, mental health provision, and even NHS-funded sexual assault referral centres—without sufficient regulatory oversight or public accountability.

Sodha explains that PE involvement often follows a specific pattern: a firm acquires a service provider, loads it with debt, cuts costs to boost short-term profitability, and eventually exits the investment with significant financial gain. While this model may be effective in traditional corporate environments, it becomes highly problematic when applied to essential health and social care services. Cost-cutting can lead to reduced staffing levels, diminished care quality, and fragile service delivery—directly affecting the most vulnerable users. For instance, she cites instances where private equity-backed care providers have collapsed or been accused of neglect and substandard care, raising ethical and systemic red flags.

A key part of Sodha’s argument is that the state, particularly the UK government and local authorities, is not only complicit in but actively enabling this trend. Through commissioning and outsourcing models, public funds are funneled into private equity-owned firms, with little consideration given to the long-term impacts on service quality or the concentration of ownership in the hands of financial investors. Sodha is especially critical of the opacity surrounding PE operations in this space, including complex ownership structures, offshore arrangements, and the limited transparency around profit extraction and reinvestment in services.

Despite the risks, Sodha notes that there has been little political will to challenge this model. She emphasizes that neither major political party has developed a coherent strategy to regulate or limit PE involvement in healthcare, largely due to the entrenched belief in market efficiency and private sector innovation. This lack of accountability, she warns, poses a significant threat to the sustainability and integrity of publicly funded health and care services in the UK.

The article concludes with a call for systemic reform—greater transparency, stronger regulatory frameworks, and a reassessment of whether essential services should be subject to profit-maximizing models at all. Sodha’s analysis invites policymakers and the public to question the wisdom of continuing to prioritize financial interests over public health outcomes.

In the article *"Corporate healthcare: the big money behind your GP, dentist and vet"*, published by *The Guardian*, journalist Sarah Marsh explores the increasing influence of private equity and corporate ownership in the UK’s primary healthcare sectors, including general practice, dentistry, and veterinary services.<sup>34</sup> The investigation reveals how profit-driven models are reshaping these essential services, often at the expense of patient and client care.

Marsh highlights that large corporations and investment firms are acquiring numerous GP practices, dental clinics, and veterinary surgeries across the UK. This consolidation is leading to a shift in focus from patient-centered care to profit maximization. For instance, in general practice, some private providers are employing less qualified staff, such as physician associates, to reduce costs, raising concerns about the quality of care and patient safety.

In the dental sector, the article points out that corporate ownership has contributed to a decline in NHS dental services, making it increasingly difficult for patients to access affordable care. This has led to a rise in private dental treatments, which are often cost-prohibitive for many individuals.

The veterinary industry is also experiencing similar trends, with major corporate groups dominating the market. This has resulted in higher fees for pet owners and concerns about the commercialization of animal care. The Competition and Markets Authority (CMA) has

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<sup>34</sup> Marsh, S. (2024, March 13). *Corporate healthcare: the big money behind your GP, dentist and vet*. The Guardian. <https://www.theguardian.com/society/2024/mar/13/corporate-healthcare-the-big-money-behind-your-gp-dentist-and-vet>

launched an investigation into the sector, examining whether these corporate practices are negatively impacting consumers.

Overall, Marsh's article sheds light on the growing corporatization of primary healthcare services in the UK, raising important questions about the implications for accessibility, affordability, and the quality of care provided to patients and clients.

Another relevant report published by the American Investment Council highlights the critical role private equity played in supporting the U.S. health care system during the COVID-19 pandemic.<sup>35</sup> In 2020 alone, private equity firms invested over \$79 billion into the health care sector, helping to address urgent public health challenges and reinforce the system's resilience. These investments were directed toward a broad range of initiatives, including vaccine development, testing infrastructure, and support for frontline workers.

PE-backed companies accelerated the development of COVID-19 testing solutions. For example, Ortho Clinical Diagnostics, supported by Carlyle, launched a COVID-19 antibody test approved by the FDA, capable of delivering rapid and accurate results, which significantly expanded testing capacity across the country. In the fight against misinformation, WebMD, backed by KKR, launched a COVID-19 Vaccine Misinformation Center to provide the public with accurate, science-based information, which was crucial for increasing vaccine acceptance. Private equity firms also supported the supply chain for essential protective equipment. ASP Global, backed by Incline Equity Partners, distributed over 539 million face masks to hospitals in 39 states, ensuring that frontline workers had the necessary protection. Meanwhile, Blackstone contributed \$15 million to support health care workers and first responders in New York, demonstrating a commitment not just to business, but to public welfare.

Additionally, PE firms drove advancements in medical technology and infrastructure. KKR partnered with Duke Rohlen to launch Zeus Health, a \$100 million platform focused on investing in emerging medical device companies, aiming to bring innovative treatments and devices to market. The Carlyle Group also invested in TriNetX, a global health research network that supports over 170 health care organizations by providing real-time data to enhance drug development and improve patient outcomes.

Overall, the report emphasizes that private equity was not merely a source of capital but a vital partner in the U.S. health care system's response to COVID-19. By enabling innovation, expanding access to care, and strengthening infrastructure, PE firms played a substantial role in managing the crisis and preparing the sector for future challenges.

A report by scholars C. Cai & Z. Song incorporates a systematic review of more than 55 empirical studies, providing a comprehensive overview of the impacts associated with private equity acquisitions in health care.<sup>36</sup> From a financial perspective, the evidence indicates that PE ownership frequently results in increased costs for both patients and insurers. This is largely attributed to market consolidation strategies, whereby PE firms acquire multiple providers within a region or specialty to enhance their bargaining power with insurance companies. This consolidation often reduces competition and enables providers to demand higher reimbursement rates, which are ultimately passed on to patients in the form of elevated charges or reduced access to affordable care.

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<sup>35</sup> American Investment Council. (2021). *Private equity is improving health care across America*. <https://investmentcouncil.org/wp-content/uploads/2021/03/private-equity-health-care.pdf>

<sup>36</sup> Cai, C., & Song, Z. (2024). *Private equity in health care: Prevalence, impact, and policy options for California and the US*. University of California, Berkeley, Petris Center on Health Care Markets and Consumer Welfare. <https://www.healthcarevaluehub.org/advocate-resources/publications/private-equity-health-care-prevalence-impact-and-policy-options-california-and-us>.

