



Private Equity in Health Care: Prevalence, Impact, and Policy Options for California and the US

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Executive Summary

Private equity (PE) investment in the broad health care economy, which includes health care service providers, health care technology, and the pharmaceutical and biotech industries, has grown markedly both nationally and in California over the last 20 years. At its most recent peak in 2021, PE investment into health care totaled about \$83 billion nationally and \$20 billion in California (see Figures 1 and 2).

While the majority of overall PE dollars has been directed at biotechnology and pharmaceuticals in recent years, PE acquisitions of health care service providers (such as outpatient clinics, hospitals, and nursing homes) make up a significant portion of all PE health care deals. Nationally, between 2019 and 2023, PE deals to acquire health care service providers totaled \$46.9 billion and represented over half ($n = 3,326$ of $5,779$) of all PE deals in the health care fields the authors examined (see Figure 1). In California, acquisitions of providers totaled \$4.31 billion dollars between 2019 and 2023, and represented roughly a third of all deals ($n = 307$ of 875) (see Figure 3). Available data, while limited, show that PE has gained a small but meaningful ownership foothold among certain kinds of providers. PE firms now own approximately 8% of all private hospitals in the US and approximately 6% of private hospitals in California.¹

This trend raises concerns as studies have shown that PE acquisition of health care service providers is associated with the following outcomes²:

- ▶ Higher costs for patients and insurers
- ▶ Lower patient satisfaction
- ▶ Mixed changes to operating costs
- ▶ Mixed to worse quality of care
- ▶ Worse financial outcomes for the entities being acquired

In response, federal and state policymakers, including in California, are exploring a range of options to increase oversight, including the following:

- ▶ Empowering federal antitrust regulators to review PE mergers and acquisitions in a more time- and cost-effective fashion. At the state level, empowering state attorneys general or some other state-based regulatory authority to review and veto PE mergers and acquisitions deemed to be anticompetitive.
- ▶ Improving public transparency of PE ownership, the specifics of a proposed deal (e.g., the amount or proportion of debt used), subsequent firm finances, and prices.
- ▶ State or federal requirements or conditions that safeguard against “asset stripping,” the common PE practice of reducing staff, shifting to lower-cost staff, or selling real estate shortly after acquiring a health care service provider to maximize profits.
- ▶ Federal or state policymakers could also consider limits on the amount of debt or leverage allowed in a PE acquisition. Since PE firms typically use debt to finance 60%–80% of the price of acquisitions, and that debt is then transferred to the entity being acquired, such limits could help protect the long-term financial stability of health care providers that are acquired.

This brief synthesizes available data and academic research to outline trends in PE investment in the broad health care sector, then dives deeper into PE investment specifically in health care service providers (clinics and outpatient services, hospitals, and nursing homes); reviews the effect of PE acquisition on economic and clinical outcomes; and explores emerging policy approaches to oversight of PE acquisitions, particularly those being exercised or considered by state policymakers.

Background: What Is Private Equity?

Over the last 20 years, private equity (PE) investment in the health care economy both nationally and in California has grown markedly. This type of private sector, investor-based ownership of health care providers introduces a financing mechanism with distinctive features relative to other forms of private ownership. It also introduces new concerns related to patient well-being, societal resources, and the health care workforce.

Several key factors distinguish PE ownership from other forms of for-profit, private ownership of health care providers (see sidebar). PE firms manage funds that receive investments from institutional investors, including pension funds, sovereign funds, and endowments, as well as high-net-worth individuals (collectively deemed “limited partners”). These PE funds, managed by general partners from the parent firm, then seek to purchase health care entities, such as hospitals, nursing homes, or physician practices. In the classic PE model, which has an over two-decade history prior to the recent influx into health care, PE funds often finance approximately 60%–80% of their acquisitions through borrowed money (i.e., debt), with the remaining 20%–40% through existing capital — the large majority of which (often over 90%) comes from institutional investors, and the small remainder from the equity of the parent PE firm. Of note, the acquired entity assumes the debt from an acquisition, with its assets typically used as collateral.³ Thus such deals typically shift risk to the acquired entity. Such debt-financed deals are called “leveraged buyouts” as they allow PE general partners to spend a small proportion of their own funds on a deal (typically ~2% of the acquisition price), allowing general partners to “leverage” proportionally higher profits.

The acquired entity, under the direction of the PE firm, subsequently faces the need to generate additional revenue or decrease operating costs to begin paying down interest on the debt. In health care, additional revenue typically comes from increases in the prices or amount (i.e., utilization) of services delivered. Strategies such as “financial engineering” (e.g., dividend recapitalization) and “asset stripping” (e.g., selling real estate to generate short-term returns) are frequently used to quickly increase revenue, often without clear long-term benefits to patients and providers. On the cost side of the ledger, PE firms often seek to reduce labor expenses, which drive a significant portion of underlying costs within the health care sector.

PE firms often sell their acquisitions within three to seven years, though in times of economic uncertainty have held them for longer periods. During the years in which PE firms hold their acquisitions, both the acquired entity and the limited partners pay the parent PE firm management fees, which annually average 2% of assets under management. These are a critical source of ongoing income for the PE firm. For instance, if an asset is held for five years, 10% of its value could be charged via management fees alone. Management fees also incentivize PE firms to increase the size and frequency of deals, as PE firms do not charge management fees on uninvested funds (or “dry powder”). When the acquisition is sold, profits are typically divided between the parent PE firm and limited partners, with the latter receiving the majority of returns.

Key Features of Private Equity in Health Care

A focus on short-term returns. Private equity (PE) firms typically invest in mature, successful businesses with the potential to generate additional revenue in the short term. Moreover, short-term techniques to maximize earnings for investors and the parent PE firm include cutting costs, selling assets of the acquired entity (e.g., real estate), and dividend recapitalization, along with other financial engineering strategies. PE firms typically exit their acquisitions (i.e., sell them to another buyer) within three to seven years.

Use of debt to finance purchases. PE firms typically finance more than half of the purchasing price of an acquisition using debt (a so-called “leveraged buy-out”). The purchased entity assumes this debt with its assets as collateral. This limits the financial risk faced by the PE firm and raises its potential returns, but the debt and associated interest also contribute to higher risk of financial insolvency for the acquired company.⁴

Accelerating consolidation. Using a “buy and build” strategy, PE firms typically purchase a “platform” practice in a geographical area and subsequently acquire neighboring clinical entities in “roll-up” deals, thereby accelerating market power, which enables the acquired entities to command higher commercial prices. Firms may also vertically consolidate by purchasing multiple companies in a supply chain.

