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Healthcare Private Equity: A Review of Key Case Studies and Recommendations for Effective, Equitable Private Investment in Healthcare

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Abstract

What is the message? This paper introduces what private equity (PE) is, why healthcare became an attractive industry for investment, and how trends in PE healthcare investments have shifted over time in response to various regulating factors, illustrated through three noteworthy PE cases. We hypothesize that the initial interest of PE in certain healthcare services derived from intrinsic qualities of the healthcare sector, macroeconomic and political factors. In addition, we speculate that the trends in PE shifting away from traditionally popular deal types, and sub-industries such as emergency medicine, anesthesiology, and air ambulances, are due to regulatory changes, including the No Surprises Act (NSA) and legal action by governing bodies, as well as macroeconomic effects from the COVID-19 pandemic and interest rate fluctuations. Finally, we emphasize the importance of aligning incentives in PE and healthcare to synergize their mutual impact, generating greater profitability and sustainably high-quality care delivery for patients to minimize costs and improve outcomes. We recommend a combination of public policy and research on the long-term impacts of PE's new strategic investments to hold the industry accountable and inform continued regulation.

What is the evidence? Our study uses press releases, news articles and investigative reports, and academic literature to illustrate the evolution of key PE strategies in

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healthcare. We draw takeaways about the unique and shared financial motives, associated investment risks, and critical populations who most often bear the consequences of both PE acquisitions and failures. The case studies we cover are KKR and Envision Healthcare (buyout), Welsh, Carson, Anderson & Stowe and U.S. Anesthesia Partners (add-on), and VBC-related deals (add-on, with unique shift in exit strategy), to illustrate landmark administrative responses to PE's historic manipulation of healthcare acquisitions for profitability. Despite the skepticism around healthcare PE given historic investment scandals, we highlight several key regulatory and political recommendations that we believe, if executed proactively, could create a more sustainable future for private capital investment in healthcare.

Timeline: Submitted: May 17, 2024; accepted after review May 23, 2024.

Cite as: Lucy W Ma, Cyrus Buckman, Shreya A Shah, Kevin A Schulman. 2024. Healthcare Private Equity: A Qualitative Review of Investments in Healthcare Services and the Impact of the No Surprises Act of 2020. *Health Management, Policy and Innovation* (www.HMPI.org), Volume 9, Issue 2.

Introduction

The healthcare sector has always been a critical area for private equity (PE) investments, given its significant impact on the economy and its potential for innovation and growth. For the past decade, PE firms have invested more than $1 trillion into U.S. healthcare.[1] The appeal of healthcare for PE investors is multifaceted, driven by both industry-specific and macro trends. Within healthcare, the industry's resilient "recession-proof" growth, high fixed demand, profitable loan restructuring, and the constant evolution and increasing commercialization of healthcare needs all present significant opportunities for value creation and sustainable growth. Additional macroeconomic aspects, especially in recent years, include low cost of capital from the Federal Reserve, a robust stock market, passage of the Affordable Care Act in 2010 which

drove healthcare reform, Trump's business-friendly administration boosting merger and acquisition (M&A) activity, and the COVID-19 pandemic's acceleration of technology and healthcare delivery expansion.[2]

Rising in popularity during the 1980s, healthcare PE firms utilized leveraged buyouts (LBOs) most commonly to facilitate significant M&A activity among hospitals. This M&A wave, that continued into the 1990s and 2000s, arose from federal legislation that motivated hospital consolidation by incentivizing provider adoption of health information technology in order to facilitate more consistent, scalable care delivery.[3] After Medicare introduced DRG-based payment systems in the 1980s, many hospitals also braced themselves for tightening operating margins and leaned into M&A in hopes of reducing costs and increasing revenue through economies of scale, streamlined operational efficiency, and increased market power. After initial LBOs to acquire hospitals, PE firms utilized a "buy and build" strategy to expand their platforms, and by February 2011, PE firms owned ten of the 15 largest for-profit hospital chains.

Nevertheless, healthcare PE activity has not always remained consistent. From macroeconomic trends such as changing interest rates and the COVID-19 pandemic that halted global operations, to regulatory shifts such as antitrust laws and the No Surprises Act (NSA), the PE industry has constantly needed to adapt their investment strategy in order to maintain their profitability in an evolving healthcare landscape. To fully understand how healthcare PE has responded to various changing influences and how sustainably the healthcare system can continue receiving private capital, we analyze three case studies that reflect critical changes in the industry's primary investment themes over the past decade. Based on the responses of other players to these PE deals, we believe these case studies represent key inflection points in PE regulation and grant us valuable insight into the field's relationship with governing regulatory, market, and financial forces.