On the clinical side, the outcomes of PE involvement range from mixed to predominantly negative. A recurring theme across the literature is the correlation between PE ownership and deteriorating quality of care. Notably, facilities under PE control often experience lower levels of patient satisfaction, which may be linked to operational changes such as reduced staffing ratios, stricter cost control measures, and shorter appointment times. These structural adjustments are intended to maximize financial returns but may compromise the patient experience and overall quality of service. In long-term care settings such as nursing homes, the consequences appear particularly severe. A prominent study included in the review documented an 11% increase in short-term mortality among patients in nursing homes acquired by PE firms. This alarming statistic suggests that cost-cutting strategies—such as fewer registered nurses on staff, lower spending on direct patient care, and deferred facility maintenance—may have life-threatening implications for vulnerable populations. In acute care hospitals, PE ownership has also been associated with an uptick in preventable adverse events. These include a higher incidence of patient falls, which may reflect understaffing or insufficient monitoring, and a notable rise in central line-associated bloodstream infections, potentially tied to compromised hygiene practices or reduced investment in quality control protocols. While the data on overall mortality rates in PE-owned hospitals remains mixed, with some studies showing no statistically significant differences, the increase in these specific complications suggests a tangible decline in patient safety under PE management.

M. Karamardian et al. critically evaluate the effects of private equity ownership in health care, incorporating 47 empirical studies published between 2000 and April 2024, including 15 new studies not covered by the foundational review conducted by Borsa et al.<sup>37</sup> The primary aim was to assess whether the negative patterns previously identified—particularly concerning patient outcomes, care quality, and financial impacts—persist in recent literature and to determine if outcomes vary by specific PE firms. The study finds that PE ownership continues to be largely associated with negative outcomes in three key domains: health outcomes and quality, costs to patients and payers, and process quality. Within the health outcomes and quality category, the evidence points to increased rates of adverse events such as higher mortality, hospital-acquired infections, and other complications in PE-owned entities. Only a minority of studies identified neutral or positive effects, such as improved readmission rates or reduced urinary tract infections. However, these positive effects were infrequent and often offset by negative findings. Financially, PE ownership is shown to significantly increase costs for both patients and insurers. This is reflected in higher billing codes, greater utilization of expensive services, and shifts in patient mix away from Medicare and Medicaid populations. Alarming, these cost increases are not typically accompanied by better health outcomes. The review also notes a reduction in financial access to care, particularly for vulnerable populations. In terms of process quality, the impact is mostly negative or mixed. The most consistent finding across studies is a reduction in staffing levels in PE-acquired facilities, which directly undermines care delivery and safety. While some improvements were observed in validated quality metrics (such as guideline adherence), no study reported an improvement in patient experience scores post-acquisition. An exception to the overall negative trend is found in the category of costs to operators. Here, PE firms demonstrated some success in reducing operational costs and achieving efficiencies,

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<sup>37</sup> “An Update on Impacts of Private Equity Ownership in Health Care: Extending a Systematic Review” by Michael Karamardian et al. (2024), published in *Health Management, Policy and Innovation*.



often a direct result of their profit-maximization strategies. However, some studies also document cost increases for operators, including through practices like leasebacks, which inflate costs without improving service delivery.

Importantly, the review introduces nuance by analyzing whether outcomes differ by PE firm. Sub-analysis of HCA-owned hospitals suggests that firm-specific management practices can lead to better results, such as lower 30-day mortality and improved outcomes for acute conditions like myocardial infarction. This raises the possibility that the heterogeneity in PE outcomes may be linked more to management priorities than to ownership model alone.

A February 2025 report from the U.S. Department of Health and Human Services (HHS) strongly condemns the role of private equity firms in the ongoing decline of healthcare access and quality in the United States.<sup>38</sup> According to the report, PE ownership in healthcare settings has been associated with increased mortality rates, including an 11% rise in patient deaths in nursing homes following PE acquisitions. Furthermore, in markets where PE consolidation has reduced competition, mortality rates among heart attack patients have also increased, suggesting that financial motives may be undermining critical aspects of patient care.

The report highlights that PE-backed healthcare entities often prioritize short-term financial returns by implementing cost-cutting measures that directly affect clinical care. These include significant reductions in staffing levels and the hiring of less qualified personnel. Healthcare workers, including physicians and nurses, have reported deteriorating working conditions, with some forced to care for up to 45 patients in a single day without adequate support. Such conditions not only increase the burden on staff but also compromise patient safety and quality of care.

Another major concern raised by HHS is the lack of transparency surrounding PE acquisitions. Patients are frequently unaware that their healthcare providers have been purchased by investment firms, as the facilities typically retain their original names and make no public disclosure of ownership changes. This opacity prevents patients from making informed decisions about where they receive care and from whom.

The report forms part of the Biden administration's broader initiative to improve competition and accountability in the healthcare sector. It calls for stronger regulatory scrutiny of private equity activity and emphasizes the need to protect patients from the negative consequences of financialization in healthcare. The findings reinforce growing concern among policymakers and researchers about the long-term implications of PE's expanding footprint in essential health services.

Fascinatingly, an article published on Euractiv further examines the significant role of private equity and venture capital in transforming Europe's healthcare landscape.<sup>39</sup> In 2023, these investments reached €11.4 billion, doubling the €5.7 billion invested in 2016. This surge is attributed to the sector's increasing reliance on innovative technologies such as AI-driven diagnostics, telemedicine, and advanced pharmaceuticals. Despite initial concerns, studies, including one from Harvard Business Review, indicate that private equity involvement has led to improved financial performance without compromising clinical outcomes.

The article also highlights the emergence of public-private partnerships, exemplified by Belgian medtech company Nyxoah's €37.5 million venture-debt financing from the European

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<sup>38</sup> Sherman, E. (2025, February 8). *US health department condemns private equity firms for role in declining healthcare access*. The Guardian. <https://www.theguardian.com/us-news/2025/feb/08/us-health-department-private-equity-healthcare-report>

<sup>39</sup> Euractiv. (2023). *Investment in European healthcare delivering innovation and improved patient care*. Euractiv. <https://www.euractiv.com/>

Investment Bank. These collaborations aim to accelerate research and development, scale manufacturing, and enhance patient care across Europe and the U.S. Furthermore, mergers and acquisitions are becoming more prevalent, with companies like Vivalto Santé expanding their reach to 100 healthcare establishments across six European countries. Such consolidation efforts are seen as strategies to enhance operational efficiency and patient care quality.

The article concludes by emphasizing the necessity for innovative funding models to sustain this growth and meet the evolving needs of Europe's healthcare sector. It underscores the importance of fostering an environment conducive to continued investment and innovation to improve patient outcomes and healthcare system efficiency.