Tax and regulatory advantages. PE general partners earn the majority of their income from investment profits, which are taxed at the capital gains rate of 20%, significantly less than the highest federal income tax rate of 37% (“carried interest loophole”). Given their private funding, PE firms are subject to less regulatory scrutiny by agencies like the Securities and Exchange Commission. Moreover, ownership structures of PE-backed entities can be opaque, such as through the use of shell companies.

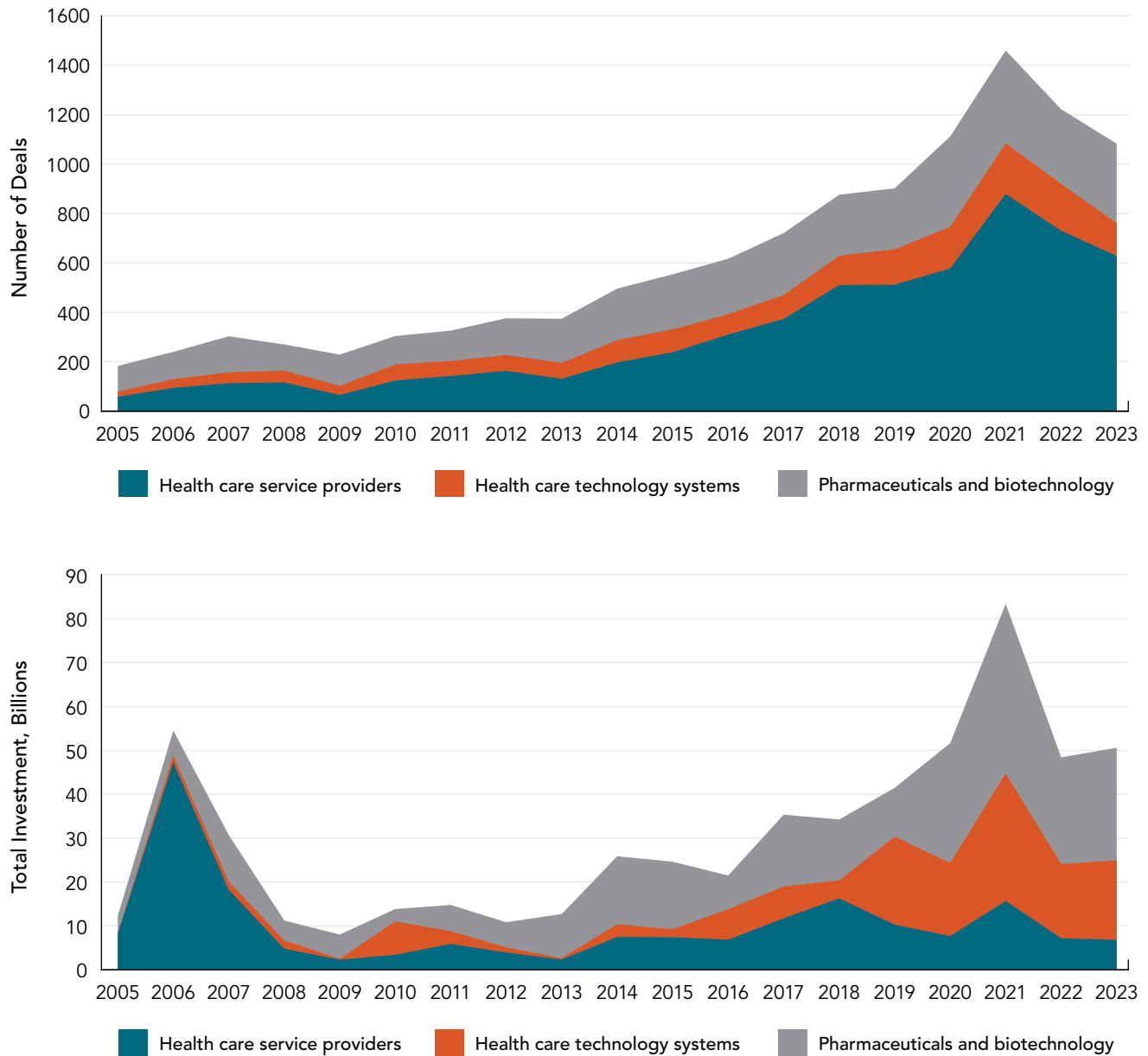
The Prevalence of Private Equity Investment in Health Care

National Trends

Nationally, the total number of PE deals in the health care sector (defined in this section as comprising health care service providers, health care technology systems, and pharma/biotech) rose steadily throughout the past two decades before peaking in 2021, fueled by low interest rates that

made the cost of leveraged buyouts comparatively less expensive (Figure 1). Over the same time, the total dollar amount of PE deals in health care nationally rose from approximately \$12 billion in 2005 to a peak of more than \$83 billion in 2021 (Figure 1).

Figure 1. PE Investment in Health Care in the US, 2005–2023



Notes: “Deals” include all buyouts, add-ons, and public-to-private deals. “Health care service providers” include hospitals/inpatient services, outpatient clinics, rehabilitation centers, and skilled nursing facilities. “Health care technology systems” include companies that provide revenue management, electronic medical records, or other technological services for health care providers and health systems. “Pharmaceuticals and biotechnology” include pharmaceutical manufacturers, drug discovery companies, and clinical trial management companies, among others.

Source: Authors’ analysis of [PitchBook](#) data. PitchBook data are dynamic, and results may vary by search date.

To date, most of the literature in medical and health policy journals has focused on PE acquisitions of health care service providers, such as outpatient clinics, skilled nursing facilities, or acute care hospitals. By the total number of deals, these acquisitions collectively represent approximately half of all PE deals in the health care sector over the past five years. Nationally, there were 3,326 PE deals for health care providers between 2019 and 2023, representing investments of \$46.9 billion (Figure 2). Though collectively fewer in number, investments in health care technology, pharmaceutical, and biotechnology firms are comparatively larger in dollar amount, driving the total value of those PE transactions significantly past those in health care service providers.