Why Healthcare Attracts PE Investment

Between 2010 to 2017, private equity deals were valued at $42.6 billion, reflecting a 187% increase within that period.[4] A year later in 2018, the value of PE investments in healthcare had reached $100 billion, more than double the amount in 2017.[5] Starting in the late 1990s to early

2000s, increased investment of PE in healthcare services likely derives from a few reasons: high growth potential and economic resilience (and thus high returns on investment [ROI] for PE firms), deregulation or regulatory changes, and the growing need for capital investment and management expertise in healthcare facilities and services.

Recession Resilience

Healthcare has always demonstrated significant resilience to economic downturn, even showing growth during some recessions. One reason is the stable demand given health insurance as a non-cyclical means of financial support for these services. Even during the 2008 financial crisis or the COVID-19 pandemic, healthcare needs did not stop, but in fact spiked significantly to the point of overwhelming the system during the pandemic, a time when most other significant industries nearly shut down.[6] Another reason is the favorable demographic trend resulting from our aging population, especially the Baby Boomers (born between 1946-1964). As patients age, healthcare needs and demand for healthcare services both increase, supporting long-term growth in the healthcare sector by providing a steady demand for services ranging from preventative care to chronic disease management and geriatric care.[7] Thirdly, the healthcare industry has always had significant regulatory and government support through funding mechanisms like Medicare and Medicaid and other subsidies, such as the tax treatment of employer health benefits.

Regulatory Shifts

Another factor that contributed to PE's growing interest in healthcare investment was a series of regulatory shifts to accommodate new business and care delivery models. For example, the Stark Law prohibited physicians from giving referrals that could lead to financial gain for the physician or their immediate family, and the Anti-Kickback Statute prohibited the exchange of trading valuable items for referrals of patients participating in state or federal health programs. However, as our healthcare system has increasingly recognized the need for providers to work together to improve patient outcomes and efficiency, exceptions and waivers have been added to both laws to accommodate new healthcare delivery models, such as accountable care organizations (ACOs) and value-based care (VBC). This loosening of regulations has also opened up new investment opportunities for PE firms.

Certificate-of-Need laws, requiring government approval before opening or expanding healthcare facilities, have been relaxed or repealed in many states in order to promote competition, address service shortages, and reduce unnecessary regulatory burden. As a result, there has been room for increases in and expansions of healthcare facilities, often funded by PE firms as they rolled-up practices and aimed to improve operational efficiency.

Another trend, especially seen with the rise in telehealth services during the pandemic, is efforts to make it easier for providers to operate across state lines, expanding the market for many healthcare services. These developments, along with the typical lag time that policy often experiences in keeping up with these rapid developments, has increased the attractiveness of healthcare for PE investments.

Growing Need for Capital & Management Expertise

Finally, PE firms provide significant capital investment to healthcare organizations that may not have access to other major forms of financing. This infusion of funds can greatly contribute to expanding facilities, upgrading technology and streamlining operational efficiency, and improving patient care services. In addition, group practices and hospital systems can encounter difficulty with management expertise and maintaining sustainable cash flows while providing the many services that patients need. Thus, on top of the capital they can provide, PE firms' operational expertise is viewed as a significant benefit for small clinics that have difficulty scaling or healthcare systems struggling to stay afloat, even helping them become more competitive in concentrated areas, which can improve both patients' continuity of care and job security of healthcare providers and staff.

Healthcare PE Strategy Over the Years: Case Studies

PE Investment Models in Healthcare

The most common financing model used by PE in healthcare has traditionally been a leveraged buyout (LBO). The approach involves a financial transaction where a PE firm buys a majority stake in a healthcare company using a significant amount of borrowed money. PE firms look for healthcare companies with stable cash flows, potential for operational improvements, and a strong market position. These companies can range from hospitals and clinics to manufacturers

of medical devices and pharmaceuticals. Upon identification of the target healthcare company, the PE firm finances the purchase through debt and the use of private equity funds, with debt being a significant portion of the financing deal (sometimes as high as 70%).[5] The assets of the healthcare company being acquired—and sometimes the acquiring company's assets—can be used as collateral for the loans.