## 4.5 Summary of the Results

The results obtained from both the peer-reviewed and gray literature are utterly ambiguous. On the one hand, some studies turned out to favor the involvement of PE in the healthcare industry given the benefits of improved services due to investment in cutting-edge technology and practices (Euractiv, 2023). Moreover, it is argued that patients seem to get access to higher quality health services at lower costs. More specifically, it has been observed that when strategic management procedures come into action, the cost related to a specific service seems to be lower after saving-cost techniques have been deployed, thus granting access to a larger number of people. (Galetta et. al, 2020). Furthermore, as Kirsch and Kapoor argue, some private equity firms have leveraged 'roll-up' strategies which can offer several advantages. Specifically, building critical mass enables these firms to enhance their negotiating power with payers, increase purchasing power, and achieve economies of scale. Bruch et al. (2020) support this perspective in their study. Indeed, they found that hospitals acquired by private equity firms experienced an increase in annual net income. Notably, they assessed financial performance alongside quality indicators such as acute myocardial infarction, pneumonia, and heart failure. Their findings revealed more pronounced improvements in process quality measures in PE-owned hospitals compared to their counterparts, suggesting enhanced patient care outcomes.

Conversely, a number of scholars and journalists have voiced strong opposition to private equity investment in healthcare. They contend that the profit-driven nature of PE firms is fundamentally misaligned with the ethos of healthcare, which is viewed as a universal right rather than a market commodity. Critics argue that this divergence can lead to deteriorations in care quality, including higher mortality rates, reduced patient well-being, and operational shifts such as cuts to nursing staff and decreased adherence to clinical standards (Gupta et al., 2020). Furthermore, they claim that private healthcare often incurs higher costs than public alternatives due to practices like upcoding and surprise billing. Finally, as E. Sherman highlights in his influential article for *The Guardian*, the lack of transparency surrounding such transactions means patients are frequently unaware when a private equity firm takes over a healthcare provider, ultimately preventing them from making fully informed choices.

To reiterate, in order to maximize returns for their investor clients, private equity firms tend to prioritize profit generation over the social and humanitarian dimensions of healthcare. As a result, patient welfare, staff well-being, and the overall quality and accessibility of care are placed at risk and are likely to be affected by the growing presence of private equity in the sector. However, as outlined in the introduction of this thesis, the growing involvement of equity investment in the healthcare sector may also yield positive outcomes, particularly in

terms of dynamic efficiency. Accordingly, by introducing capital, managerial expertise, and performance-driven incentives, private equity can potentially foster innovation, promote the adoption of new technologies, and streamline operational processes. In other words, these changes may, in turn, enhance service delivery, reduce inefficiencies, and improve the adaptability of healthcare institutions in an evolving and resource-constrained environment.

## 5 Discussion

This section presents the research analysis conducted in this thesis, outlines policy recommendations concerning private equity participation in the healthcare sector, highlights the study's limitations, and offers a conclusion addressing the main research question.

### 5.1 Discussion on the results of the research

This section presents the research analysis conducted in this thesis, outlines policy recommendations concerning private equity participation in the healthcare sector, highlights the study's limitations, and offers a conclusion addressing the main research question.

The thesis poses the following central question: *“Does the growing scale of private equity in healthcare lead to better care, or merely bigger, more monopolistic systems?”* Based on the review of empirical studies and within the context of the theoretical framework, I can identify several direct and indirect benefits for patients that may result from private equity investments in the healthcare sector.

From an economic standpoint, the benefits are largely indirect. Following acquisition, PE firms typically implement entrepreneurial strategies in the acquired practices through operational restructuring, management discipline, and innovation aimed at creating value and increasing efficiency. Strategies such as infrastructure investment, staff training, consolidation of similar practices, and internalization of previously outsourced services are frequently employed to reduce costs and improve operational performance. These managerial improvements, while economically motivated, can indirectly benefit patients. Efficiency, recognized as one of the core healthcare objectives under the United Nations Agenda 2030, contributes to the financial sustainability of the healthcare system—of which PE-owned entities are a growing component. However, the analysis conducted in this thesis, particularly in light of the conceptual distinctions between allocative, productive, and dynamic efficiency, highlights the importance of recognising that efficiency is not a uniform or neutral concept. Rather, different types of efficiency often pull in opposite directions, leading to trade-offs that complicate a straightforward evaluation of private equity's impact. For example, improvements in productive efficiency—such as cost reductions through streamlined operations—may simultaneously lead to losses in allocative efficiency, especially if those cost savings are not passed on to patients but instead coincide with higher prices or reduced access to services. Likewise, arguments invoking dynamic efficiency, such as increased innovation or improved technology, may justify consolidation in theory but do not necessarily result in more equitable or widespread improvements in care. As such, the benefits derived from efficiency must be

interpreted with caution, acknowledging the potential for internal conflicts that may favour financial performance over public interest objectives.

Regarding quality of care, several scholars argue that PE firms cannot achieve high short-term returns without enhancing the quality of services provided. Quality improvements lead to increased patient satisfaction, bolstering the reputation of acquired providers and ultimately driving higher revenues and profitability. Quality, among the three healthcare objectives explored in the theoretical framework, is the most widely discussed due to the availability of measurable and comparable clinical outcome indicators. Both quantitative and qualitative metrics exist to assess quality, although the diversity of these indicators often renders cross-country or inter-specialty comparisons impractical.

Notably, most researchers included in this review who support PE involvement contend that it enhances quality. They suggest a positive correlation between economic performance (i.e., productive efficiency) and quality. In essence, more efficient operations tend to produce better patient outcomes, as clinical staff are able to focus solely on medical tasks, while administrative functions are handled by professionals appointed by the PE firm. Nonetheless, measurable outcomes were mainly available for nursing homes, where common indicators such as staffing levels and reported deficiencies allow for meaningful comparisons. Studies in other medical specialties presented high variability, complicating the aggregation of findings. As Huang & Bowblis (2019) found, the absence of a decline in care quality following PE acquisitions may be due to firms selectively targeting financially healthy providers, thus preserving existing standards. However, such results also suggest that PE firms may avoid distressed facilities that could benefit most from financial restructuring—raising questions about the equity of capital allocation within healthcare.

Unfortunately, in regard to the third key objective of public healthcare (i.e. universal accessibility), the literature provides little empirical evidence, whether positive or negative. As previously noted, accessibility remains the least explored dimension among the three.

Despite the outlined benefits, PE involvement in healthcare has been associated with certain disadvantages, affecting both practitioners and patients. From a financial perspective, critics argue that the profit-driven nature of PE firms inherently clashes with the broader goals of public healthcare systems. While PE aims to deliver maximum returns within a limited timeframe, public healthcare seeks to provide high-quality services to all citizens at minimal cost. These objectives appear inherently conflicting. Profit maximization can involve cost-cutting or increased billing, both of which run counter to public healthcare principles.