A Closer Look at PE Investment in Health Care Service Providers Nationally

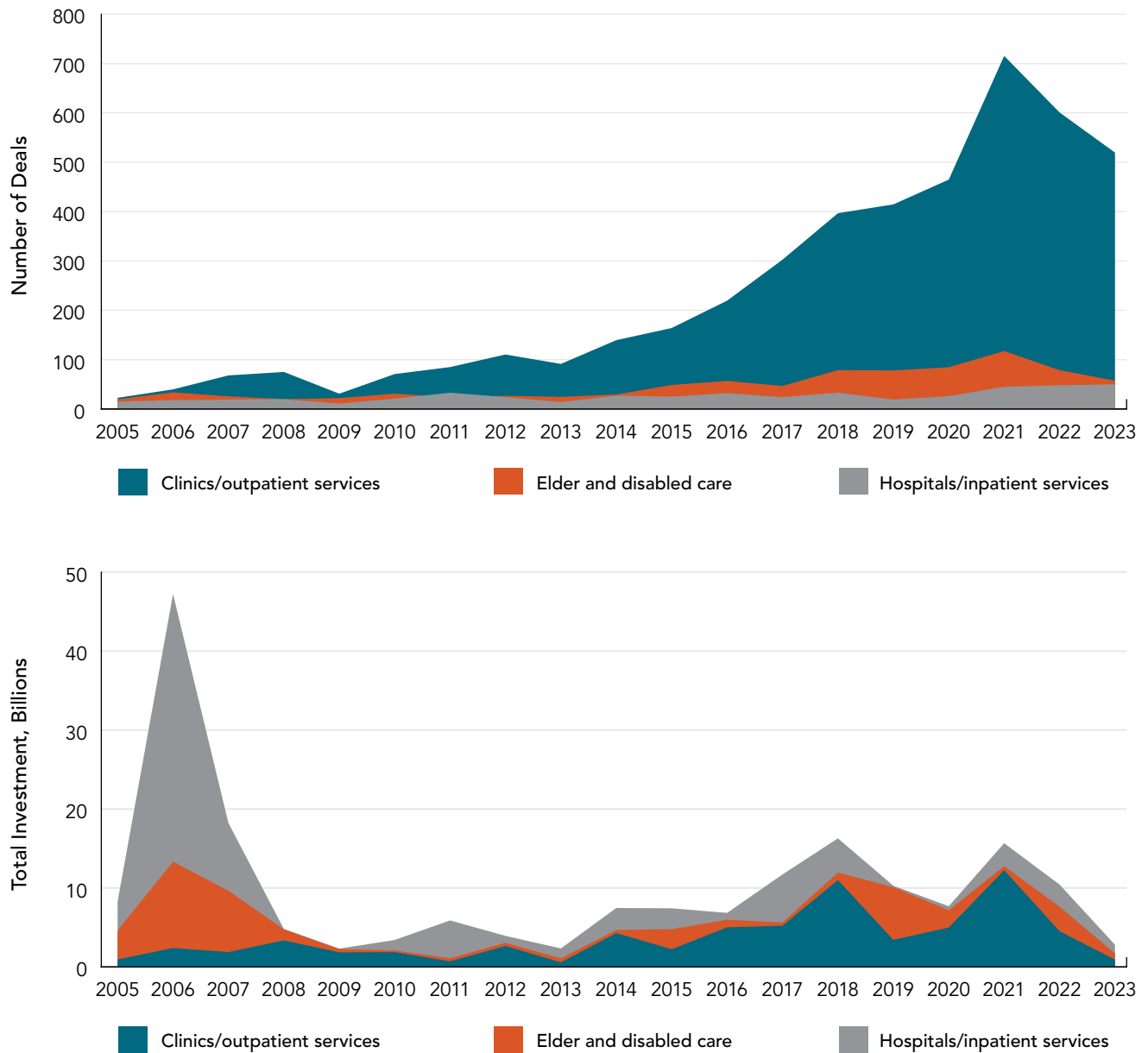
Outpatient Clinics

Our findings are similar to those of another study, which found that PE investment in outpatient practices nearly tripled from 2010 to 2020.⁵ PE firms

have focused on specialties that have the potential to deliver highly reimbursed procedures historically through solo practices or fragmented networks of providers, as this type of landscape provides opportunities for consolidation.

Empirically, PE investment in dermatology and ophthalmology practices represented more than half of all total outpatient deals in 2021.⁶ Other physician specialties that have garnered acquisitions from PE firms include gastroenterology and orthopedics, which similarly perform relatively quick outpatient procedures. With an aging US population, the recently lowered recommended age for screening colonoscopies, and mandated coverage of preventive care under the Affordable Care Act, anticipated demand for gastroenterology services is expected to increase in the future, consistent with PE interest in this specialty.⁷ Investment in reproductive and fertility care has increased as well, partly because this clinical specialty has a high proportion of high-earning, cash-paying patients, and thus may be particularly resilient to changes in government regulation and economic downturns.⁸

Figure 2. PE Acquisitions of Health Care Service Providers in the US, 2005–2023



Notes: “Deals” include all buyouts, add-ons, and public-to-private deals. “Clinics/outpatient services” include ambulatory surgery centers, outpatient rehab centers, primary care clinics, specialty clinics, and outpatient radiology. “Elder and disabled care” includes skilled nursing facilities, hospice, and assisted living. “Hospitals/inpatient services” include emergency rooms as well as acute care hospitals.

Source: Authors’ analysis of [PitchBook](#) data. PitchBook data are dynamic, and results may vary by search date.

Hospital and Inpatient Services

By deal amount, PE hospital deals spiked in 2006 with the acquisition of the Hospital Corporation of America by Bain Capital and investment bank Merrill Lynch. By deal count, PE acquisitions of hospitals have remained relatively steady over the past two decades. PE firms now own approximately 4%–6% of all acute care hospitals in the US,⁹ and 11% of all nongovernment inpatient admissions now occur at hospitals owned by PE firms.¹⁰ To date, PE firms have been more likely to acquire for-profit hospitals in the mid-Atlantic and southern US.¹¹ Proportionately, rural hospitals have been more likely to be acquired by PE firms than urban or suburban ones.¹² Rural hospitals may be attractive options for PE firms because they are more likely to already have a high degree of market power, be financially challenged, and be eligible for additional government subsidies.¹³