After the acquisition, the PE firm works closely with the management of the healthcare company to improve operations, cut costs, and increase efficiencies with the goal of improving profitability (also referred to as "strategic dismantling").[3] The ultimate goal of an LBO is to sell the acquired company at a higher value than its purchase price. This can be achieved through various means, such as a sale to another company, a public offering, or selling it to another PE firm. LBOs in healthcare have been particularly attractive and feasible due to the sector's generally stable and predictable cash flows, which are critical for servicing the debt incurred during the buyout.

Another investment model increasingly used by PE is the "platform and add-on," or consolidation, approach. The goal is to build value by acquiring smaller companies around a larger, core company, known as the platform.[8] The platform company serves as the foundation for the consolidation strategy, providing the infrastructure and management expertise necessary to integrate add-on acquisitions of smaller companies effectively. This "buy-and-build" method aims to create significant value through synergies, market expansion, diversified product offerings, and improved operational efficiencies and economies of scale.[4,9]

Buyout Strategy: KKR and Envision Healthcare

In 2018, Kohlberg Kravis Roberts (KKR), a globally leading PE firm, acquired Envision Healthcare Corporation, a provider of various healthcare services, post-acute care, and ambulatory surgery services, in an all-cash leveraged buyout (LBO) for $9.9 billion.[10–12] Of that valuation, KKR financed $5.3 billion—more than 50%—with debt.[13]

Envision provided emergency department and inpatient, anesthesiology, and radiology services to over 300 healthcare facilities in 45 states and the District of Columbia, staffing other hospitals with their physicians. It was the biggest player in the physician outsourcing space, capturing 6%

of the $41 billion emergency department and hospital-based physician market and 7% of the $20 billion anesthesiologist market.[15]

In order to service the debt and yield the returns promised to its investors, KKR deployed surprise medical billing.[14] Health insurers establish contracts with providers (physicians and hospitals) that set up payment models for services. These contracts prohibit the provider from billing the patient for unallowed charges, essentially the amount of the provider charge that is above the negotiated payment rate, or the disallowed amount of the bill. Pursuing payment for these disallowed charges is a practice called balance billing. Out-of-network providers do not have a contract with a health plan, so they face no restrictions on balance billing for services. Providers are free to set their charges as they see fit without any further justification. In many states, courts uphold provider charges as the financial responsibility of the patient—even when these charges are grossly exaggerated or well above market prices.[16]

Many of Envision's employed emergency room and radiology doctors had deliberately remained out-of-network providers for most health plans. Prior to the passage of the NSA in 2020, the company could surprise even insured patients with drastic medical costs and burden them with significant debt.[5] These numbers ranged from $600, the average balance bill charge for an emergency room visit, to $100,000 for out-of-network providers that patients neither select for themselves nor have a choice to avoid.[17]

In 2019, Envision's, and in turn KKR's, reliance on surprise medical billing became clear through a series of media investigations and increasing scrutiny by health economists and advocacy groups, in particular focusing on its emergency room operations managed by its subsidiary, EmCare. A team of Yale health economists found that, after EmCare took over hospital emergency departments, patient care charges nearly doubled compared to those by previous physician groups, sending out-of-network bills at a rate of 62% compared with a national average of 26%.[14] This represented a more than 81 percentage point increase in out-of-network billing rates at these hospitals that previously had low rates.[15] In addition, average physician payments increased by 117%.[15]

Combined with widespread outrage from patients receiving surprise medical bills, Congress launched an inquiry into Envision after the National Bureau of Economic Research circulated the Yale study.[15] Out of this investigation birthed the bipartisan bill that would ultimately become the NSA passed in December 2020. This legislation banned the practice of surprise medical billing and effectively destroyed Envision's business strategy. The onset of the COVID-19 pandemic further strained Envision's finances as the numbers of elective surgeries and ER visits—the main sources of out-of-network billing and revenue—plummeted. By April 2020, only one month after the pandemic's onset, Envision began considering the need for debt restructuring and the increasing possibility of bankruptcy.[18] In May 2023, Envision filed for Chapter 11 bankruptcy. KKR lost more than $5 billion.[18,19]

Roll-up Strategy: Welsh, Carson, Anderson & Stowe and U.S. Anesthesia Partners

In 2023, the Federal Trade Commission (FTC) sued Welsh, Carson, Anderson & Stowe (WCAS), a private equity firm, for creating U.S. Anesthesia Partners (USAP) in 2012 to "roll-up" anesthesia practices in Texas and create a monopoly over the market and gain ultimate pricing power.[20] The FTC claimed in its lawsuit that the PE firm's actions violated key antitrust legislation, including the Sherman Act (which prescribes the rule of free competition), Clayton Act (which aims to prevent anti-competitive practices), and FTC Act (which outlaws unfair methods of competition that affect commerce). To address their concerns of competitive suppression and price gouging, the FTC demanded that WCAS permanently halt their add-on deals and undergo "structural relief," or voiding past transactions to deconstruct the consolidated practices.