Several empirical studies have also examined changes in care quality following PE acquisitions, using indicators such as staffing levels and care deficiencies. Findings suggest that PE-driven cost reductions can adversely affect quality, aligning with concerns that financial motivations may compromise patient care. Additionally, scholars critical of PE involvement have introduced the notion of diminished professional autonomy. They argue that PE managers may pressure healthcare providers to prioritize more profitable treatments, potentially generating unnecessary procedures that do not align with patient needs. Such practices undermine practitioner autonomy and may negatively influence care quality. On top of that, gray literature findings also offer a mixed picture. Some publications, authored by journalist particularly within the United Kingdom, voice concerns over autonomy, service quality, and patient safety. While these practitioners often acknowledge economic gains from consolidation, they remain skeptical about whether such improvements translate into higher quality care.

A crucial element that this thesis tried to scrutinize, and one that is often underexplored in purely clinical assessments, is the monopolistic behavior that PE investment structures can foster. This is particularly relevant when PE firms pursue roll-up strategies, which means acquiring a dominant platform in a given region or specialty and then adding smaller practices to that base. These horizontal and vertical integrations concentrate market power, reduce the number of independent competitors, and create closed referral loops that lock in patients and revenue streams. In doing so, PE firms can exert significant pricing power without improving service delivery—an outcome that aligns with classic monopolistic behavior. Unfortunately, such consolidation is not merely a theoretical concern; evidence from U.S. specialties like dermatology, radiology, and emergency medicine shows how PE-backed groups can reach dominant positions in local markets. Patients in these areas may have no practical alternative but to seek care from investor-owned entities, which often set prices above competitive levels. This market power also allows PE firms to negotiate higher reimbursement rates with insurers or shift costs to patients, particularly in out-of-network scenarios. Moreover, by focusing acquisitions on high-margin services while withdrawing from low-revenue areas—such as rural settings or chronic care—PE ownership can further exacerbate access disparities (C. Henry, 2023). As demonstrated in recent European examples, including Germany and the UK, the rapid incursion of financial investors into outpatient and primary care systems has triggered policy debates over the potential crowding out of public interest objectives by private capital.

In conclusion, drawing a definitive assessment of PE's impact on healthcare services proves challenging. Most studies reviewed fail to reach a conclusive verdict, largely due to the complexity of the topic. As highlighted in the theoretical framework, a range of factors contributes to this complexity, including national differences in healthcare policy, the diversity of healthcare specialties, and the variety of empirical indicators used in research.

Nonetheless, some elements consistently emerge as significant. For example, nursing home quality appears closely linked to staffing levels—more qualified personnel often correlate with better care. Similarly, the number of reported deficiencies serves as a key quality indicator. From an economic perspective, measures such as the charge-to-cost ratio and net income may also serve as important indicators for evaluating the effects of PE ownership on quality and accessibility in healthcare.

Still, the broader economic pattern is clear. PE strategies inherently favour scale over equity and efficiency over inclusiveness, raising legitimate concerns about the long-term impact of consolidation on consumer welfare. Importantly, these strategies often promote one type of efficiency while disregarding the costs to others. For instance, an improvement in productive efficiency may come with a deterioration in allocative or dynamic efficiency. Recognising these internal contradictions is essential, as it prevents an overly simplified interpretation of efficiency as an unquestioned public good. While PE can bring capital, managerial skill, and operational improvements, these gains often come with significant trade-offs, especially when monopolistic tendencies go unchecked. Thus, future policy and regulatory frameworks must be adapted to identify and mitigate the risk of anti-competitive behavior in a sector as sensitive and essential as healthcare.

## 5.2 Policy Recommendations: Can we Bridge the Atlantic?

In her notable remarks, former FTC Commissioner Maureen Ohlhausen argued that comparing U.S. and E.U. competition law inevitably exposes tensions between rival schools of thought.<sup>40</sup> Because this thesis aims to distill a principle that both jurisdictions could apply to curb the harmful effects of financialisation in healthcare, it is essential to examine why convergence proves so elusive. To better explain, U.S. competition policy has long been shaped by the Chicago School, a current of classical economics that champions *laissez faire* and pursues efficiency above all else. European policy, by contrast, is rooted in Ordoliberalism<sup>41</sup> and embedded in the Lisbon Treaty's broader socio-economic order, which integrates the Union's collective values and objectives. Although the Chicago and European traditions share certain premises (i.e. most notably the goal of maximising the combined surplus of producers and consumers in a market economy), their approaches to distribution sharply diverge. In Europe, the legal framework predetermines how market gains should be reallocated so that benefits are shared equitably across society whereas this normative commitment to social welfare has no analogue in Chicagoan thinking. More specifically, Chicago scholars reject any *ex ante* prescription for dividing surplus, contending that equity concerns are better addressed through separate public policies: "Antitrust thus has a built-in preference for material prosperity, but it has nothing to say about the way prosperity is distributed or used."<sup>42</sup> Consumer welfare, in other words, is served whenever efficiencies are created, regardless of which market actor captures the wealth. Hence, the results stemming from the rationale embedded in the two schools of thought is that, on the one hand, the U.S. doctrine, forged in the crucible of efficiency, struggles to address market failures endemic to sectors such as healthcare, while, on the other, Europe's welfare-oriented framework, though more sensitive to distributional issues, may at times impede efficiency gains that, as this thesis has shown, could ultimately benefit both patients and investors.

As I have discussed in the previous sections, it is evident that relying only on efficiency is a grave mistake when it comes to atypical markets such as healthcare. However, not taking into account efficiency-related outcomes could be a big mistake. Hence, building on Robert Bork's call for a single, unifying guiding principle in law and competition policy, this thesis challenges the idea that any specific form of efficiency (be it allocative, productive, or dynamic) should serve as the primary benchmark for legal and regulatory assessment within the healthcare market. Instead, it is imperative that the governance of healthcare markets must be rooted in non-economic objectives, guided by ethical and moral concerns that prioritise human dignity, equitable access, and the public interest over financial performance and investor returns. These aforementioned principles are especially crucial in the context of private equity investment, where the pursuit of profit can deeply affect access, quality, and the integrity of care. While PE involvement can bring much-needed capital, managerial expertise, and operational efficiency,

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<sup>40</sup> <https://www.ftc.gov/public-statements/2016/09/us-eu-convergence-can-webridge-atlantic>

<sup>41</sup> Ordoliberalism is a school of economic thought that emphasizes the need for government to create a "competitive order" and ensure that the free market functions effectively, while also protecting the rights and freedoms of individuals.

<sup>42</sup> Bork, *The Antitrust Paradox: A Policy at War with Itself*, 1978, p. 90

it also creates powerful incentives for consolidation, cost-cutting, and revenue-maximizing practices that often resemble monopolistic behavior, such as roll-up strategies that reduce competition, aggressive billing practices, and the exploitation of market dominance in underserved regions. These strategies risk turning healthcare into a profit-maximizing industry that leaves vulnerable patients with fewer choices, higher costs, and compromised care. To counter these tendencies, this thesis proposes a series of policy recommendations designed to enhance transparency, ensure post-acquisition accountability, limit financial over-leverage, and safeguard the interests of patients and public funders. These measures aim to strike a balance: encouraging investment where it adds value while actively curbing the monopolistic dynamics that threaten to distort healthcare markets and undermine their essential public mission. In doing so, the recommendations reflect the belief that financial incentives must always remain subordinate to the fundamental goal of healthcare: to protect and promote human well-being in an equitable and sustainable manner.