Elder and Disabled Care

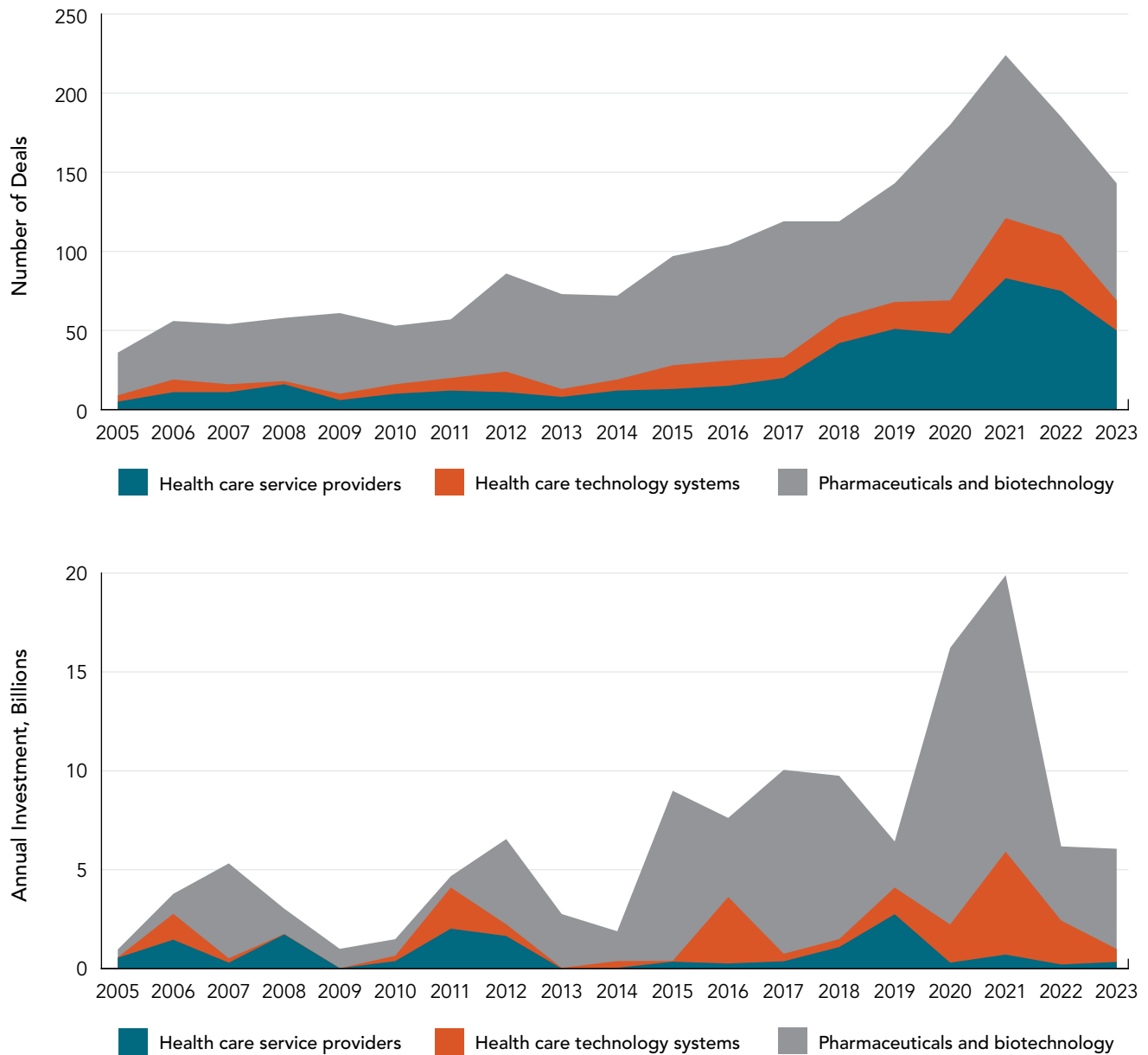
PE investment in nursing homes was essentially nonexistent prior to 2004. Since then, however, PE ownership of nursing homes has grown to

about 11% of all total nursing home agencies in the US.¹⁴ By 2019, 7.7% of Medicare beneficiaries receiving hospice care were treated by PE-owned hospice agencies, a 328% increase from 2018.¹⁵ PE investment in home health care agencies has also accelerated, with PE acquisitions representing nearly 50% of all deals in home health care between 2018 and 2019.¹⁶

California-Specific Trends

Trends in PE acquisitions in California have been similar to national trends, but with more year-to-year variation. Deal counts and sizes have grown steadily, from 36 deals collectively totaling less than \$1 billion in 2005, to 224 deals collectively totaling \$20 billion in 2021. By deal amount, pharmaceutical companies were responsible for 71.4% of transactions between 2019 and 2023, though a small number of large transactions explain this fact. Deals for health care providers (inpatient hospitals, clinics, and elder and disabled care) totaled \$4.31 billion in the past five years and \$14.53 billion in the past 19 years the authors analyzed (Figure 3).