PE roll-ups of anesthesia practices have been shown to increase prices by 26% after acquisition.[21] In addition, the prevalence of this investment strategy has led PE to control 18.8% of the anesthesia and 22.0% of the emergency medicine market by 2019, representing a sixfold and threefold increase, respectively, in market concentration since 2009.[22] As a result, even though high-leverage buyout deals may have been curbed through legislative efforts like the NSA, add-on deals may continue to provide PE with opportunities to obtain rapid returns in healthcare, as this strategy enables them to manipulate natural market dynamics and laws of supply and demand in order to drive up prices and increase profitability.

The FTC's complaint describes the actions of USAP after its creation. It suggests that USAP is the largest anesthesia practice in Texas, with control over almost 70% of the commercial-insured, hospital-only anesthesia market in Houston and Dallas, and performing almost half of all cases across Texas, while earning nearly 60% of the hospital-only anesthesia revenue. The complaint reports how the firm systematically acquired anesthesia practices within target markets. It also alleges anti-competitive behavior to keep other firms out of the market, and leveraging its billing clout for other anesthesia practices it does not own.[23]

In May 2024, the court granted WCAS's motion to dismiss it from the lawsuit, though US Anesthesia Partners' motion was denied.[23] Thus, the ultimate resolution of this question of antitrust enforcement is still unresolved, but WCAS will not be held directly responsible for USAP's actions. Nevertheless, the negative impact of such consolidations and the financialization of healthcare that results from PE ownership are well-documented, and the future of private capital investment in healthcare needs to be carefully considered while value-decreasing and cost-inflating PE strategies remain lawful.[3,24,25]

The Shift Toward Value-Based Care (VBC) Models: New Beginnings or Continuing Consolidation Strategy?

In October 2019, TPG Capital, another leading global PE firm, executed a non-controlling strategic investment in Kelsey-Seybold Clinic Partners, a renowned leader in multispecialty medical group practice management.[26]

In contrast to the LBO deal type and surprise billing business model deployed by KKR through Envision, the goal of TPG and Kelsey-Seybold's partnership was two-fold: first, to expand the accountable care model to more geographic locations in the Houston area; and second, to provide additional capital and strategic expertise to the physician leadership who would maintain control of the organization. (Although, TPG quickly flipped the practice to UnitedHealthcare's Optum in 2022.[27] (see related article by Rooke-Ley and Bowling in this issue of *HMPI*)

This is just one example of how PE has turned its focus to VBC in recent years. According to a 2022 McKinsey analysis, investment activity in companies focused on VBC over patient volume

(traditionally seen in fee-for-service or surprise billing models) has increased more than 400% between 2019 and 2021.[28] (see study by Nembhard et. al. in this issue of *HMPI*) Additional examples of recent deals include Kinderhook Industries' $500 million investment in VBC physician group Physician Partners and the insurance company, Humana's, $1.2 billion joint venture with Welsh, Carson, Anderson & Stowe to expand the insurer's VBC clinics for Medicare patients, CenterWell Senior Primary Care.[29,30] Similar to TPG's investment in Kelsey-Seybold, Humana and WCAS aim to scale clinic operations and platform through de novo expansion and inorganic growth.

Analysts largely agree that the growing activity around VBC investments in the private sector is likely driven by concurrent public policy shifts aimed at aligning payor, provider, and investor incentives through improved reimbursement of VBC models.[31] However, while these changes may be encouraging, healthy skepticism is still warranted, given the fact that many new VBC systems are just consolidated managed care organizations (MCOs), and thus continue to run the risk of gaining monopolistic market share and pricing power.[32]

Takeaways & Remaining Questions

PE's primary aim of generating returns for investors have often led to tensions between their profit motives and the intrinsic values of the healthcare services they are acquiring and operating, such as accessibility and quality of patient care.[25,32,33] Critics argue that the short-term investment horizons of some PE firms may not always align with the long-term nature of healthcare delivery, potentially leading to cost-cutting and profit-maximizing measures that could negatively impact patient care.[32,33] In addition, the emphasis on financial performance might overshadow the fundamental healthcare mission of providing patient-centered care. Concerns about PE investment stem from the existing correlations of negative impact on patient care and outcomes with PE acquisition and ownership.[25,34]