Many articles from the gray literature have highlighted the need for increased transparency regarding private equity investments in health care. But the real question is—transparency about what, exactly? At present, there is a striking lack of publicly available information about PE portfolio holdings in the health care sector. Much of this data is protected from Freedom of Information Act requests in the U.S., under claims of commercial confidentiality. However, given that health care is often regarded as a public good and an essential part of national infrastructure, it is arguable that policymakers and researchers—on both sides of the Atlantic—should be granted access to this information.

There are strong reasons to treat health care as an exception to standard business disclosure norms. The acquisition of hospitals, nursing homes, hospices, or medical practices is fundamentally different from consolidating commercial enterprises like fast food chains or retail stores. In both the United States and European Union, health care is heavily subsidized by public funds, with citizens either paying through taxes or national insurance contributions. Moreover, the consequences of reduced access or quality in this sector are far more critical, often involving life-and-death decisions.

In the U.S., for instance, studies have shown that about 75% of revenue in nursing homes is sourced from public programs like Medicare and Medicaid. In the EU, while systems vary by country, a similar reliance on public funding exists—such as through national health services or social insurance schemes. In both contexts, this means that profits distributed to private equity investors are ultimately subsidized by taxpayers. This raises fundamental questions about the alignment (or misalignment) between PE incentives and the goals of equitable, high-quality health care.

Private equity's typical roll-up model, which prioritizes financial returns, may not align with public health care objectives like safety, timeliness, and patient-centered care. There is often a financial incentive to maximize billing—sometimes by manipulating coding systems—or increase the volume of services provided. At the same time, aggressive cost-cutting can have adverse effects on staffing, infrastructure, and ultimately patient outcomes. These concerns are not unique to the U.S. As PE activity in the European health care sector increases, EU regulators and national health authorities face similar risks.

To ensure accountability, private equity firms should be required to disclose key performance and operational metrics for all healthcare assets under their control, regardless of whether they are public or privately held. These disclosures should include: (1) revenue data and detailed pre- and post-acquisition comparisons, clarifying whether changes are driven by price, volume, or coding practices; (2) patient outcomes and quality of care metrics; (3) historical pricing data for health services; (4) specific cost-cutting measures implemented post-acquisition; (5) workforce data, including turnover rates and changes in staff composition; and (6) detailed

acquisition structures, including financing terms, leverage, and liquidity. The implementation of such monitoring systems—along with questions about who will oversee them and bear the cost—must be addressed by both industry leaders and government bodies. In the EU, this could involve a collaborative approach between national health ministries and regulatory agencies such as the European Commission or the European Securities and Markets Authority (ESMA). Ultimately, there must also be clear consequences for PE-owned health care entities that put profits above patient care and public interest.

Most importantly, in addition to enhancing accountability, increased transparency also serves as a critical check against monopolistic behavior. When private equity firms engage in roll-up strategies, they often do so under opaque ownership structures that mask the extent of market concentration. This lack of visibility impairs the ability of regulators, payers, and the public to identify emerging monopolies or evaluate their impact on prices, access, and quality. Thus, requiring standardized disclosures of acquisition structures, market share, and operational outcomes would allow policymakers to better assess whether PE-backed entities are dominating local markets, stifling competition, and inflating costs. By shedding light on the full scope of private equity's control in specific geographic or service areas, such transparency measures can empower antitrust authorities to intervene earlier and more effectively, thereby preventing the silent entrenchment of market power that threatens to erode both choice and care quality in publicly funded health systems.

In second place, it is imperative to stress that in every society there are vulnerable populations who must be shielded from exploitation, especially when they are unable to advocate for themselves. Private equity firms must exercise heightened caution when investing in sectors where profits — including carried interest — may be generated at the expense of such individuals. This caution is particularly critical when firms apply the classic "roll-up" strategy, focusing on enhancing revenues, cutting costs, or divesting less profitable services. Sectors requiring particular attention include hospice care, nursing homes, rehabilitation centers, substance use disorder treatment facilities, patient transportation services, women's health clinics, primary care practices, autism centers, childcare services, and similar areas. As cited in this study, an investigation by *The Guardian* conducted by journalists Sarah Marsh and Carmen Aguilar García revealed that private equity-backed firms have been profiting significantly from operating Sexual Assault Referral Centres (SARCs) in England, raising serious concerns about the commercialization of highly sensitive healthcare services for vulnerable patients.

While some U.S. states have introduced legislation requiring attorney general approval before changes in control of healthcare facilities, such regulations primarily focus on transactions and do not address the realities of post-acquisition management. Similarly, within the European Union, although competition authorities may review healthcare acquisitions for antitrust concerns, there is limited regulation specifically addressing the long-term operational impacts of private equity ownership on patient care. In both the U.S. and the EU, ongoing, rigorous monitoring is essential to ensure that patient outcomes are safeguarded under private equity ownership.

PE firms must recognize that healthcare investments impose unique responsibilities toward vulnerable constituencies, responsibilities that are not typically encountered in their traditional portfolio companies. The interests of these populations are deeply intertwined with the outcomes of the services they receive. Therefore, investment analysis and operational strategies must integrate a clear focus on both the quality and affordability of patient care.

Thirdly, some maneuvers must be taken into consideration to curb the effects of bankruptcy. Generally speaking, in a typical private equity acquisitions, firms rely heavily on debt



financing, often covering 60% to 80% of the purchase price. These short-term capital injections can temporarily stabilize distressed healthcare institutions — such as hospitals with low operating margins — that might otherwise face closure without immediate financial relief. However, As N. Lietz and Z. Song argued in their article, evidence indicates that PE firms are more likely to target financially healthy companies, both within and outside of healthcare, rather than distressed ones. Healthier targets are generally better positioned to absorb the increased debt burden resulting from leveraged buyouts, whether by raising prices, expanding service volume, or implementing cost reductions, such as workforce cuts. For example, one study found that hospitals acquired by PE firms had significantly higher pre-acquisition operating margins (+4.4%) compared to non-PE hospitals (-1.2%), suggesting that PE firms prioritize more profitable acquisition targets.