Figure 3. PE Investment in Health Care in California, 2005–2023

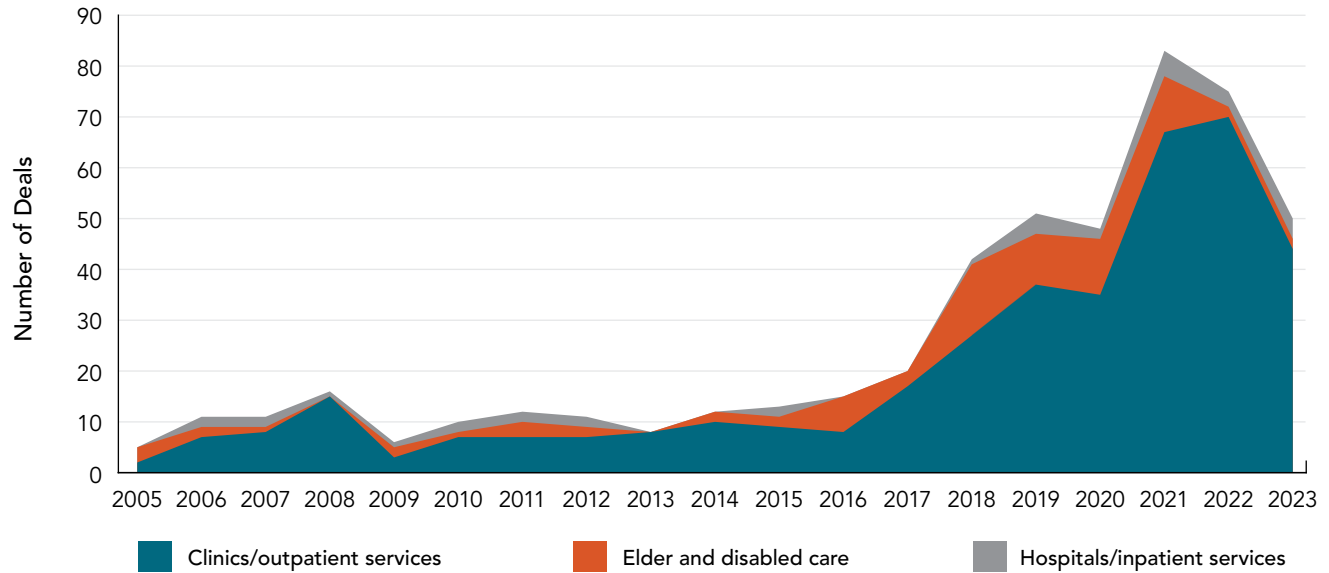


Notes: “Deals” include all buyouts, add-ons, and public-to-private deals. “Health care service providers” include hospitals/inpatient services, outpatient clinics, rehabilitation centers, and skilled nursing facilities. “Health care technology systems” include companies that provide revenue management, electronic medical records, or other technological services for health care providers and health systems. “Pharmaceuticals and biotechnology” include pharmaceutical manufacturers, drug discovery companies, and clinical trial management companies, among others. “Number of deals” may reflect companies with assets in multiple states, which cannot all be attributed to California.

Source: Authors’ analysis of [PitchBook](#) data. PitchBook data are dynamic, and results may vary by search date.

A Closer Look at PE Investment in Health Care Service Providers in California

Figure 4. PE Acquisitions of Health Care Service Providers in California, 2005–2023



Notes: “Clinics/outpatient services” include ambulatory surgery centers, outpatient rehab centers, primary care clinics, specialty clinics, and outpatient radiology. “Elder and disabled care” includes skilled nursing facilities, hospice, and assisted living. “Hospitals/inpatient services” include emergency rooms as well as acute care hospitals. Small sample size and high year-to-year variability precluded a meaningful year-to-year trend analysis of deal size (in dollars) in California. Source: Authors’ analysis of [PitchBook](#) data. PitchBook data are dynamic, and results may vary by search date.

Mirroring national trends, PE acquisitions of health care service providers in California have been heavily focused on clinics and outpatient services (by deal count). Acquisitions of outpatient providers increased from two in 2005 to 70 in 2022 (Figure 4).

PE firms currently own 22 hospitals in California, which represent approximately 6% of all private hospitals in the state (Table 1).¹⁷

Table 1. Hospital Ownership by PE Firms in California, February 2024

HOSPITAL NAME	PE FIRM	CITY
Bakersfield Heart Hospital	Bain Capital	Bakersfield
Bakersfield Rehabilitation Hospital	One Equity Partners	Bakersfield
Barstow Community Hospital	GoldenTree Asset Management, Davidson Kempner	Barstow
Coast Plaza Hospital	Stanton Road Capital, Davidson Kempner, Deerfield Management	Norwalk
Community Hospital of Huntington Park	Stanton Road Capital, Davidson Kempner, Deerfield Management	Huntington Park
East Los Angeles Doctors Hospital	Stanton Road Capital, Davidson Kempner, Deerfield Management	Los Angeles
Kindred Hospital Baldwin Park	Apollo Global Management	Baldwin Park
Kindred Hospital Brea	Apollo Global Management	Brea
Kindred Hospital La Mirada	Apollo Global Management	La Mirada
Kindred Hospital Los Angeles	Apollo Global Management	Los Angeles
Kindred Hospital Ontario	Apollo Global Management	Ontario
Kindred Hospital Paramount	Apollo Global Management	Paramount
Kindred Hospital Rancho	Apollo Global Management	Rancho Cucamonga
Kindred Hospital Riverside	Apollo Global Management	Perris
Kindred Hospital San Diego	Apollo Global Management	San Diego
Kindred Hospital San Francisco Bay Area	Apollo Global Management	San Leandro
Kindred Hospital South Bay	Apollo Global Management	Gardena
Kindred Hospital Westminster	Apollo Global Management	Westminster
Memorial Hospital of Gardena	Stanton Road Capital, Davidson Kempner, Deerfield Management	Gardena
Pacifica Hospital of the Valley	JR Dallas Wealth Management	Sun Valley
Palomar Rehabilitation Institute	Apollo Global Management	Escondido
Sacramento Rehabilitation Hospital	One Equity Partners	Sacramento

Source: "PESP Private Equity Hospital Tracker," Private Equity Stakeholder Project, accessed February 27, 2024. Analysis performed using Stata 18.1 and Excel. Data are current as of February 28, 2024.

Effects of PE Acquisition on Health Care Delivery

Peer-reviewed studies of the effects of PE acquisitions in the health care services sector have emerged concurrent to increasing PE activity. A recent systematic review of 55 studies of changes in financial and clinical outcomes associated with PE acquisitions of health care provider entities offers insights that are summarized in the accompanying sidebar.¹⁸ To the authors' knowledge, there are few data on health outcomes of PE investment specific to California.

The Effects of PE Acquisition on Health Care Service Providers

Higher prices. PE acquisition has led to higher prices for patients and insurers.

Lower patient satisfaction. PE acquisition was associated with lower scores on overall satisfaction.

Mixed changes in operating costs. PE-acquired hospitals had lower operating costs per discharge, likely due to reduced staffing. Nursing homes had higher operating costs, possibly due to sale-leasebacks, though there were only two studies evaluating this (Figure 5).

Mixed to worse quality. PE acquisition was associated with mixed to worse clinical quality. Staffing decreased in most studies. Four studies have evaluated mortality, with overall mixed to possibly worse effects (Table 2).

Worse financial outcomes. Outside of health care, leveraged buyouts have significantly increased the risk of bankruptcy.¹⁹ Nursing homes acquired more debt after PE acquisition.

Source: Alexander Borsa et al., "Evaluating Trends in Private Equity Ownership and Impacts on Health Outcomes, Costs, and Quality: Systematic Review," *BMJ* 382 (July 19, 2023): e075244.

Most (n = 9 of 12) studies found that PE acquisition led to higher costs for patients or insurers, with some (n = 3 of 12) finding no difference. Higher charges, which are often passed along to patients, have been documented in outpatient clinics, hospitals, and nursing homes.²⁰ PE firms often serially acquire multiple health care entities. Such "roll-ups" increase market power in a geographic area and make it easier for these providers to charge higher prices.

For owners of health care delivery entities, PE acquisition was associated with mixed changes in operating costs, though only five studies evaluated this question. In hospitals, some (n = 3 of 12) studies found reduced operating costs that were likely accompanied by mixed to worse changes in hospital quality. Decreases in hospital staff likely explain both trends. Two studies in nursing homes reported higher costs per patient-day, partially due to higher rents from sale-leaseback agreements (Figure 5).