Examples of the historically popular LBO model have not reflected kindly on PE as healthcare systems like Envision Healthcare, Hahnemann Hospital, and Steward Health Care failed to produce the outsized earnings needed to repay their debt and thus faced bankruptcy following

PE ownership.[19,35–37] (see related Kumar article in this issue of *HMPI*) The model's profitability has not only been heavily impacted by regulatory change like the No Surprises Act which removed a key revenue stream—out-of-network surprise billing—but also is subject to significant macroeconomic risk as PE's ability to repay debt depends heavily on interest rates influencing their cost of capital. An open question, especially from the Steward bankruptcy, is the impact on the community from the financial collapse of an essential public service.[24,25]

This model has left a great deal of carnage in its wake. In addition to the financial damage to the PE firms themselves from pursuing an unsavory (even unethical) business strategy, there is the loss to the community of the underlying healthcare company, the jobs lost as a result of LBO-induced bankruptcies, and the brunt of the consequences of the business model often manifest as higher prices for patients and worse clinical outcomes due to resource stripping to drive profitability.[24,25]

While the roll-up model differs from the LBO in its degree of macroeconomic risk, it shares a key question of how PE constructs their core business model. In this case, the concern is that the strategy will use market leverage to drive up prices for services. The USAP case will help define the limits of this strategy and may portend its future application across provider markets.

Finally, the shift in PE add-on focus toward VBC may reflect hope that regulatory and reimbursement model innovation can drive PE cash flows toward delivering greater value to patients. However, as with all roll-ups, PE encounters the same risk of challenges with integration and cost-effective synergy. Furthermore, a common exit strategy is for PE to sell the consolidated outpatient entity to a healthcare services conglomerate, such as Optum, Elevance Health, and CVS Health, which raises further questions about price and quality of clinical services. Physicians and patients may find themselves whipsawed as ownership and governance of practices shift rapidly in the market.

Recommendations for the Future of Healthcare and PE

While the cash flows of healthcare delivery remain an attractive target for PE investors, the healthcare system is forced to grapple between the access to capital offered by private investment and the obligation to generate the financial returns required to sustain this

investment model. The experience to date of several strategies to solve this equation seem to suggest that we have not yet reached an attractive solution that benefits patients in their search for affordable, high-quality healthcare services. Whether the adoption of "value" as a strategy for the latest round of investments results in a sustainable solution to this challenge remains an open question at this point.

Some observers have recommended policy strategies including improved regulation of fraud and abuse, greater antitrust oversight, regulating price inflation especially with consolidation and roll-ups in areas with limited market competition, and significantly increased transparency in the reporting of PE acquisitions.[38] Antitrust enforcement is also a challenge, Currently, only acquisitions over $111.4 million must be reported (under which only 10% PE acquisitions fall), so acquisition of smaller physician practices could easily be missed by antitrust agencies.

There is also concern about the lingering impact of PE investment strategies on cost, quality, and access over time. When individual firms fail, the public must struggle with the fallout. Bankruptcy of PE-backed healthcare firms was the most dominant business failure of any PE-backed sector in 2023.[39] The failure of a PE-backed retail chain not only has an impact on employees; it also limits access to essential services for the community. This begs the question of whether the public should be concerned over the long-term impact of PE-investment in healthcare. There is no data yet on what happens to health and healthcare after these bankruptcies. Healthcare providers are a limited resource, and financial distress may motivate early retirement or migration of providers from unstable markets.

As PE focuses more on VBC, many of the top firms ultimately exit their outpatient and specialty care investments by selling to large insurers and their health services branches.[27,40] Because regional and services consolidation strengthens these companies' market power and could lead to higher costs, this strategy could add to the continuously rising cost burden on patients and the entire U.S. healthcare system.[40–42]

Finally, the challenges of PE investment in healthcare reflect the issue that there is no public agency charged with oversight of healthcare markets in their entirety. There is limited data into the structure of care delivery across markets, and no entity responsible for reviewing this data. The new data transparency requirements may provide some insight into prices across markets

and may bring greater visibility to business practices that serve to drive up prices.[41] However, these rules still do not extend to many PE-backed practice models.

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