Following a leveraged buyout, the responsibility for repaying acquisition-related debt typically falls on the healthcare entity itself, shifting the financial risk away from the parent PE firm. This structure reduces the financial exposure of PE firms and enhances potential returns by leveraging a higher proportion of debt. Moreover, the legal separation between PE firms and their acquired entities — as well as among the acquired entities themselves — often shields the parent company from the consequences of bankruptcy. For instance, if a "rolled-up" practice within a platform acquisition were to fail, neither the platform company nor other associated practices would bear direct financial liability, despite collective negotiations for higher insurance reimbursement rates. Research indicates that entities with similar debt levels, whether PE-owned or not, experience comparable default rates, suggesting that it is the debt burden — rather than PE ownership per se — that largely explains bankruptcy risks.

To mitigate these risks, federal and state policymakers in the United States should consider introducing caps on the amount of debt permitted in healthcare transactions. The European Union's Alternative Investment Fund Managers Directive (AIFMD) provides a useful model, as it formally imposes limits on leverage within PE acquisitions. However, while the AIFMD was fully implemented in 2018, enforcement has been uneven across EU member states, and limited data are available regarding its impact on institutional financial health or patient care outcomes. Strengthening enforcement of the AIFMD across all EU countries, coupled with the adoption of similar debt limitation frameworks in the U.S., would promote greater financial stability among healthcare institutions and better protect patients from the downstream effects of excessive leverage.

Fourth, after acquiring healthcare entities, private equity firms commonly implement strategies such as reducing staff numbers, replacing higher-cost employees with lower-cost alternatives, and selling off real estate assets. These practices, often referred to as asset stripping, allow PE firms to extract value from the acquired organization and distribute returns to their investors. Evidence shows that reductions in staffing are associated with deteriorating patient outcomes, including higher mortality rates, as observed in a study of nursing homes. Staffing cuts have also been linked to a relative rise in hospital-acquired adverse events following acquisitions. Furthermore, the sale of real estate increases the debt burden on healthcare entities, which can intensify cost-cutting pressures and threaten the institution's long-term financial health. In response to these risks, policymakers, both in the United States and across the European Union, should consider adopting general prohibitions or conditioning approvals of healthcare transactions on the presence of robust safeguards against asset-stripping practices. As a result, strengthening such oversight on both sides of the Atlantic would help protect healthcare institutions and patients from the negative impacts of these financial strategies.

### 5.3 Limitations of the study

While this thesis offers a comprehensive and timely review of private equity's impact on healthcare, it is important to acknowledge several limitations that constrain the scope, representativeness, and generalizability of its findings.

The primary aim of this thesis was to provide an up-to-date and structured overview of the most authoritative and methodologically robust studies examining the impact of private equity on patient welfare, healthcare delivery systems and the healthcare market equilibrium. In pursuit of this objective, the research prioritized literature that assessed healthcare outcomes, specifically quality, efficiency, and accessibility, from a patient-centered perspective, rather than focusing exclusively on financial performance or operational metrics. These three healthcare objectives were not only used to evaluate the effects of PE ownership, but also served as key benchmarks for identifying potential indicators of monopolistic behavior within the healthcare sector. However, this approach immediately revealed a substantial gap: very few empirical or narrative studies focus directly on PE investment through the lens of healthcare goals or patient-centered outcomes. The dominant body of research in this area tends to adopt an economic or business-oriented perspective, measuring success through profitability, return on investment, or market consolidation—metrics that, while relevant, may overlook the ethical and practical consequences for patients and providers. In order to address this gap, the study incorporated a number of sources from the gray literature—including reports by think tanks, professional associations, journalistic investigations, and firsthand practitioner accounts. While these sources provide valuable insights, especially into emerging trends and under-researched specialties, they do not undergo the same rigorous peer-review process as academic journal articles. As a result, their inclusion introduces a potential bias in the form of anecdotal or advocacy-driven conclusions, which may reflect vested interests or lack consistent methodological standards. The blending of academic and gray literature, while necessary to construct a more holistic narrative, complicates the uniformity and reliability of the evidence base.

Second, a geographic limitation significantly influences the findings. The overwhelming majority of available literature pertains to the United States, whose healthcare system differs structurally, ideologically, and financially from that of the European Union. In the U.S., healthcare is predominantly privatized and insurance-based, meaning that access to care is largely contingent on one's employment status, income level, or eligibility for government programs like Medicare or Medicaid. By contrast, EU member states prioritize universal access, often providing publicly funded healthcare services underpinned by principles of equity, solidarity, and fairness. This fundamental difference in healthcare governance and financing models renders direct comparisons, and particularly the generalization of U.S.-based findings to European contexts, problematic and often misleading. For example, profit-driven motives that might severely restrict access to care in the U.S. may have muted effects in the EU, where baseline access is protected by law and supported through taxation.

Third, PE activity in Europe remains under-researched and underreported. Despite the growing presence of private investors in EU-based outpatient clinics, diagnostic centers, and primary care practices, scientific evidence on the clinical and social implications of this expansion is still relatively scarce. There is a lack of granular, country-specific data, and the diversity of national healthcare systems within the EU, ranging from Bismarckian insurance-based systems to Beveridge-style tax-funded models, makes it difficult to identify a cohesive European trend.

As a result, any attempt to evaluate PE's systemic impact across Europe is inherently constrained by insufficient data, inconsistent definitions, and methodological disparities.

Fourth, the multidisciplinary nature of the topic, which touches upon economics, health policy, ethics, and competition law, makes it difficult to apply a unified analytical framework. The methodological heterogeneity across the selected studies complicates any attempt to compare findings or synthesize them into definitive conclusions. For instance, while one study may use staffing levels and deficiency citations as proxies for quality in nursing homes, another may rely on coding practices and reimbursement claims in surgical clinics—metrics that are not directly comparable. In addition, variation across specialties (e.g., emergency medicine vs. behavioral health) introduces another layer of complexity, as the dynamics of PE ownership differ significantly depending on the clinical and regulatory environment of each field.

Finally, the rapidly evolving nature of private equity investments in healthcare presents a temporal limitation. The landscape continues to shift with each regulatory change, merger wave, or financial innovation. Many of the studies cited in this thesis are based on data collected before the full effects of recent legislative reforms (e.g., the U.S. No Surprises Act or national reforms on MVZ ownership in Germany) have taken hold. This means that some conclusions may soon be outdated, and new risks or benefits may emerge that were not captured in this review.

Taken together, these limitations underscore the need for continued, interdisciplinary, and region-specific research. Without more transparent ownership data, more robust patient outcome measures, and more comprehensive cross-national studies, it remains difficult to draw final conclusions about whether private equity ultimately improves or undermines the integrity and equity of healthcare delivery. Nonetheless, this thesis contributes to filling a critical gap in the literature by integrating both economic and ethical perspectives and by emphasizing the need for regulatory vigilance in the face of financial consolidation.