Health care quality was mixed to worse after PE acquisition. The review included 27 studies that assessed quality, with 12 finding a harmful impact, 9 finding a mixed impact, 3 finding a beneficial impact, and 3 finding a neutral impact. The authors of this review conclude there is more evidence that PE acquisition leads to harmful effects on patients, possibly because PE acquisition is associated with reductions in nursing staffing as firms aim to cut costs.

Changes in Patient Mortality Associated with Private Equity

Mortality is a concrete and meaningful outcome for evaluating the effect of health care interventions, as it is unquestionably a poor outcome and relatively simple to measure. Notably, to the authors' knowledge, only four studies have directly evaluated patient mortality after PE acquisition (Table 2). The limited evidence available suggests PE acquisition has contributed to mixed mortality effects in hospitals — possibly due to higher-acuity patients being transferred to other hospitals²¹ — and likely higher mortality in nursing homes for a subset of patients. Overall, it is likely that appropriateness of discharge and changes in staffing levels after PE acquisition contribute to such findings.

One rigorous study has evaluated mortality in nursing homes. Using a difference-in-difference and instrumental variable framework, with several robustness checks, Gupta et al. found that PE acquisition led to an 11% higher short-term mortality rate on average, defined as mortality during a nursing home stay or 90 days after discharge.²²

Several factors likely contributed to the large mortality effect in this study: decreases in staff after PE acquisition, decreases in patient mobility, increases in pain score, and decreased compliance with care standards. Notably, a subset of healthier patients largely drove the mortality effect observed by Gupta et al. The authors postulate this is because PE firms appear to maintain adequate highly skilled RN-level nursing staffing for higher-risk patients, but reduce nursing assistants for lower-risk patients. Length of stay for low-risk patients also increased after PE acquisition, possibly to maximize revenue as Medicare reimburses all covered services for the first 20 days of stay. Due to its rigor and salient findings, this study has received widespread attention by policymakers.²³

Song et al. found that PE acquisition was associated with higher mortality among Medicare patients hospitalized for COVID-19 and a differential increase in mortality among Medicare patients hospitalized for non-COVID-19 indications.²⁴ Specifically, 30-day all-cause mortality was 2.3 absolute percentage points higher (8% relative increase) at PE hospitals versus non-PE hospitals during the first year of the pandemic. These results might be explained by differences in appropriateness of discharge as PE hospitals had shorter length of stay. In a quasi-experimental difference-in-difference analysis, 30-day mortality among patients hospitalized for non-COVID-19 indications increased by 0.8–0.9 percentage points at PE hospitals versus non-PE hospitals, or a 10%–11% change. Similarly, these results might be explained by higher mortality during readmissions.

Liu analyzed a large sample of over 70 million hospital encounters and 5,000 hospitals. His study has the advantage of having the largest sample size of any study of mortality in PE hospitals the authors are aware of, includes all payers, and also uses a rigorous difference-in-difference quasi-experimental framework. He found no difference in 30-day mortality for admissions for six conditions: acute myocardial infarction or heart attack, coronary artery bypass surgery (CABG), chronic obstructive pulmonary disease (COPD), heart failure, stroke, or pneumonia.²⁵

Using a difference-in-difference framework limited to traditional Medicare data, Cerullo et al. found no difference in mortality for hospital admissions for stroke, COPD, pneumonia, or heart failure, representing 85.4% of admissions in their sample.²⁶ However, for myocardial infarction, these researchers observed a 1.1% and 1.4% lower in-hospital and 30-day mortality, respectively.

Table 2. The Effect of PE Acquisition on Patient Mortality

SETTING	STUDY DESIGN	SAMPLE	EFFECT ON PATIENTS
Nursing homes	Difference-in-difference and instrumental variable analysis (Gupta et al. 2024)	<ul style="list-style-type: none"> ▶ 2000–2017 nursing home data ▶ 7,000,000 patient-years ▶ 280,000 nursing home-years 	▶ 11% higher combined in-home and 90-day mortality
Hospitals	Longitudinal analysis (Liu et al. 2022)	<ul style="list-style-type: none"> ▶ 2013–2019 insurance claims data ▶ 72,663,354 claims ▶ 5,000 hospitals 	▶ No changes in 30-day mortality for six conditions studied: heart attack, COPD, CABG, stroke, pneumonia, and heart failure
Hospitals	Difference-in-difference analysis (Cerullo et al. 2022)	<ul style="list-style-type: none"> ▶ 2001–2018 Medicare fee-for-service data ▶ 3,302 non-PE-owned hospitals ▶ 257 PE-owned hospitals ▶ 21,091,222 hospital admissions 	<ul style="list-style-type: none"> ▶ No changes in in-hospital or 30-day mortality for four of five conditions (85.4% of total admissions) ▶ 1.1% lower in-hospital mortality for heart attack (14.6% of total admissions) ▶ 1.4% lower 30-day mortality for heart attack
Hospitals	Cross-sectional and difference-in-difference analysis of traditional Medicare data (Song et al. 2023)	<ul style="list-style-type: none"> ▶ 187,382 and 114,166 hospitalizations before and during the pandemic, respectively, among 122 PE-owned hospitals ▶ 2,287,717 and 1,454,353 hospitalizations before and during the pandemic, respectively, among 1,060 non-PE-owned hospitals 	<ul style="list-style-type: none"> ▶ No difference in in-hospital mortality for COVID-19 or non-COVID-19 hospitalizations ▶ 8% higher 30-day COVID-19 mortality at PE-owned hospitals ▶ 10%–11% higher 30-day non-COVID-19 mortality at PE-owned hospitals

Sources: Atul Gupta et al., “Owner Incentives and Performance in Healthcare: Private Equity Investment in Nursing Homes,” *Review of Financial Studies* 37, no. 4 (Apr. 2024): 1029–77; Tong Liu, “Bargaining with Private Equity: Implications for Hospital Prices and Patient Welfare,” SSRN, revised November 30, 2022; Marcelo Cerullo et al., “Association Between Hospital Private Equity Acquisition and Outcomes of Acute Medical Conditions Among Medicare Beneficiaries,” *JAMA Network Open* 5, no. 4 (2022): e229581; and Zirui Song et al., “Changes in Hospitalization Outcomes Among Private Equity and Non-Private Equity Hospitals During the COVID-19 Pandemic” (AcademyHealth Annual Research Meeting, Seattle, Washington, June 25, 2023).

Notes: CABG is coronary artery bypass surgery. COPD is chronic obstructive pulmonary disease.

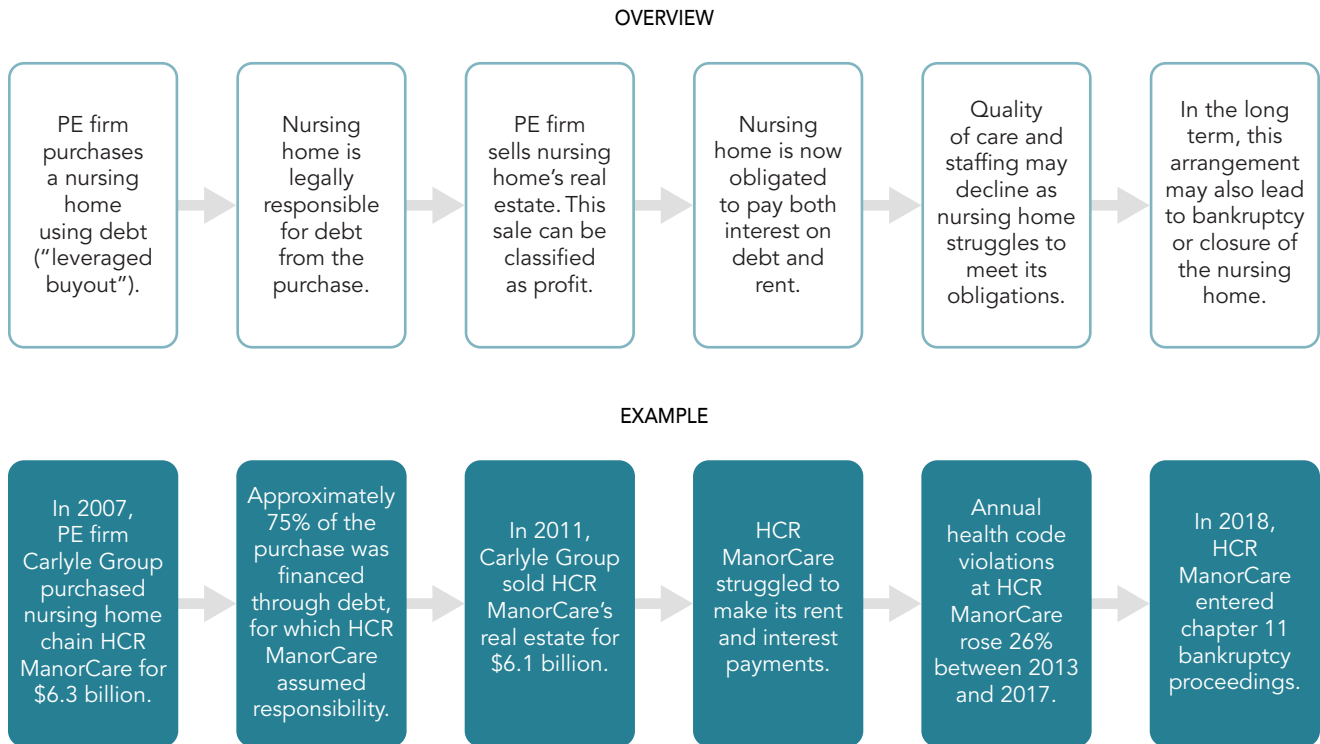
Changes in Financial Outcomes Associated with Private Equity

Few studies have evaluated the effect of PE acquisition on financial outcomes for the health care entity being acquired, such as debt, bankruptcy, or closure. However, in a study outside of health care, leveraged buyout — the practice of using debt to finance purchases, which is often employed by PE firms — was associated with 10-fold higher rates of bankruptcy, though the study employed older data, from the early 2000s.²⁷

Nursing homes may be particularly vulnerable to poor long-term financial outcomes after PE acquisition. A common business model employed by PE

firms is the “sale-leaseback,” in which a PE firm will sell the real estate underlying a nursing home to another organization, often a real estate investment trust (REIT), which is a tax-privileged pass-through organization (Figure 5). The value of the real estate itself may exceed the value of the nursing home as a health care delivery organization, and liquidating it generates immediate returns for investors. The purchasing organization can then lease the property back to the nursing home, sometimes at above-market rates. Despite owning the property, REITs may stipulate in their sale-leaseback contracts that nursing homes must continue to pay property taxes and maintenance fees.

Figure 5. Sale-Leasebacks



Sources: Peter Whoriskey and Dan Keating, “Overdoses, Bedsores, Broken Bones: What Happened When a Private-Equity Firm Sought to Care for Society’s Most Vulnerable,” *Washington Post*, November 25, 2018.

An example of this strategy is summarized in Figure 5. In 2007, PE firm Carlyle Group purchased nursing home chain HCR ManorCare for \$6.3 billion. Carlyle Group was then able to sell HCR ManorCare’s real estate assets for \$6.1 billion in 2011. With new debt and rent obligations, HCR ManorCare struggled financially, its quality of care may have worsened, and the company filed for bankruptcy in 2018.

Though PE firms bring capital infusions to sometimes distressed companies, there is no evidence to suggest that PE acquisition improves the chances of a nursing home remaining open. Moreover, there is no evidence that the capital from a sale-leaseback is used to finance improvements to health care staff in nursing homes — cost-cutting measures are often taken instead, and profits from real estate sales are most often given to investors.

As a result, the PE-acquired nursing home may face several new financial challenges: the debt of being acquired via a leveraged buyout, high rents from a sale-leaseback contract, the liquidation of its most valuable asset(s), and the continued responsibilities of property taxes and maintenance fees. All of these challenges may theoretically increase the chance of long-term bankruptcy or nursing home closure, though this has not been empirically evaluated, to the authors’ knowledge.

In other sectors of the health care system, PE firms may be less likely to sell real estate to finance profits. Suggestive of this, REITs own 12% of skilled nursing facilities but only 3% of hospitals.²⁸ Few data exist on the prevalence of sale-leasebacks for outpatient clinics.

Policies to Address Private Equity Ownership in Health Care Delivery

Given the prevalence of PE ownership in health care services and a growing body of concerning evidence related to its effects, many federal and state policymakers have proposed or enacted new regulatory authority to mitigate potential harms. These approaches address four main concerns: consolidation, transparency, asset stripping, and risky financial practices.