## 6 Conclusion

This thesis set out to examine a central and timely question: “*Does the growing scale of private equity in healthcare lead to better care, or merely bigger, more monopolistic systems?*” In exploring the growing presence of private equity in healthcare, the research critically evaluated whether the expansion of investor-owned delivery models enhances or undermines core public health objectives (i.e. quality, efficiency, and accessibility of care).

Interestingly, the findings reveal a deeply complex and often contradictory landscape. On the one hand, PE investments can introduce managerial discipline, capital injections, and operational efficiencies that, under the right conditions, contribute to improved service delivery. In particular, several studies show that financially stable facilities, such as certain nursing homes and specialty clinics, have not experienced a decline in care quality post-acquisition, especially when PE firms adopt strategies aimed at streamlining workflows or upgrading infrastructure. On the other, these benefits are often unequally distributed and, at times, come at a cost. Fascinatingly, the thesis uncovered consistent concerns regarding the long-term consequences of PE-driven consolidation, especially when scale is pursued not for clinical innovation, but for market dominance. By vertically and horizontally integrating healthcare providers, PE firms are well-positioned to reduce competition, influence referral flows, and increase their bargaining power over payers, all of which represent behaviors that mirror classical monopolistic dynamics. In such cases, price increases and reduced provider diversity may occur without proportional improvements in patient outcomes.

Moreover, the analysis highlights significant limitations in the current body of research. Most notably, the U.S.-centric nature of the empirical evidence and the scarcity of robust data on European markets. In retrospect, this geographic imbalance limits the generalizability of findings and points to a critical need for further region-specific studies, particularly in light of the structural and ideological differences between healthcare systems in the U.S. and the EU. The thesis also acknowledges the reliance on gray literature to supplement gaps in peer-reviewed studies, which, while necessary, introduces potential sources of bias and calls for more rigorous, academic research in this space.

To reiterate, the answer to the question posed in the title is not straightforward. Bigger, in the form of consolidated private equity owned healthcare networks, can at times deliver better outcomes, but this is not inherently guaranteed. Better, when defined through patient welfare, equitable access, and sustainable care, should be the central objective of healthcare delivery. However, as the old latin saying goes, “*in medio stat virtus*”. Indeed, meaningful improvements in healthcare can also arise from unconventional paths that may initially raise legitimate concerns. As private capital continues to pour into the sector, regulators and policymakers must urgently ensure that financial scale and ‘short-termism’ do not overshadow clinical value and long term public health priorities while, at the same time, preserving the benefits stemming from much-needed investments. In my quest to strike a perfect balance between ‘bigger and better’, I posit that a single, unifying principle must be at the very core of competition policy in both the U.S and E.U. juridical system, fulfilling that void R. Bork mentioned in his work. More specifically, throughout a brief analysis on the school of thoughts that shaped competition policy in both the realms, it could be highlighted that the American emphasis on efficiency, championed by the Chicagoans, often fails to resolve sector specific inefficiencies, such as those found in healthcare. On the other hand, the European focus on welfare and redistribution, which is a clear Ordoliberal treat, may at times slow innovation and limit scale in favor of preserving social welfare. In light of this, in my quest to find a common principle, I posit that

it is imperative to stress that the governance of healthcare markets must be rooted in non-economic objectives, guided by ethical and moral concerns that prioritise human dignity, equitable access, and the public interest over financial performance and investor returns. In other words, efficiency (in each of its declination) must not be the main objective of competition policy but, rather, a means to an end, that is maximizing patients' well-being.

With that in mind, this thesis concludes with a clear message: healthcare must not be treated merely as an asset class. If private equity is to play a responsible and lasting role in contemporary health systems, it must be held accountable not only for its financial performance but also for its impact on people and society at large. In this context, the potential benefits that financialisation might bring to the healthcare sector must be examined through an open and adaptive legal environment, one that does not judge *ex ante* new investments but welcomes them when they align with the overarching goal of protecting and promoting human well-being. Therefore, regulatory frameworks on both sides of the Atlantic must move beyond narrow economic calculations and adopt a broader, value driven approach that treats health not as a commodity, but as a public good, whose proper functioning directly affects the quality and dignity of our lives.

## Appendix A

### Keywords

- (1) Private Equity
- (2) PE Ownership
- (3) Healthcare Goals
- (4) SDG-3
- (5) Quality
- (6) Efficiency
- (7) Universal Access
- (8) Benefits
- (9) Monopoly
- (10) Monopolistic behavior

### ADVANCED SEARCH Keywords

- (1) “Private Equity” AND “Healthcare Goals”
- (2) “Private Equity” Ownership” AND “Quality” AND “Healthcare Goals”
- (3) “Private Equity” AND “Healthcare” AND “Quality”
- (4) “Private Equity” AND “Healthcare Efficiency”
- (5) “Private Equity” AND “Healthcare Quality”
- (6) “Private Equity” AND "Efficiency" AND "SDG-3"
- (7) “Private Equity AND "Quality" AND "SDG-3"
- (8) “Private Equity" AND "Benefit" AND "Healthcare” AND "SDG-3"
- (9) “Private Equity” AND “Monopoly”
- (10) “Private Equity” AND “Monopoly” AND “Healthcare efficiency”
- (11) “Private Equity” AND “Monopoly” AND “Healthcare efficiency” AND “Quality”

## REFERENCES

- Appelbaum, E., & Batt, R. (2014). *Private Equity at Work: When Wall Street Manages Main Street*. Russell Sage Foundation.
- Appelbaum, E., Batt, R., & Clark, I. (2013). Implications of financial capitalism for employment relations research: Evidence from breach of trust and implicit contracts in private equity buyouts. *British Journal of Industrial Relations*, 51(3), 498–518. <https://doi.org/10.1111/bjir.12006>
- Barros, P. P., & Siciliani, L. (2011). Choosing the type of competition in the NHS: The trade-off between patient choice and provider incentives. *Fiscal Studies*, 32(4), 531–552.
- Braun, B. (2021). Central banking and the infrastructural power of finance: The case of ECB support for repo and securitization markets. *Socio-Economic Review*, 19(2), 367–392.
- Burns, L. R., & Pauly, M. V. (2018). Transformation of the health care industry: Curb your enthusiasm? *Milbank Quarterly*, 96(1), 57–109.
- Candeub, A., & McCotter, M. (2021). How private equity hurts healthcare. *American Affairs*, 5(2). <https://americanaffairsjournal.org/2021/05/how-private-equity-hurts-healthcare/>
- Center for Economic and Policy Research. (2023). *Private Equity's Toll on Healthcare*. <https://cepr.net/report/private-equitys-toll-on-healthcare/>
- Centers for Medicare & Medicaid Services. (2023). *National Health Expenditure Data*. <https://www.cms.gov>
- Earle, C. C., et al. (2020). Private equity investment and outcomes in nursing homes: A longitudinal study. *Health Affairs*, 39(6), 956–963. <https://doi.org/10.1377/hlthaff.2020.00030>
- European Commission. (2021). *Competition policy brief: Private equity in healthcare*. Directorate-General for Competition.
- European Private Equity and Venture Capital Association (Invest Europe). (2023). *Private Equity Activity in Europe*. <https://www.investeurope.eu>
- GAO. (2020). *Private Health Insurance: Markets Remain Concentrated through 2018*. U.S. Government Accountability Office. <https://www.gao.gov/assets/gao-21-34.pdf>
- Gupta, A., Howell, S. T., Yannelis, C., & Gupta, A. (2021). Does private equity investment in healthcare benefit patients? Evidence from nursing homes. *NBER Working Paper No. 28474*. <https://doi.org/10.3386/w28474>
- HCA Healthcare. (2023). *Annual Report 2022*. <https://investor.hcahealthcare.com/>
- Khan, L. M., & Vaheesan, S. (2017). Market power and inequality: The antitrust counterrevolution and its discontents. *Harvard Law & Policy Review*, 11, 235.

- Kruse, G. R., et al. (2022). The effect of private equity acquisition on hospital financial performance and quality: A difference-in-differences analysis. *JAMA Health Forum*, 3(8), e222073. <https://doi.org/10.1001/jamahealthforum.2022.2073>
- Lazonick, W., & Shin, J.-S. (2020). *Predatory Value Extraction: How the Looting of the Business Corporation Became the US Norm and How Sustainable Prosperity Can Be Restored*. Oxford University Press.
- Ludvigsson, J. F. (2015). Research and healthcare quality in the era of private equity. *Acta Paediatrica*, 104(2), 97–99.
- Madgavkar, A., et al. (2020). *The future of work in Europe*. McKinsey Global Institute. <https://www.mckinsey.com/mgi>.
- OECD. (2021). *Private Equity Investment in Healthcare: Risks and Opportunities*. Organisation for Economic Co-operation and Development. <https://www.oecd.org>
- Palangkaraya, A., Yong, J., & Webster, E. (2012). Entry and exit in the healthcare sector. *Small Business Economics*, 39, 161–183.
- Phalippou, L. (2020). *An Inconvenient Fact: Private Equity Returns & The Billionaire Factory*. SSRN. <https://ssrn.com/abstract=3623820>.
- Pradhan, R., et al. (2023). Private equity and maternal outcomes in obstetrics: A comparative study. *American Journal of Obstetrics and Gynecology*, 229(1), 82.e1–82.e10. <https://doi.org/10.1016/j.ajog.2023.01.009>.
- Private Equity Stakeholder Project. (2022). *Private Equity in Healthcare Report*. <https://pestakeholder.org>
- PwC. (2023). *Global Private Equity and Healthcare Outlook*. <https://www.pwc.com>
- Romero, R. (2021). Steward Health Care: An experiment in private equity hospital management. *Journal of Health Politics, Policy and Law*, 46(5), 777–784.
- Scheffler, R. M., & Arnold, D. R. (2019). Insurer market power lowers prices in health exchanges. *Health Affairs*, 38(9), 1517–1524.
- Shortell, S. M., & Kaluzny, A. D. (2006). *Health Care Management: Organization Design and Behavior* (5th ed.). Cengage Learning.
- U.S. Department of Justice. (2022). *Enforcement of antitrust laws in healthcare markets*. <https://www.justice.gov/atr/health-care>.
- Weigel, P. A., et al. (2023). Private equity ownership and patient experience in hospitals. *Health Services Research*, 58(1), 17–26. <https://doi.org/10.1111/1475-6773.14091>.



- Bruch, J. D., Gondi, S., & Song, Z. (2020). Changes in hospital income, use, and quality associated with private equity acquisition. *JAMA Internal Medicine*, 180(11), 1428–1435. <https://doi.org/10.1001/jamainternmed.2020.3552>
- Bruch, J. D., Zeltzer, D., & Song, Z. (2021). Characteristics of private equity-owned hospitals in 2018. *Annals of Internal Medicine*, 174(2), 277–279. <https://doi.org/10.7326/M20-1361>
- Braun, R. T., Yun, H., Casalino, L. P., et al. (2020). Comparative performance of private equity-owned US nursing homes during the COVID-19 pandemic. *JAMA Network Open*, 3(10), e2026702. <https://doi.org/10.1001/jamanetworkopen.2020.26702>
- Dranove, D., & Satterthwaite, M. A. (2000). The industrial organization of health care markets. In A. J. Culyer & J. P. Newhouse (Eds.), *Handbook of Health Economics* (Vol. 1, Part B, pp. 1093–1139). Elsevier. [https://doi.org/10.1016/S1574-0064\(00\)80033-5](https://doi.org/10.1016/S1574-0064(00)80033-5)
- Galetta, M. S., Mekanji, H. S., Strony, J., Goyal, D. K. C., & Kurd, M. F. (2019). Changing reimbursement models and private equity ownership in spine surgery. *Annals of Translational Medicine*, 7(Suppl 5), S166. <https://doi.org/10.21037/atm.2019.05.68>
- Gaynor, M., Ho, K., & Town, R. J. (2015). The industrial organization of health-care markets. *Journal of Economic Literature*, 53(2), 235–284. <https://doi.org/10.1257/jel.53.2.235>
- Gondi, S., & Song, Z. (2019). Potential implications of private equity investments in health care delivery. *JAMA*, 321(11), 1047–1048. <https://doi.org/10.1001/jama.2019.1077>
- Gupta, A., Howell, S. T., Yannelis, C., & Gupta, A. (2020). Does private equity investment in healthcare benefit patients? Evidence from nursing homes. *NYU Stern School of Business Working Paper*. <https://doi.org/10.2139/ssrn.3537612>
- Harrington, C., Olney, B., Carrillo, H., & Kang, T. (2012). Nurse staffing and deficiencies in the largest for-profit nursing home chains and chains owned by private equity companies. *Health Services Research*, 47(1 Pt 1), 106–128. <https://doi.org/10.1111/j.1475-6773.2011.01311.x>
- Henry, C., & Loomis, J. M. (2024). *Private equity and the transformation of U.S. healthcare: From public good to financial asset*. *Journal of Health Economics and Policy*, 39(2), 115–134.
- Goodair, B., & Reeves, A. (2024). The effect of health-care privatisation on the quality of care. *The Lancet Public Health*, 9(3), e199–e206. [https://doi.org/10.1016/S2468-2667\(24\)00003-3](https://doi.org/10.1016/S2468-2667(24)00003-3)
- Eren, M. (2016). *Financialisation in health care: An analysis of private equity fund investments in health care systems*. *Social Science & Medicine*, 168, 305–313. <https://doi.org/10.1016/j.socscimed.2016.10.019>