Addressing Consolidation

At the federal level, jurisdiction over mergers and acquisitions falls to the Federal Trade Commission (FTC) or the Department of Justice (DOJ) if such deals exceed a reporting threshold. However, 90% of PE mergers and acquisitions in health care are not reviewed by federal authorities because they fall below reporting guidelines, which in 2024 were set at \$119.5 million and are adjusted annually for inflation.²⁹ Mergers not reviewed are much more likely to pass.³⁰ Even when mergers are reviewed, regulators must often litigate to stop a merger, which is costly and time-consuming.

Federal antitrust regulators could be empowered to review mergers in a more timely and cost-effective fashion. One approach would be a set of federal guidelines that create prespecified, evidence-based thresholds above which mergers would be deemed anticompetitive. For instance, new merger guidelines by the FTC outline that an increase in the Herfindahl-Hirschman index (HHI), a common measure of market concentration, of more than 100, a post-merger HHI of 1,800, or a single merged firm's market share of 30% or more will be viewed as potentially anticompetitive.³¹ In the coming years, the FTC may probe or litigate to stop mergers that meet these criteria. This is an emerging area to monitor as litigation, even if unsuccessful in court, may have a chilling effect on PE mergers.

At the state level, including California, empowering state attorneys general or some other state-based regulatory authority to review and veto mergers deemed to be anticompetitive has been considered in several contexts, including increased oversight of PE transactions.³² In addition, some states have begun examining revisions to — or enhanced enforcement of — existing corporate practice of medicine (CPOM) laws. Such laws technically require a physician, rather than a corporate entity, to control medical practices but are not always stringently enforced and may be worked around.³³

Addressing Transparency

Currently it can be challenging to determine who owns a PE firm. Many PE firms own health care entities via shell companies or through complex corporate hierarchies. PE firms also have less stringent reporting requirements than publicly traded companies. Improving public transparency of PE ownership, the specifics of a proposed deal (e.g., the amount or proportion of debt used), subsequent firm finances, and prices may mitigate pure profit-maximizing behavior.

At the federal level, the Centers for Medicare & Medicaid Services (CMS) recently published a rule requiring nursing homes accepting Medicare or Medicaid to report ownership and operating information.³⁴ The rule is designed to increase transparency of PE and REIT involvement in nursing homes.

Future transparency efforts at the federal or state level could build on this rule in several ways. Among long-term care facilities, having additional public information on average patient out-of-pocket expenditures and length of stay by illness severity could allow stakeholders to better monitor financial and quality impacts among acquired facilities.

Outside of the long-term care sector, having additional information on ownership and financing within PE-acquired hospitals and outpatient clinics could help ensure that those transactions serve the public's overriding interest in costs and quality.

Addressing Asset Stripping

After acquiring a new health care entity, PE firms have reduced staff, shifted to lower-cost staff, or sold real estate.³⁵ Collectively, these practices are known as “asset stripping” because they enable PE firms to generate revenue from the assets of the acquired entity, which can then be paid to investors. Decreases in staff are associated with worse patient outcomes, including higher mortality in one nursing home study.³⁶ Decreased staffing is also likely to explain the relative increase in hospital-acquired adverse effects following acquisition.³⁷ Selling real estate increases debt for the acquired entities, which may increase pressure to further reduce costs and worsen the long-term financial health of an institution. Given this, state or federal policymakers may wish to include blanket requirements or otherwise condition approvals on safeguards against asset-stripping strategies.

Addressing Risky Financial Practices

In the mold of classic PE acquisitions, firms use debt to finance a majority (e.g., 60%–80%) of the price of acquisitions. These short-term infusions of capital may temporarily buoy distressed institutions, such as a hospital with low operating margins, which might have otherwise closed if not for the short-term financing relief.³⁸ However, evidence shows it is substantially more common for PE firms to invest in financially healthy companies (both in and outside of health care) than distressed ones. Financially healthier targets of acquisition are expected to be able to better handle the additional debt placed on them from a leveraged buyout — by increasing prices, increasing volume, or withstanding cost reductions

(e.g., workforce cuts) — than already distressed targets. In one study, a sample of PE-acquired hospitals had a higher margin before acquisition compared to non-PE-acquired hospitals (pre-acquisition operating margin of +4.4% vs. -1.2%), suggesting that PE firms purchased hospitals that had been more profitable than non-PE acquired hospitals.³⁹

After a buyout, the acquired health care entity is responsible for repaying the debt used in the acquisition, which shifts risk away from the parent PE firm. This technically gives PE firms lower financial risk, and a higher share of debt supports higher returns (although it is important to note that there is also financial risk of not being able to secure future investments into additional PE funds if an acquisition does not do well, even if the acquisition itself has minimal risk). Moreover, PE firms are often shielded from the consequences of bankruptcy since they are legally separate from the health care entities they purchase, as are the purchased entities from each other. For example, after a platform practice acquisition followed by roll-up acquisitions, the bankruptcy of a rolled-up practice does not impose financial accountability onto the other rolled-up practices or the parent firm, even though the platform and rolled-up practices negotiate collectively for higher prices from insurers. One study found that PE- and non-PE-acquired businesses that have the same level of debt, on average, have similar rates of defaulting. Thus debt, rather than PE ownership itself, may be what explains the risk of bankruptcy.⁴⁰

Federal or state policymakers could consider limits on the amount of debt or leverage allowed in health care transactions. In the European Union, the Alternative Investment Fund Managers Directive has capped limits on leverage in PE acquisitions. However, after the law was fully enacted in 2018, enforcement has varied across member states, and few data exist on the impact of this legislation, including on the financial outcomes of institutions and the health outcomes of patients.

Conclusion

Private equity acquisitions in health care have rapidly increased in recent decades. These acquisitions have been associated with higher prices, increased consolidation, and mixed to worse clinical outcomes in patient populations. Concerningly, emerging studies suggest that PE acquisition may be associated with higher mortality in nursing homes for some patients and higher incidence of adverse events in hospitals. Policy opportunities include increasing and automating regulatory review of mergers, limiting staffing reductions and asset stripping after PE acquisition, improving transparency, and limiting the amount of leverage allowed in PE deals. More

research is needed to evaluate ongoing regulatory efforts — such as a CMS transparency nursing home final rule and FTC new merger guidelines.⁴¹ In addition, researchers have focused on average effects of PE acquisition, so future work should evaluate heterogeneity among PE deals to better understand what behaviors or characteristics are most associated with concerning effects for patients. Given that the rapid pace of private equity investment in health care has historically exceeded that of regulatory response, additional policy innovation is urgently needed.

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